

Polytechnic Institute

Overview

The Purdue Polytechnic Institute, one of the 10 academic colleges of Purdue University, provides a unique array of high-demand technology disciplines for bachelor's, master's and PhD degrees available on Purdue's flagship campus in West Lafayette, Indiana, and at other locations throughout the state.

The Polytechnic's faculty and staff encourage innovation, collaboration and creativity among diverse interdisciplinary groups in the persistent pursuit of big ideas and novel approaches.

Undergraduate Degree

The Polytechnic consists of six academic departments and is proud to be the college for Purdue's Division of Military Science and Technology and its three Reserve Officers' Training Corps (ROTC) programs on campus.

Program Information for Undergraduate: Polytechnic Institute (Undergraduate)

Polytechnic Institute Statewide Programs: Polytechnic Institute (Undergraduate - Statewide Locations)

Graduate Degree

Graduate study options are available within all Purdue Polytechnic Institute disciplines. The college also provides a Ph.D. degree that allows students to focus in any of our academic departments.

Graduates become leaders in business and industry and many pursue entrepreneurial and consulting opportunities. Graduate alumni are employed by some of the top Fortune 500 companies, including Arthur Andersen, Ford Motor Company, General Motors, Delco Electronics, Symbol Technologies, Eli Lilly, and Northern Telecom.

Program Information for Graduate: Polytechnic Institute (Graduate)

Website: [Purdue Polytechnic Institute](#)

Polytechnic Institute (Undergraduate)

Polytechnic Institute

College Overview

The Purdue Polytechnic Institute, previously named the College of Technology, is one of 10 colleges at Purdue University offering undergraduate and graduate degrees. The college includes seven academic schools, departments, and divisions:

- Aviation and Transportation Technology
- Engineering Technology
- Computer and Information Technology
- Computer Graphics Technology
- Construction Management Technology
- Military Science & Technology
- Technology Leadership & Innovation.

The academic programs in the Purdue Polytechnic combine theory-based applied learning, team-based projects, integrated humanities studies, competency-based credentialing, and a series of experiential components such as industry-sponsored senior capstone projects, internships, global immersions, and certification-earning activities. The Polytechnic learning experience is designed to produce graduates who not only have deep technical knowledge and applied skills in their chosen discipline, but also possess problem-solving, critical thinking, communication, and leadership skills sought by industries and communities.

Admissions

Teacher Education Program (TEP) Requirements and Milestones

Advising

Students in the Polytechnic Institute must meet with their advisor at least once per semester.

Meeting with your Advisor

- Some majors have group advising sessions, others have individual advising appointments or walk-in hours.
- Your advisor will email you with information about the procedure used in your department.

Preparing for your Advising Session

- Determine how many credit hours you want to take.
- Compile a list of courses and alternates that you would like to take.
- Determine that you meet all the prerequisites for the courses you want to take.
- Once the Schedule of Classes is available, make sure course times work together.

Topics Typically Covered in an Advising Session

- Progress toward your degree.
- Appropriate courses for the next semester.
- Academic standing.
- Internships, career fairs, and other non-academic opportunities.
- Registration PIN release (PINs will not be released by phone, email or text message).
- Other questions a student may have.

Contact Information

Purdue Polytechnic Institute
West Lafayette, IN 47907
(765) 494-4935
E-mail: choosepolytechnic@purdue.edu

Polytechnic Statewide Information

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Polytechnic Institute Administration

Overview

Propel ideas into reality

Welcome to the fast lane. At the Polytechnic Institute, you'll discover how to harness the power of technology to have an immediate impact.

From making a smartphone brilliant to creating video games to improve a child's health, technology is the springboard for faster, greener and healthier solutions.

In our team-based labs you'll test ideas, take things apart and put them back together - only better. You'll learn side-by-side with professors who have worked in the industry and thrive on combining theory, imagination and real-world application. In this innovative environment, you'll learn by doing - gaining deep technical knowledge and applied skills in your chosen discipline as well as the problem-solving, critical-thinking, communication and leadership skills employers desire.

Companies like Amazon, Boeing, Caterpillar, Motorola, Honeywell Aerospace and Rolls-Royce know us well - they come knocking for our big-picture-thinking leaders.

Faculty

[Polytechnic Institute Website](#)

Contact Information

For more information on the Polytechnic Institute, please visit <https://polytechnic.purdue.edu/>.

They can be reached at 765-494-4935 or at choosetechnology@purdue.edu.

Graduate Information

For Graduate Information please see Polytechnic Administration Graduate Program Information.

Baccalaureate

Aeronautical Technology, BS

About the Program

You can earn your Purdue University bachelor's degree in aeronautical technology in two years if you already have an aviation-related Vincennes University associate's degree. Your Purdue coursework builds on the skills you learned during your first two years at Vincennes while it expands your career options. Your classes and labs will also be at the Aviation Technology Center at the Indianapolis International Airport.

Special features:

- Flexible curriculum based on your career goals
- Internship and other work experience opportunities at aviation-related companies surrounding Indianapolis International Airport
- Access to Aviation Technology Center labs: Advanced Composites Laboratory, Air Traffic Control/Computer Laboratory, FAA-approved flight simulator, Avionics Laboratory, Non-Destructive Testing Laboratory, and Materials Processing Laboratory

Course topics include:

- Operations management
- Safety problems
- Aviation finance
- Human factors in aviation
- Aviation law

[Click here for plan of study.](#)

Degree Requirements (120 Credits)

Departmental/Program Major Requirements (107 Credits)

Required Major Requirements (33 Credits)

- AT 23300 - Ethics And Aviation **Credits: 3.00**
- AT 33800 - Airline Management **Credits: 3.00**

- AT 35900 - Airport Management **Credits: 3.00**
- AT 38100 - Aviation Security **Credits: 3.00**
- AT 41200 - Aviation Finance **Credits: 3.00**
- AT 45400 - Human Factors In Aviation **Credits: 3.00**
- AT 48100 - Aviation Safety Problems **Credits: 3.00**
- AT 49000 - Aviation Project **Credits: 1.00 to 6.00**
- AT 49800 - Aviation Technology Capstone **Credits: 3.00**
- TLI 21300 - Project Management **Credits: 3.00**

Other Departmental Course Requirements (74 Credits)

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- MA 15300 - College Algebra **Credits: 3.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**
- PHYS 22000 - General Physics **Credits: 4.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- Any departmentally-approved thematic area of study - 34 Credits
- Humanities Foundational Selective (*satisfies Human Cultures: Humanities for core*) - 3 Credits
- Behavioral/Social Science Foundational Selective (*satisfies Human Culture: Behavioral/Social Science for core*) - 3 Credits
- Science Foundational Selective (*satisfies Science Selective for core*) - 3 Credits
- English Composition Selective - 3 Credits
- Economics Selective - 3 Credits
- Advanced English Selective - 3 Credits
- Technical Communications Selective - 3 Credits

Credit Hours: 55.0

- TECH 12000 - Design Thinking In Technology **Credits: 3.00**

Electives (13 Credits)

Non-Course/Non-Credit Requirement

- Complete a Globalization Requirement

Program Notes

- Students must earn a "D-" or better in all courses unless otherwise noted.
- 2.0 Graduation GPA required for the Bachelor of Science degree.
- Courses at Purdue University may only be attempted a maximum of three (3) times, including (but not limited to) W, WF, I, IF and all graded attempts.
- Transfer credit from other institutions, including courses taken as dual or concurrent credit in high school, and credit from testing such as Advanced Placement and International Baccalaureate that are an exact match for Purdue courses, may be applied to degree requirements.

For undistributed credit to be applied to degree requirements, the course or courses will need to be evaluated by the Curriculum Committee for approval. Additional approvals will be required for courses to meet University Core Curriculum requirements. In both cases approval is not automatic.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Supplemental List

Multidisciplinary Technology, BS (Statewide)

About the Program

From businesses to industries to government, Purdue's multidisciplinary technology program will give you the skills to focus on the management, operation, and maintenance of complex technological systems. In this program you'll prepare for a career that

requires knowledge in industrial and manufacturing technologies as well as quality assurance and plant supervision. The skills you gain will help your employers become more efficient and safe.

Purdue Polytechnic Vincennes students receive their A.S. degree from Vincennes University before continuing on with the B.S. with Purdue Polytechnic. Each plan of study below corresponds with a different A.S. major that feeds into the B.S. program.

- Computer Integrated Manufacturing - Industrial Maintenance
- Computer Integrated Manufacturing/Robotics
- Drafting and Design/CAD
- Electronics Technology
- Machine Trades - Injection Molding
- Machine Trades - Tool & Die

Minor

Advanced Global Technology Minor

About the Minor

In order to prepare graduates for professions in a global and societal context, the Purdue Polytechnic Institute adopted minimum global requirements in the Fall of 2017. Knowing that not every student will go abroad during their experience at Purdue, the Polytechnic has deliberately established plans of study, intercultural activities, and an overall learning environment in order to foster higher levels of global and cultural awareness. This learning philosophy is supported through formal assessments and analyses of student experiences, recommended coursework and experiences within student plans of study promoting the global and cultural capacity among all students.

The Polytechnic Minor in Advanced Global Technology includes a total of 15 credit hours. The overall minor has coursework and a global experience component. Students can achieve the minor without going overseas by participating in a 6 week international collaborative project via a formalized classroom activity.

Requirements for the Minor (12-15 credits)

Short Term Mobility Option:

- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
- Complete the Pre-and Post- Intercultural Development Inventory Assessments (1st and 4th years)
- Complete the Pre-and Post BEVI (1st and 4th years)
- Complete a debrief and develop a personalized Intercultural Development Plan (end of 2nd year)
- Complete **9 credit hours** of courses from the Polytechnic list of recommended Global/ Cultural courses. These courses must be selected during a required consultation with Office of Globalization (see below) based on your IDI profile results in conjunction with your Individual Development Plan (IDP).
Required Global Activity
- Complete **one (1)** of the following **global activities**:
 - Participate in an international internship (Outside of the US), **or**
 - Participate in Faculty-led Study Abroad program, Faculty-led Field Trip Abroad, **or**
 - Participate in an international capstone which contains an international travel component, **or**
 - Participate in a Purdue University collaborative project which contains an international travel component, **or**

- Participate in a collaborative project which is comprised of a globally oriented task (assignment) of a duration of 6 weeks or greater through which students gain an understanding of global perspectives when solving problems (e.g. using global business practices, considering foreign policies, or solving global societal challenges). Further, it is required that the task involves interaction with international team members, international mentors, or other international stakeholders (e.g. local citizens or policy makers) in completion of the project deliverables.

Full Semester Mobility Option:

- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
- Complete the Pre-and Post- Intercultural Development Inventory Assessments (1st and 4th years)
- Complete the Pre-and Post BEVI (1st and 4th years)
- Complete a debrief and develop a personalized Intercultural Development Plan (end of 2nd year)
- Complete a semester abroad (earning a minimum of 12 credits)

Supplemental Information

Advanced Global Technology Minor Supplemental Information

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Program Information

Advanced Global Technology Minor Supplemental Information

Global/Cultural Courses

- AAS 27100 - Introduction To African American Studies **Credits: 3.00**
- AAS 35900 - Black Women Writers **Credits: 3.00**
- AAS 37100 - The African American Experience **Credits: 3.00**
- AAS 37300 - Issues In African American Studies **Credits: 3.00**
- AAS 37500 - The Black Family **Credits: 3.00**
- AAS 39200 - Caribbean History And Culture **Credits: 3.00**
- AAS 47300 - Blacks In Hollywood Film **Credits: 3.00**
- AGECE 25000 - Economic Geography Of World Food And Resources **Credits: 3.00**

- AGE 53200 - World Food Problems **Credits: 3.00**
- AGR 20100 - Communicating Across Culture **Credits: 3.00**
- AMST 10100 - America And The World **Credits: 3.00**
- AMST 20100 - Interpreting America **Credits: 3.00**
- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21000 - Technology And Culture **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- ANTH 31000 - Mortuary Practices Across Cultures **Credits: 3.00**
- ANTH 32700 - Environment And Culture **Credits: 3.00**
- ANTH 33600 - Human Variation **Credits: 3.00**
- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 34100 - Culture And Personality **Credits: 3.00**
- ANTH 35800 - African Cultures **Credits: 3.00**
- ANTH 36800 - Sociolinguistic Study Of African American English **Credits: 3.00**
- ANTH 37000 - Ethnicity And Culture **Credits: 3.00**
- ANTH 37300 - Anthropology Of Religion **Credits: 3.00**
- ANTH 37800 - Archaeology And Cultural Anthropology Of Mesoamerica (Mexico, Belize And Guatemala) **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- ANTH 38500 - Community Engagement In Anthropology **Credits: 3.00**
- ARAB 23900 - Arab Women Writers **Credits: 3.00**
- ARAB 28000 - Arabic Culture **Credits: 3.00**
- ARAB 28100 - Introduction To Islamic Civilization And Culture **Credits: 3.00**
- ARAB 33400 - North African Literature And Culture **Credits: 3.00**
- ARAB 58700 - Modern Arab Thought **Credits: 3.00**
- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- ASL 28000 - American Deaf Community: Language, Culture, And Society **Credits: 3.00**
- CDIS 23900 - Introduction To Disability Studies **Credits: 3.00**
- CGT 28500 - Cross Cultural Game Development **Credits: 3.00**
- CHNS 28000 - Topics In Chinese Civilization And Culture **Credits: 3.00**
- CHNS 28100 - Introduction To Chinese Food Culture **Credits: 3.00**
- CHNS 33000 - Introduction To Chinese Cinema **Credits: 3.00**
- CM 33200 - Architectural Design, Construction Techniques And Society **Credits: 3.00**
- CMPL 23700 - Our Common Bond: Languages And Cultures In A Global Context **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 32800 - Diversity At Work: A Rhetorical Approach **Credits: 3.00**
- COM 37200 - Communication In Relationships **Credits: 3.00**
- COM 37600 - Communication And Gender **Credits: 3.00**
- COM 38100 - Gender And Feminist Studies In Communication **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- COM 41600 - United States Politics And The Media **Credits: 3.00**
- COM 46400 - American Political Communication **Credits: 3.00**

- COM 50300 - Cross Cultural Communication **Credits: 3.00**
- COM 52700 - Introduction To Cultural Studies In Communication **Credits: 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDCI 28500 - Multiculturalism And Education **Credits: 2.00 to 3.00**
- EDPS 21200 - Collaboration And Family Engagement To Support Students With Disabilities **Credits: 3.00**
- EDPS 23500 - Learning And Motivation **Credits: 2.00 or 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- EDST 20010 - Educational Policies And Laws **Credits: 1.00 to 3.00**
- ENGL 21700 - Figures Of Myth And Legend I: Monsters **Credits: 3.00**
- ENGL 21800 - Figures Of Myth And Legends II: Heroes And Villains **Credits: 3.00**
- ENGL 21900 - Figures Of Myth And Legend III: Magic And Marvels **Credits: 3.00**
- ENGL 22500 - Literature, Inequality, And Injustice **Credits: 3.00**
- ENGL 22800 - Language And Social Identity **Credits: 3.00**
- ENGL 22900 - Creole Languages And Cultures **Credits: 3.00**
- ENGL 25700 - Literature Of Black America **Credits: 3.00**
- ENGL 28000 - Games, Narrative, Culture **Credits: 3.00**
- ENGL 33000 - Games And Diversity **Credits: 3.00**
- ENGL 35200 - Native American Literature **Credits: 3.00**
- ENGL 35400 - Asian American Literature **Credits: 3.00**
- ENGL 35800 - Black Drama **Credits: 3.00**
- ENGL 35900 - Black Women Writers **Credits: 3.00**
- ENGL 36000 - Gender And Literature **Credits: 3.00**
- ENGL 36600 - Postcolonial Literatures **Credits: 3.00**
- ENGL 43900 - Topics In Disability Studies **Credits: 3.00**
- ENGR 31000 - Engineering In Global Context **Credits: 3.00**
- ENTR 47000 - Gender, Diversity And Leadership **Credits: 3.00**
- FNR 23000 - The World's Forests And Society **Credits: 3.00**
- GSLA 10100 - Global Awareness **Credits: 3.00**
- GSLA 30100 - Theories Of Global Studies **Credits: 3.00**
- HDFS 20100 - Introduction To Relationship And Family Science **Credits: 3.00**
- HDFS 22500 - Human Development Across Cultures **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HEBR 38000 - Israel And The Modern World: Cinema, Literature, History And Politics **Credits: 3.00**
- HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
- HIST 10500 - Survey Of Global History **Credits: 3.00**
- HIST 21000 - The Making Of Modern Africa **Credits: 3.00**
- HIST 21100 - The Global Field: World Soccer And Global History **Credits: 3.00**
- HIST 23900 - History Of Russia From 1861 To The Present **Credits: 3.00**
- HIST 24100 - East Asia In The Modern World **Credits: 3.00**
- HIST 24300 - South Asian History And Civilizations **Credits: 3.00**
- HIST 24600 - Modern Middle East And North Africa **Credits: 3.00**
- HIST 27200 - Introduction To Modern Latin American History (1810 To The Present) **Credits: 3.00**
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits: 3.00**
- HIST 30305 - Food In Modern America **Credits: 3.00**
- HIST 31205 - The Arab-Israeli Conflict **Credits: 3.00**
- HIST 31405 - Science, Technology, Engineering And Mathematics (STEM) And Gender **Credits: 3.00**

- HIST 31505 - American Beauty **Credits: 3.00**
- HIST 31905 - Christianity In The Global Age **Credits: 3.00**
- HIST 32400 - Modern France **Credits: 3.00**
- HIST 32900 - History Of Women In Modern Europe **Credits: 3.00**
- HIST 33400 - Science And Society In Western Civilization II **Credits: 3.00**
- HIST 33805 - History Of Human Rights **Credits: 3.00**
- HIST 34000 - Modern China **Credits: 3.00**
- HIST 34505 - Arabs in American Eyes **Credits: 3.00**
- HIST 34705 - History Of Religion In America **Credits: 3.00**
- HIST 35000 - Science And Society In The Twentieth Century World **Credits: 3.00**
- HIST 35205 - Death, Disease And Medicine In Twentieth Century American History **Credits: 3.00**
- HIST 35900 - Gender In East Asian History **Credits: 3.00**
- HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
- HIST 37100 - Society, Culture, And Rock And Roll **Credits: 3.00**
- HIST 37500 - Women In America Since 1870 **Credits: 3.00**
- HIST 37700 - History And Culture Of Native America **Credits: 3.00**
- HIST 38105 - American Indians And Film **Credits: 3.00**
- HIST 38505 - Media, Politics And Popular Culture **Credits: 3.00**
- HIST 38605 - Land Of The Indians: Native Americans In Indiana **Credits: 3.00**
- HIST 38700 - History Of The Space Age **Credits: 3.00**
- HIST 39800 - African American History Since 1877 **Credits: 3.00**
- HIST 40000 - Great Books And The Search For Meaning **Credits: 3.00**
- HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
- HIST 47005 - Women And Health In America **Credits: 3.00**
- HIST 47700 - Native American Women's History **Credits: 3.00**
- HIST 48800 - History Of Sexual Regulation In The United States **Credits: 3.00**
- HIST 49400 - Science And Society In American Civilization **Credits: 3.00**
- HK 57600 - Diversity And Health **Credits: 3.00**
- ITAL 28000 - Italian Culture And Civilization **Credits: 3.00**
- ITAL 28100 - The Italian Renaissance And Its Scientific And Cultural Impact On Western Civilization **Credits: 3.00**
- JPNS 28000 - Introduction To Modern Japanese Civilization **Credits: 3.00**
- JWST 33000 - Introduction To Jewish Studies **Credits: 3.00**
- KOR 33000 - Introduction To Korean Cinema **Credits: 3.00**
- LALS 25000 - Introduction To Latin American And Latino Studies **Credits: 3.00**
- LALS 26000 - U S Latino Culture **Credits: 3.00**
- LC 23100 - Fairytale, Folktale, Fable **Credits: 3.00**
- LC 23700 - Our Common Bond: Languages And Cultures In A Global Context **Credits: 3.00**
- LC 23900 - Women Writers In Translation **Credits: 3.00**
- LC 26700 - World Literature: From 1700 A D To The Present **Credits: 3.00**
- LC 28100 - Introduction To World Food Cultures **Credits: 3.00**
- LC 32300 - Global Sustainable Engineering **Credits: 1.00 or 3.00**
- LC 36800 - Sociolinguistic Study Of African American English **Credits: 3.00**
- LING 36800 - Sociolinguistic Study Of African American English **Credits: 3.00**
- LING 57600 - Latin American Indigenous Languages And Cultures **Credits: 3.00**
- MFET 35800 - Smart Manufacturing And The Global Economy **Credits: 3.00**
- MGMT 33100 - Development And Impact of Equal Employment Law **Credits: 3.00**
- MGMT 55500 - Leading Management Of Diversity And Inclusion In Organizations **Credits: 2.00 or 3.00**

- MSL 20100 - Leadership And Ethics **Credits: 2.00 to 3.00**
- MUS 37600 - World Music **Credits: 3.00**
- NUTR 53200 - World Food Problems **Credits: 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 20700 - Ethics For Technology, Engineering, And Design **Credits: 3.00**
- PHIL 22500 - Philosophy And Gender **Credits: 3.00**
- PHIL 23000 - Religions Of The East **Credits: 3.00**
- PHIL 23100 - Religions Of The West **Credits: 3.00**
- PHIL 24000 - Social And Political Philosophy **Credits: 3.00**
- PHIL 24200 - Philosophy, Culture, And The African American Experience **Credits: 3.00**
- POL 13000 - Introduction To International Relations **Credits: 3.00**
- POL 14100 - Governments Of The World **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23100 - Introduction To United States Foreign Policy **Credits: 3.00**
- POL 23200 - Contemporary Crises In International Relations **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 23700 - Modern Weapons And International Relations **Credits: 3.00**
- POL 32600 - Black Political Participation In America **Credits: 3.00**
- POL 32700 - Global Green Politics **Credits: 3.00**
- POL 33500 - China And The Challenges Of Globalization **Credits: 3.00**
- POL 34700 - Introduction To Latin American Politics **Credits: 3.00**
- POL 34800 - East Asian Politics **Credits: 3.00**
- POL 36000 - Women And The Law **Credits: 3.00**
- POL 41300 - Analysis Of Political Attitudes And Behavior **Credits: 3.00**
- POL 42300 - International Environmental Policy **Credits: 3.00**
- POL 43300 - International Organization **Credits: 3.00**
- POL 43801 - International Human Rights **Credits: 3.00**
- PSY 23900 - The Psychology Of Women **Credits: 3.00**
- PSY 24400 - Introduction To Human Sexuality **Credits: 3.00**
- PTGS 23500 - Luso-Brazilian Literature In Translation **Credits: 3.00**
- PTGS 33000 - Brazilian, Portuguese, And African Cinema **Credits: 3.00**
- PUBH 22500 - Contemporary Women's Health **Credits: 3.00**
- PUBH 23000 - Community, Culture And Social Justice From A Public Health Perspective **Credits: 3.00**
- PUBH 25000 - Intercultural Development In Public Health And Human Sciences **Credits: 3.00**
- PUBH 51100 - Foundations Of Global Health **Credits: 3.00**
- REL 23000 - Religions Of The East **Credits: 3.00**
- REL 23100 - Religions Of The West **Credits: 3.00**
- RUSS 33000 - Russian And East European Cinema **Credits: 3.00**
- RUSS 38000 - Russian Culture And Civilization I **Credits: 3.00**
- RUSS 38100 - Russian Culture And Civilization II **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- SOC 22000 - Social Problems **Credits: 3.00**
- SOC 26700 - Religion In The Modern World **Credits: 3.00**
- SOC 31000 - Race And Ethnicity **Credits: 3.00**
- SOC 33800 - Global Social Movements **Credits: 3.00**
- SOC 33900 - Sociology Of Global Development **Credits: 3.00**
- SOC 35200 - Drugs, Culture, And Society **Credits: 3.00**

- SOC 35600 - Hate And Violence **Credits: 3.00**
- SOC 36700 - Religion In America **Credits: 3.00**
- SOC 36900 - Religion And Chinese Society **Credits: 3.00**
- SOC 41100 - Social Inequality **Credits: 3.00**
- SOC 45000 - Gender Roles In Modern Society **Credits: 3.00**
- SOC 51400 - Racial And Cultural Minorities **Credits: 3.00**
- SPAN 33000 - Spanish And Latin American Cinema **Credits: 3.00**
- SYS 30000 - It's A Complex World - Addressing Global Challenges **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 35600 - Global Technology Leadership **Credits: 3.00**
- WGSS 28000 - Women's, Gender, And Sexuality Studies: An Introduction **Credits: 3.00**
- WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**
- WGSS 38100 - Women Of Color In The United States **Credits: 3.00**
- WGSS 38300 - Women, Work, And Labor **Credits: 3.00**
- WGSS 48500 - Feminist Perspectives On Film **Credits: 3.00**
- Any foreign language 20000 or higher (20100, 20200, 30100, 30200, 40100, 40200)
- Any Purdue approved Study Abroad with a minimum of 3 credit hours that includes reflective learning assignments.

Approved Global/Cultural Course List for Intercultural Requirement

Global/Cultural Courses

- AAS 27100 - Introduction To African American Studies **Credits: 3.00**
- AAS 35900 - Black Women Writers **Credits: 3.00**
- AAS 37100 - The African American Experience **Credits: 3.00**
- AAS 37300 - Issues In African American Studies **Credits: 3.00**
- AAS 37500 - The Black Family **Credits: 3.00**
- AAS 47300 - Blacks In Hollywood Film **Credits: 3.00**
- AGE 53200 - World Food Problems **Credits: 3.00**
- AGR 20100 - Communicating Across Culture **Credits: 3.00**
- AMST 10100 - America And The World **Credits: 3.00**
- AMST 20100 - Interpreting America **Credits: 3.00**
- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21000 - Technology And Culture **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- ANTH 32700 - Environment And Culture **Credits: 3.00**
- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 34100 - Culture And Personality **Credits: 3.00**
- ANTH 35800 - African Cultures **Credits: 3.00**
- ANTH 36800 - Sociolinguistic Study Of African American English **Credits: 3.00**

- ANTH 37000 - Ethnicity And Culture **Credits: 3.00**
- ANTH 37300 - Anthropology Of Religion **Credits: 3.00**
- ANTH 37800 - Archaeology And Cultural Anthropology Of Mesoamerica (Mexico, Belize And Guatemala) **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- ANTH 40400 - Comparative Social Organization **Credits: 3.00**
- ARAB 23900 - Arab Women Writers **Credits: 3.00**
- ARAB 28000 - Arabic Culture **Credits: 3.00**
- ARAB 28100 - Introduction To Islamic Civilization And Culture **Credits: 3.00**
- ARAB 33400 - North African Literature And Culture **Credits: 3.00**
- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- ASL 28000 - American Deaf Community: Language, Culture, And Society **Credits: 3.00**
- AT 23300 - Ethics And Aviation **Credits: 3.00**
- CDIS 23900 - Introduction To Disability Studies **Credits: 3.00**
- CGT 28500 - Cross Cultural Game Development **Credits: 3.00**
- CHNS 28000 - Topics In Chinese Civilization And Culture **Credits: 3.00**
- CHNS 28100 - Introduction To Chinese Food Culture **Credits: 3.00**
- CHNS 33000 - Introduction To Chinese Cinema **Credits: 3.00**
- CM 33200 - Architectural Design, Construction Techniques And Society **Credits: 3.00**
- CMPL 23700 - Our Common Bond: Languages And Cultures In A Global Context **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 32800 - Diversity At Work: A Rhetorical Approach **Credits: 3.00**
- COM 37200 - Communication In Relationships **Credits: 3.00**
- COM 37600 - Communication And Gender **Credits: 3.00**
- COM 38100 - Gender And Feminist Studies In Communication **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- COM 41600 - United States Politics And The Media **Credits: 3.00**
- COM 46400 - American Political Communication **Credits: 3.00**
- COM 52700 - Introduction To Cultural Studies In Communication **Credits: 3.00**
- CSR 34400 - Fundamentals Of Negotiations **Credits: 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 21200 - Collaboration And Family Engagement To Support Students With Disabilities **Credits: 3.00**
- EDPS 23500 - Learning And Motivation **Credits: 2.00 or 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- ENGL 21700 - Figures Of Myth And Legend I: Monsters **Credits: 3.00**
- ENGL 21800 - Figures Of Myth And Legends II: Heroes And Villains **Credits: 3.00**
- ENGL 21900 - Figures Of Myth And Legend III: Magic And Marvels **Credits: 3.00**
- ENGL 22500 - Literature, Inequality, And Injustice **Credits: 3.00**
- ENGL 22800 - Language And Social Identity **Credits: 3.00**
- ENGL 22900 - Creole Languages And Cultures **Credits: 3.00**
- ENGL 25700 - Literature Of Black America **Credits: 3.00**
- ENGL 28000 - Games, Narrative, Culture **Credits: 3.00**
- ENGL 33000 - Games And Diversity **Credits: 3.00**
- ENGL 35200 - Native American Literature **Credits: 3.00**

- ENGL 35400 - Asian American Literature **Credits: 3.00**
- ENGL 35800 - Black Drama **Credits: 3.00**
- ENGL 35900 - Black Women Writers **Credits: 3.00**
- ENGL 36000 - Gender And Literature **Credits: 3.00**
- ENGL 36600 - Postcolonial Literatures **Credits: 3.00**
- ENGL 43900 - Topics In Disability Studies **Credits: 3.00**
- ENGR 31000 - Engineering In Global Context **Credits: 3.00**
- ENTR 47000 - Gender, Diversity And Leadership **Credits: 3.00**
- GSLA 10100 - Global Awareness **Credits: 3.00**
- GSLA 30100 - Theories Of Global Studies **Credits: 3.00**
- HDFS 20100 - Introduction To Relationship And Family Science **Credits: 3.00**
- HDFS 22500 - Human Development Across Cultures **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HEBR 38000 - Israel And The Modern World: Cinema, Literature, History And Politics **Credits: 3.00**
- HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
- HIST 10500 - Survey Of Global History **Credits: 3.00**
- HIST 21000 - The Making Of Modern Africa **Credits: 3.00**
- HIST 21100 - The Global Field: World Soccer And Global History **Credits: 3.00**
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits: 3.00**
- HIST 31205 - The Arab-Israeli Conflict **Credits: 3.00**
- HIST 31405 - Science, Technology, Engineering And Mathematics (STEM) And Gender **Credits: 3.00**
- HIST 31505 - American Beauty **Credits: 3.00**
- HIST 31905 - Christianity In The Global Age **Credits: 3.00**
- HIST 32900 - History Of Women In Modern Europe **Credits: 3.00**
- HIST 33400 - Science And Society In Western Civilization II **Credits: 3.00**
- HIST 33805 - History Of Human Rights **Credits: 3.00**
- HIST 34505 - Arabs In American Eyes **Credits: 3.00**
- HIST 35000 - Science And Society In The Twentieth Century World **Credits: 3.00**
- HIST 35900 - Gender In East Asian History **Credits: 3.00**
- HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
- HIST 37100 - Society, Culture, And Rock And Roll **Credits: 3.00**
- HIST 37700 - History And Culture Of Native America **Credits: 3.00**
- HIST 38105 - American Indians And Film **Credits: 3.00**
- HIST 38605 - Land Of The Indians: Native Americans In Indiana **Credits: 3.00**
- HIST 38700 - History Of The Space Age **Credits: 3.00**
- HIST 39800 - African American History Since 1877 **Credits: 3.00**
- HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
- HIST 47005 - Women And Health In America **Credits: 3.00**
- HIST 47700 - Native American Women's History **Credits: 3.00**
- HIST 48800 - History Of Sexual Regulation In The United States **Credits: 3.00**
- HIST 49400 - Science And Society In American Civilization **Credits: 3.00**
- HK 57600 - Diversity And Health **Credits: 3.00**
- ITAL 28000 - Italian Culture And Civilization **Credits: 3.00**
- ITAL 28100 - The Italian Renaissance And Its Scientific And Cultural Impact On Western Civilization **Credits: 3.00**
- JPNS 28000 - Introduction To Modern Japanese Civilization **Credits: 3.00**
- LALS 25000 - Introduction To Latin American And Latino Studies **Credits: 3.00**
- LALS 26000 - U S Latino Culture **Credits: 3.00**

- LC 23700 - Our Common Bond: Languages And Cultures In A Global Context **Credits: 3.00**
- LC 36800 - Sociolinguistic Study Of African American English **Credits: 3.00**
- LING 36800 - Sociolinguistic Study Of African American English **Credits: 3.00**
- LING 57600 - Latin American Indigenous Languages And Cultures **Credits: 3.00**
- MGMT 33100 - Development And Impact of Equal Employment Law **Credits: 3.00**
- MUS 37600 - World Music **Credits: 3.00**
- NUTR 53200 - World Food Problems **Credits: 3.00**
- MGMT 55500 - Leading Management Of Diversity And Inclusion In Organizations **Credits: 2.00 or 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 20700 - Ethics For Technology, Engineering, And Design **Credits: 3.00**
- PHIL 22500 - Philosophy And Gender **Credits: 3.00**
- PHIL 23000 - Religions Of The East **Credits: 3.00**
- PHIL 23100 - Religions Of The West **Credits: 3.00**
- PHIL 24000 - Social And Political Philosophy **Credits: 3.00**
- PHIL 24200 - Philosophy, Culture, And The African American Experience **Credits: 3.00**
- POL 13000 - Introduction To International Relations **Credits: 3.00**
- POL 14100 - Governments Of The World **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23100 - Introduction To United States Foreign Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 32600 - Black Political Participation In America **Credits: 3.00**
- POL 32700 - Global Green Politics **Credits: 3.00**
- POL 33500 - China And The Challenges Of Globalization **Credits: 3.00**
- POL 36000 - Women And The Law **Credits: 3.00**
- POL 41300 - Analysis Of Political Attitudes And Behavior **Credits: 3.00**
- POL 42300 - International Environmental Policy **Credits: 3.00**
- POL 43300 - International Organization **Credits: 3.00**
- POL 43801 - International Human Rights **Credits: 3.00**
- PSY 23900 - The Psychology Of Women **Credits: 3.00**
- PSY 24400 - Introduction To Human Sexuality **Credits: 3.00**
- PSY 33700 - Social Cognition **Credits: 3.00**
- PTGS 33000 - Brazilian, Portuguese, And African Cinema **Credits: 3.00**
- PUBH 22500 - Contemporary Women's Health **Credits: 3.00**
- PUBH 51100 - Foundations Of Global Health **Credits: 3.00**
- REL 23000 - Religions Of The East **Credits: 3.00**
- REL 23100 - Religions Of The West **Credits: 3.00**
- RUSS 33000 - Russian And East European Cinema **Credits: 3.00**
- RUSS 38000 - Russian Culture And Civilization I **Credits: 3.00**
- RUSS 38100 - Russian Culture And Civilization II **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- SOC 22000 - Social Problems **Credits: 3.00**
- SOC 26700 - Religion In The Modern World **Credits: 3.00**
- SOC 31000 - Race And Ethnicity **Credits: 3.00**
- SOC 33800 - Global Social Movements **Credits: 3.00**
- SOC 33900 - Sociology Of Global Development **Credits: 3.00**
- SOC 35200 - Drugs, Culture, And Society **Credits: 3.00**
- SOC 35600 - Hate And Violence **Credits: 3.00**

- SOC 36700 - Religion In America **Credits: 3.00**
- SOC 36900 - Religion And Chinese Society **Credits: 3.00**
- SOC 41100 - Social Inequality **Credits: 3.00**
- SOC 42900 - Sociology Of Protest **Credits: 3.00**
- SOC 51400 - Racial And Cultural Minorities **Credits: 3.00**
- SYS 30000 - It's A Complex World - Addressing Global Challenges **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 35600 - Global Technology Leadership **Credits: 3.00**
- WGSS 28000 - Women's, Gender, And Sexuality Studies: An Introduction **Credits: 3.00**
- WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**
- WGSS 38100 - Women Of Color In The United States **Credits: 3.00**
- WGSS 38300 - Women, Work, And Labor **Credits: 3.00**
- Any foreign language 20000 or higher (20100, 20200, 30100, 30200, 40100, 40200)
- Any Purdue approved Study Abroad with a minimum of 3 credit hours that includes reflective learning assignments.

Multidisciplinary Technology Supplemental Information (Statewide Locations Only)

Approved Polytechnic Location Selective (33 credits)

Any Polytechnic course available at the location of admission as chosen by host company or institution.

May include the following courses:

AD10000:29900, ANTH 10000:29900, ASTR 10000:29900, AT10000:499000, CGT 10000:49900, CHM10000:CHM29900, CNIT10000:CNIT49900, COM 10000:49900, EAPS 10000:29900, ECET 10000:49900, ECON 10000:29900, ENGL 10000:49900, ENGT 10000:49900, HIST10000:39900, IET 10000:49900, MA10000:29900, MET10000:49900, MFET10000:49900, MGMT10000:29900, OLS10000:49900, PHIL10000:29900, PHYS10000:29900, POL10000:29900, SCLA10000:29900, STAT10000:49900, SOC10000:29900, TECH10000:49900, TLI10000:49900

Mathematics Selective (3 credits)

(satisfies Quantitative Reasoning Selective for core)

- MA 15300 - College Algebra **Credits: 3.00**
- MA 15555 - Quantitative Reasoning **Credits: 3.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**

Mathematics/Statistics Selective (3 credits)

- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**

Oral Communication Selective (3 credits)

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- COM 21200 - Approaches To The Study Of Interpersonal Communication **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

English Composition Selective (3 credits)

SCLA Critical Thinking & Communication

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**

Advanced Communication Selective (3 credits)

Lab Science Foundation Selective (3 credits)

(satisfies Science for core) Must be a lab-based course from the approved UCC Science list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Science Foundation Selective (3 credits)

(satisfies Science for core) Must be a course from the approved UCC Science list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Behavioral/Social Science Foundational Selective (3 credits)

(satisfies Human Cultures Behavioral/Social Science for core)
Must be a class from the approved UCC Science list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Humanities Foundational Selective (3 credits)

(satisfies Human Cultures Humanities for core)
See approved UCC Humanities list at: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Global/Professional Selective (3 credits)

Approved Polytechnic Statewide Selective (45 credits)

Any course offered within the Polytechnic Statewide system as chosen by host company or institution.

May include the following courses: AD10000:29900, ANTH 10000:29900, ASTR 10000:29900, AT10000:499000, CGT 10000:49900, CHM10000:CHM29900, CNIT10000:CNIT49900, COM 10000:49900, EAPS 10000:29900, ECET 10000:49900, ECON 10000:29900, ENGL 10000:49900, ENGT 10000:49900, HIST10000:39900, IET 10000:49900, MA10000:29900,

MET10000:49900, MFET10000:49900, MGMT10000:29900, OLS10000:49900, PHIL10000:29900, PHYS10000:29900, POL10000:29900, SCLA10000:29900, STAT10000:49900, SOC10000:29900, TECH10000:49900, TLI10000:49900

Civics Literacy Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the Civics Literacy Proficiency website.

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of these approved courses (or transferring in approved AP or departmental credit in lieu of taking a course).

Robotics Engr Tech Concentration for Engineering Technology (Polytechnic Statewide)

Robotics is one of the concentrations in the Engineering Technology major offered for students who seek to contribute at the intersection between manufacturing, electrical, mechanical, and computing areas in primarily industrial environments. When majoring in robotics engineering technology, students will develop and apply robotic solutions to a broad range of industrial and consumer problems. Robots help people and companies be more productive and safer, and they help explore more frontiers.

Required Courses (37 credits)

General Education (3 credits)

- Elective - Credit Hours: 3.00

Science, Mathematics and Technology (13 credits)

- ECET 27900 - Embedded Digital Systems **Credits: 3.00**
- MET 21300 - Dynamics **Credits: 3.00**
- MET 23000 - Fluid Power **Credits: 3.00**
- Lab Science Foundation Selective - Credit Hours: 4.00

Robotics (21 credits)

- ECET 32700 - Instrumentation And Data Acquisition Design **Credits: 3.00**
- MET 28400 - Introduction To Industrial Controls **Credits: 3.00**
- MFET 24800 - Industrial Robot Programming And Applications **Credits: 3.00**
- MFET 34400 - Automated Manufacturing Processes **Credits: 3.00**
- Robotics Technical Selectives - Credit Hours: 9.00

School of Aviation and Transportation Technology

Overview

Purdue University has been a leader in aviation education since the mid-1950s. The School of Aviation and Transportation Technology offers seven majors at the bachelor's degree level. The curriculum touches all areas of the aviation industry, including design, flight, and business.

With our focus on industry partnerships, undergraduate students have access to real-world projects, networking opportunities and up-to-date information that make them desirable future employees and leaders. Flexible scheduling can also help you get into the workforce sooner.

Faculty

[School of Aviation and Transportation Technology Website](#)

Contact Information

School of Aviation and Transportation Technology

1401 Aviation Drive

West Lafayette IN 47907-2015

Phone: 765.494.5782

Email: atinfo@purdue.edu

Graduate Information

For Graduate Information please see [Aviation and Transportation Technology Graduate Program Information](#).

Baccalaureate

Aeronautical Engineering Technology, BS

About the Program

Airplanes are complex mechanical marvels, utilizing several different disciplines of science, engineering and mathematics. A degree in aeronautical engineering technology will provide you with the skills and knowledge to create and maintain these machines as well as improve the quality of life for those who depend on and use them. Over the course of the program you will learn how to design, manufacture, maintain, operate and support all varieties of aerospace vehicles.

Disciplines covered in the AET program include applied aeronautical structures and materials, electrical systems, powerplants, vehicle systems and design. A Bachelor of Science degree in AET will optionally provide you with an opportunity to take the Airframe and Powerplant Certification exam.

The Aeronautical Engineering Technology major is part of the Aeronautical Engineering Technology program. The Aeronautical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET.

Aeronautical Engineering Technology Website

Aeronautical Engineering Technology Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (75 credits)

Required Major Courses (75 credits)

- AT 10000 - Introduction To Aviation Technology **Credits:** 1.00
- AT 11600 - Aircraft Science For Engineering Technology **Credits:** 3.00 or
- AT 10600 - Basic Aircraft Science **Credits:** 3.00

- AT 12700 - Publications Records And Regulations **Credits:** 3.00
- AT 20501 - Statics For Aerostructures **Credits:** 3.00
- AT 20700 - Introduction To Aircraft Systems **Credits:** 3.00
- AT 20802 - Aircraft Materials **Credits:** 3.00
- AT 26200 - Basic Aircraft Powerplant Technology **Credits:** 4.00
- AT 26502 - Aircraft Electrical Systems **Credits:** 3.00
- AT 26700 - Fixed And Rotary Wing Assemblies **Credits:** 3.00
- AT 27200 - Introduction To Composite Technology **Credits:** 3.00
- AT 27800 - Nondestructive Testing For Aircraft **Credits:** 3.00
- AT 30702 - Advanced Aircraft Systems **Credits:** 3.00
- AT 30802 - Aircraft Materials Processes **Credits:** 3.00
- AT 32001 - Advanced Aviation Operations **Credits:** 3.00
- AT 33502 - Avionics Systems **Credits:** 3.00
- AT 36302 - Fundamentals Of Powerplant Systems **Credits:** 4.00
- AT 37200 - Aircraft Maintenance Practices **Credits:** 3.00
- AT 37600 - Aircraft Gas Turbine Engine Technology I **Credits:** 4.00
- AT 38500 - Design Support Analysis **Credits:** 2.00
- AT 40300 - Airman Certification Procedures **Credits:** 1.00
- AT 44502 - Aircraft Electronics **Credits:** 3.00

- AT 47200 - Advanced Composite Technology **Credits:** 3.00 or
- AT 48000 - Advanced Aviation Manufacturing (Lean Six Sigma Methodologies) **Credits:** 3.00

- AT 47600 - Aircraft Gas Turbine Engine Technology II **Credits:** 3.00
- AT 49200 - Aircraft Airworthiness Assurance **Credits:** 3.00
- AT 49600 - Applied Research Proposal **Credits:** 2.00
- AT 49700 - Applied Research Project **Credits:** 3.00

Other Departmental/Program Course Requirements (42 credits)

- PHYS 22000 - General Physics **Credits: 4.00** ♦ (satisfies Science for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ (satisfies Written Communication for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦ (satisfies Oral Communication for core)
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** ♦ (satisfies Information Literacy and Science, Technology & Society Selective for core)
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** (satisfies Quantitative Reasoning Selective for core)
- MA 16010 - Applied Calculus I **Credits: 3.00** (satisfies Quantitative Reasoning Selective for core)
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** ♦
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00** ♦
- Behavioral/Social Science Foundational Selective - Credit Hours: 3.00 (satisfies Human Cultures: Behavioral/Social Science for core)
- Cornerstone Level II Selective- Credit Hours: 3.00
- Cornerstone Level III Selective- Credit Hours: 3.00
- Cornerstone Level III Selective - Credit Hours: 3.00 (satisfies Human Cultures: Humanities for core)
- Economics Selective - Credit Hours: 3.00
- Science Foundational Selective - Credit Hours: 3.00 (satisfies Science for core)

Electives (3 credits)

Elective (any course/any subject) - Credit Hours: 3.00

Supplemental List

[Click here for Aviation Technology Supplemental Information .](#)

Grade Requirements

- Students must earn a "C" or better in all AT courses.
- Purdue policy states that a student may attempt a course no more than three times. An attempt is defined as all courses displayed on a student transcript having grades of (including, but not limited to) A, B, C, D, E, F, W, WF, I and IF.

GPA Requirements

2.0 Graduation GPA required for Bachelor of Science degree.

Course Requirements and Notes

- A course can only satisfy one departmental/program major degree requirement within a unique plan of study.
- A course may be used to satisfy two separate departmental/program major degree requirements

Non-course / Non-credit Requirements

- Internship Requirement
- Globalization Requirement

Pass/No Pass Policy

A student may elect the Pass/Not-Pass (P/NP) grading option for courses without an AT prefix. A student may not elect this option for more than 20 percent of the total credit hours required for graduation. AT prefix courses may be taken for P/NP only under extenuating circumstances and in close coordination with advisors and faculty. Some AT prefix courses have been established as P/NP for all students and are therefore required to be taken in that manner. For further information regarding P/NP, students should refer to the Purdue Regulations, Grades and Grade Reports, Pass/Not-Pass Option & Scholastic Indexes.

Transfer Credit Policy

- SATT adheres to the admissions office Transfer Credit Course Equivalency Guide.
- Students may submit requests (with accompanied Syllabi) for Non-Purdue course evaluations for AT courses that are not reflective in the Transfer Credit Course Equivalency Guide.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- AT 11600 - Aircraft Science For Engineering Technology **Credits: 3.00** or
- AT 10600 - Basic Aircraft Science **Credits: 3.00**
- AT 10000 - Introduction To Aviation Technology **Credits: 1.00**
- AT 12700 - Publications Records And Regulations **Credits: 3.00**
- AT 27800 - Nondestructive Testing For Aircraft **Credits: 3.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦

16 Credits

Spring 1st Year

- AT 20700 - Introduction To Aircraft Systems **Credits: 3.00**
- AT 20802 - Aircraft Materials **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** ♦
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00** ♦
- PHYS 22000 - General Physics **Credits: 4.00** ♦

15 Credits

Fall 2nd Year

- AT 26502 - Aircraft Electrical Systems **Credits: 3.00**
- AT 26700 - Fixed And Rotary Wing Assemblies **Credits: 3.00**
- AT 27200 - Introduction To Composite Technology **Credits: 3.00**
- AT 30702 - Advanced Aircraft Systems **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦

15 Credits

Spring 2nd Year

- AT 26200 - Basic Aircraft Powerplant Technology **Credits: 4.00**
- AT 33502 - Avionics Systems **Credits: 3.00**

- AT 36302 - Fundamentals Of Powerplant Systems **Credits: 4.00**
- AT 37600 - Aircraft Gas Turbine Engine Technology I **Credits: 4.00**

15 Credits

Fall 3rd Year

- AT 20501 - Statics For Aerostructures **Credits: 3.00**
- AT 37200 - Aircraft Maintenance Practices **Credits: 3.00**
- AT 40300 - Airman Certification Procedures **Credits: 1.00**
- AT 47600 - Aircraft Gas Turbine Engine Technology II **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00**
- Elective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

- AT 30802 - Aircraft Materials Processes **Credits: 3.00**
- AT 32001 - Advanced Aviation Operations **Credits: 3.00**
- AT 38500 - Design Support Analysis **Credits: 2.00**
- AT 47200 - Advanced Composite Technology **Credits: 3.00** or
- AT 48000 - Advanced Aviation Manufacturing (Lean Six Sigma Methodologies) **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** ♦

14 Credits

Fall 4th Year

- AT 44502 - Aircraft Electronics **Credits: 3.00**
- AT 49600 - Applied Research Proposal **Credits: 2.00**
- Cornerstone Level II Selective - Credit Hours: 3.00
- Cornerstone Level III Human Cultures Selective - Credit Hours: 3.00
- Science Selective - Credit Hours: 3.00

14 Credits

Spring 4th Year

- AT 49200 - Aircraft Airworthiness Assurance **Credits: 3.00**
- AT 49700 - Applied Research Project **Credits: 3.00**
- Behavioral/Social Science Selective - Credit Hours: 3.00
- Cornerstone Level III Selective- Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00

15 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Aerospace Financial Analysis, BS

About the Program

The business side of aviation industry is complex, from aircraft leases to fuel options to route efficiency. When you major in aerospace financial analysis at Purdue University, you will gain the expertise necessary to bridge the knowledge gap between airline operations professionals and their financial counterparts.

[Aerospace Financial Analysis Website](#)

[Aviation & Transportation Technology Department Major Change \(CODO\) Requirements](#)

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (59 credits)

Required Major Courses (59 credits)

- AT 10000 - Introduction To Aviation Technology **Credits: 1.00**
- AT 10200 - Aviation Business **Credits: 3.00 ♦**
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems **Credits: 3.00**
- AT 10600 - Basic Aircraft Science **Credits: 3.00**
- AT 14400 - Private Pilot Lectures **Credits: 4.00**
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations **Credits: 3.00**
- AT 20300 - Aviation Operations Management **Credits: 3.00 ♦**
- AT 25200 - Aviation Projects **Credits: 3.00**
- AT 34001 - Aerospace Business Statistics **Credits: 3.00 or**
- STAT 22500 - Introduction To Probability Models **Credits: 3.00**
- AT 35900 - Airport Management **Credits: 3.00**
- AT 36201 - Aviation Operations **Credits: 3.00**
- AT 41200 - Aviation Finance **Credits: 3.00**
- AT 42101 - Managerial Economics In Aviation **Credits: 3.00**
- AT 42201 - Aerospace Risk Management **Credits: 3.00 or**
- AT 38100 - Aviation Security **Credits: 3.00**
- AT 47500 - Aviation Law **Credits: 3.00**
- AT 48100 - Aviation Safety Problems **Credits: 3.00**
- AT 49800 - Aviation Technology Capstone **Credits: 3.00**
- MGMT 20000 - Introductory Accounting **Credits: 3.00 ♦**
- MGMT 20100 - Management Accounting I **Credits: 3.00 ♦**
- MGMT 30400 - Introduction To Financial Management **Credits: 3.00**

Other Departmental/Program Course Requirements (52 credits)

- PHYS 22000 - General Physics **Credits: 4.00 ♦** (satisfies Science for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00 ♦** (satisfies Written Communication for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00 ♦** (satisfies Oral Communication for core)
- TECH 12000 - Design Thinking In Technology **Credits: 3.00 ♦** (satisfies Information Literacy Selective for core)
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** (satisfies Quantitative Reasoning Selective for core)
- MA 16010 - Applied Calculus I **Credits: 3.00** (satisfies Quantitative Reasoning Selective for core)
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00 ♦**
- Behavioral/Social Science Foundational Selective - Credit Hours: 3.00 (satisfies Human Cultures: Behavioral/Social Science for core)
- Cornerstone Level II Selective List - Credit Hours: 3.00
- Cornerstone Level III Selective List - Credit Hours: 3.00
- Cornerstone Level III Selective - Credit Hours: 3.00 (satisfies Human Cultures: Humanities for core)
- Economics Selective - Credit Hours: 3.00
- Science Selective - Credit Hours: 3.00 (satisfies Science Selective for core)
- Any University - approved minor or departmentally - approved thematic area of study - Credit Hours: 12.00

Electives (9 credits)

Supplemental List

[Click here for Aviation Technology Supplemental Information .](#)

Grade Requirements

- Students must earn a "C" or better in all AT courses.
- Purdue policy states that a student may attempt a course no more than three times. An attempt is defined as all courses displayed on a student transcript having grades of (including, but not limited to) A, B, C, D, E, F, W, WF, I and IF.

GPA Requirements

2.0 Graduation GPA required for Bachelor of Science degree.

Course Requirements and Notes

- A course can only satisfy one departmental/program major degree requirement within a unique plan of study.
- A course may be used to satisfy two separate departmental/program major degree requirements
- Thematic Area Selective Requirement
 - Option I: Any University - approved minor
 - Option II: 6 credit hours of 20000 or higher-level courses AND 6 credit hours of 30000 or higher-level courses from any of the following departments: AT, AFT, EAPS, ECON, ENTR, HTM, MGMT, OBHR, OLS, POL, or TLI
 - Option III: 12 consecutive credit hours in a foreign language
 - Option IV: 9 credit hours of 50000 level courses AND 3 credit hours of 30000 or higher-level courses

Non-course / Non-credit Requirements

- Internship Requirement
- Globalization Requirement

Pass/No Pass Policy

A student may elect the Pass/Not-Pass (P/NP) grading option for courses without an AT prefix. A student may not elect this option for more than 20 percent of the total credit hours required for graduation. AT prefix courses may be taken for P/NP only under extenuating circumstances and in close coordination with advisors and faculty. Some AT prefix courses have been established as P/NP for all students and are therefore required to be taken in that manner. For further information regarding P/NP, students should refer to the Purdue Regulations, Grades and Grade Reports, Pass/Not-Pass Option & Scholastic Indexes.

Transfer Credit Policy

- SATT adheres to the admissions office Transfer Credit Course Equivalency Guide.
- Students may submit requests (with accompanied Syllabi) for Non-Purdue course evaluations for AT courses that are not reflective in the Transfer Credit Course Equivalency Guide.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency Website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- AT 10000 - Introduction To Aviation Technology **Credits: 1.00**
- AT 10600 - Basic Aircraft Science **Credits: 3.00**
- AT 14400 - Private Pilot Lectures **Credits: 4.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦

14 Credits

Spring 1st Year

- AT 10200 - Aviation Business **Credits: 3.00**
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** ♦
- MA 16010 - Applied Calculus I **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦

15 Credits

Fall 2nd Year

- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations **Credits: 3.00**
- AT 20300 - Aviation Operations Management **Credits: 3.00**
- AT 25200 - Aviation Projects **Credits: 3.00**
- MGMT 20000 - Introductory Accounting **Credits: 3.00** ♦
- Science Core Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- AT 36201 - Aviation Operations **Credits: 3.00**
- MGMT 20100 - Management Accounting I **Credits: 3.00** ♦
- PHYS 22000 - General Physics **Credits: 4.00** ♦
- Behavioral/Social Science Selective List - Credit Hours: 3.00
- Cornerstone Level II Selective List - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** ♦
- AT 35900 - Airport Management **Credits: 3.00**
- Thematic Area Selective - Credit Hours: 3.00
- Cornerstone Level III Selective List - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- AT 34001 - Aerospace Business Statistics **Credits: 3.00** or
- STAT 22500 - Introduction To Probability Models **Credits: 3.00**
- AT 42101 - Managerial Economics In Aviation **Credits: 3.00**
- AT 47500 - Aviation Law **Credits: 3.00**
- Thematic Area Selective - Credit Hours: 3.00

- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- AT 41200 - Aviation Finance **Credits: 3.00**
- AT 48100 - Aviation Safety Problems **Credits: 3.00**
- MGMT 30400 - Introduction To Financial Management **Credits: 3.00** ♦
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- AT 42201 - Aerospace Risk Management **Credits: 3.00** or
- AT 38100 - Aviation Security **Credits: 3.00**
- AT 49800 - Aviation Technology Capstone **Credits: 3.00**
- Cornerstone Level III Humanities Selective List - Credit Hours 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

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Airline Management and Operations, BS

About the Program

Managing an airline takes more than shuttling passengers between airports. It includes scheduling, planning networks, maintenance of aircraft, staffing, customer service and more. When you major in airline management and operations at Purdue University you will gain the expertise necessary to navigate the many aspects of managing an airline. You will gain a broad exposure to aviation management with a strong focus on airline operations. Your courses will provide insights into how the world's airlines make daily business decisions.

Airline Management Operations Website

Aviation & Transportation Technology Department Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (111 credits)

Required Major Courses (59 credits)

- AT 10000 - Introduction To Aviation Technology **Credits:** 1.00
- AT 10200 - Aviation Business **Credits:** 3.00
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems **Credits:** 3.00
- AT 10600 - Basic Aircraft Science **Credits:** 3.00
- AT 14400 - Private Pilot Lectures **Credits:** 4.00
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations **Credits:** 3.00
- AT 20300 - Aviation Operations Management **Credits:** 3.00
- AT 25200 - Aviation Projects **Credits:** 3.00
- AT 33800 - Airline Management **Credits:** 3.00
- AT 36201 - Aviation Operations **Credits:** 3.00
- AT 41200 - Aviation Finance **Credits:** 3.00
- AT 42101 - Managerial Economics In Aviation **Credits:** 3.00
- AT 43800 - Airline Operations **Credits:** 3.00
- AT 47500 - Aviation Law **Credits:** 3.00
- AT 48100 - Aviation Safety Problems **Credits:** 3.00
- AT 49800 - Aviation Technology Capstone **Credits:** 3.00
- MGMT 20000 - Introductory Accounting **Credits:** 3.00 ♦
- MGMT 20100 - Management Accounting I **Credits:** 3.00 ♦
- Aviation Management Selectives - Credit Hours: 6.00

Other Departmental/Program Course Requirements (52 credits)

- PHYS 22000 - General Physics **Credits: 4.00** ♦ (satisfies Science for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ (satisfies Written Communication for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦ (satisfies Oral Communication for core)
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** ♦ (satisfies Information Literacy Selective for core)
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** (satisfies Quantitative Reasoning Selective for core)
- MA 16010 - Applied Calculus I **Credits: 3.00** (satisfies Quantitative Reasoning Selective for core)
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** ♦
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- Cornerstone Level II Selective - Credit Hours: 3.00
- Cornerstone Level III Selective - Credit Hours: 3.00
- Cornerstone Level III Selective (satisfies Human Culture Humanities for core) - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Science Core Selective (satisfies Science Selective for core) - Credit Hours: 3.00
- Any University - approved minor or departmentally - approved thematic area of study - Credit Hours: 12.00

Electives (9 credits)

Any Course, any subject. Credit Hours: 9.00

Supplemental List

[Click here for Aviation Technology Supplemental Information .](#)

Grade Requirements

- Students must earn a "C" or better in all AT courses.
- Purdue policy states that a student may attempt a course no more than three times. An attempt is defined as all courses displayed on a student transcript having grades of (including, but not limited to) A, B, C, D, E, F, W, WF, I and IF.

GPA Requirements

2.0 Graduation GPA required for Bachelor of Science degree.

Course Requirements and Notes

- A course can only satisfy one departmental/program major degree requirement within a unique plan of study.
- A course may be used to satisfy two separate departmental/program major degree requirements
- Thematic Area Selective Requirement
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- Option III: 12 consecutive credit hours in a foreign language
- Option IV: 9 credit hours of 50000 level courses AND 3 credit hours of 30000 or higher-level courses

Aviation Management Selective Requirement

Aviation Management selectives may consist of any 30000, 40000, or 50000 level AT prefixed courses. In addition, AFT 35100 and AFT 36100 may be used as AM selectives.

- Airport Management - Recommended courses for the Airport Management focus area are AT 35900, AT 45100, and AT 45900.

Non-course / Non-credit Requirements

- Internship Requirement
- Globalization Requirement

Pass/No Pass Policy

A student may elect the Pass/Not-Pass (P/NP) grading option for courses without an AT prefix. A student may not elect this option for more than 20 percent of the total credit hours required for graduation. AT prefix courses may be taken for P/NP only under extenuating circumstances and in close coordination with advisors and faculty. Some AT prefix courses have been established as P/NP for all students and are therefore required to be taken in that manner. For further information regarding P/NP, students should refer to the Purdue Regulations, Grades and Grade Reports, Pass/Not-Pass Option & Scholastic Indexes.

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- Science #1 (SCI)
- Science #2 (SCI)
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- Written Communication (WC)

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Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

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- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- AT 10000 - Introduction To Aviation Technology **Credits:** 1.00
- AT 10600 - Basic Aircraft Science **Credits:** 3.00
- AT 14400 - Private Pilot Lectures **Credits:** 4.00
- MA 15800 - Precalculus - Functions And Trigonometry **Credits:** 3.00
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00 ♦

14 Credits

Spring 1st Year

- AT 10200 - Aviation Business **Credits:** 3.00
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems **Credits:** 3.00
- TECH 12000 - Design Thinking In Technology **Credits:** 3.00 ♦
- MA 16010 - Applied Calculus I **Credits:** 3.00
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits:** 3.00 ♦

15 Credits

Fall 2nd Year

- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations **Credits: 3.00**
- AT 20300 - Aviation Operations Management **Credits: 3.00**
- AT 25200 - Aviation Projects **Credits: 3.00**
- MGMT 20000 - Introductory Accounting **Credits: 3.00** ♦
- Science Core Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- AT 36201 - Aviation Operations **Credits: 3.00**
- MGMT 20100 - Management Accounting I **Credits: 3.00** ♦
- PHYS 22000 - General Physics **Credits: 4.00** ♦
- Cornerstone Level II Selective List - Credit Hours: 3.00
- Behavioral/Social Science Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- AT 33800 - Airline Management **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** ♦
- Aviation Management Selective - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- AT 42101 - Managerial Economics In Aviation **Credits: 3.00**
- AT 47500 - Aviation Law **Credits: 3.00**
- Thematic Area Selective - Credit Hours: 3.00
- Cornerstone Level III Selective List - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- AT 41200 - Aviation Finance **Credits: 3.00**
- AT 43800 - Airline Operations **Credits: 3.00**
- AT 48100 - Aviation Safety Problems **Credits: 3.00**
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- AT 49800 - Aviation Technology Capstone **Credits: 3.00**
- Thematic Area Selective - Credit Hours: 3.00
- Aviation Management Selective - Credit Hours: 3.00
- Cornerstone Level III Humanities Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

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Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Airport Management and Operations, BS

About the Program

Managing an airport takes more than loading passengers and maintaining runways. It includes security, customer service, knowledge of federal regulations, baggage handling, staffing and more. When you major in airport management and operations at Purdue University you will gain the expertise necessary to navigate the many aspects of operating an airport. You will gain a broad exposure to aviation management with a strong focus on airport operations. Your courses will provide insights into how the world's airports make daily business decisions.

[Airport Management Operations Website](#)

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (59 credits)

Required Major Courses (59 credits)

- AT 10000 - Introduction To Aviation Technology **Credits:** 1.00
- AT 10200 - Aviation Business **Credits:** 3.00
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems **Credits:** 3.00
- AT 10600 - Basic Aircraft Science **Credits:** 3.00
- AT 14400 - Private Pilot Lectures **Credits:** 4.00
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- AT 20300 - Aviation Operations Management **Credits:** 3.00
- AT 25200 - Aviation Projects **Credits:** 3.00
- AT 35900 - Airport Management **Credits:** 3.00
- AT 36201 - Aviation Operations **Credits:** 3.00
- AT 41200 - Aviation Finance **Credits:** 3.00
- AT 42101 - Managerial Economics In Aviation **Credits:** 3.00
- AT 45100 - Airport Operations **Credits:** 3.00
- AT 45900 - Airport Manager Certification **Credits:** 3.00
- AT 47500 - Aviation Law **Credits:** 3.00
- AT 48100 - Aviation Safety Problems **Credits:** 3.00
- AT 49800 - Aviation Technology Capstone **Credits:** 3.00
- MGMT 20000 - Introductory Accounting **Credits:** 3.00 ♦
- MGMT 20100 - Management Accounting I **Credits:** 3.00 ♦
- Aviation Management Selectives - Credit Hours: 3.00

Other Departmental/Program Course Requirements (52 credits)

- PHYS 22000 - General Physics **Credits:** 4.00 ♦ (satisfies Science for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00 ♦ (satisfies Written Communication for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits:** 3.00 ♦ (satisfies Oral Communication for core)
- TECH 12000 - Design Thinking In Technology **Credits:** 3.00 ♦ (satisfies Information Literacy Selective for core)
- MA 15800 - Precalculus - Functions And Trigonometry **Credits:** 3.00 (satisfies Quantitative Reasoning Selective for core)
- MA 16010 - Applied Calculus I **Credits:** 3.00 (satisfies Quantitative Reasoning Selective for core)
- STAT 30100 - Elementary Statistical Methods **Credits:** 3.00 ♦
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- Cornerstone Level II Selective List - Credit Hours: 3.00

- Cornerstone Level III Selective List - Credit Hours: 3.00
- Cornerstone Level III Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Science Core Selective (satisfies Science Selective for core) - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Any University - approved minor or departmentally - approved thematic area of study - Credit Hours: 12.00

Electives (9 credits)

Any Course, any subject. Credit Hours: 9.00

Supplemental List

[Click here for Aviation Technology Supplemental Information .](#)

Grade Requirements

- Students must earn a "C" or better in all AT courses.
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GPA Requirements

2.0 Graduation GPA required for Bachelor of Science degree.

Course Requirements and Notes

- A course can only satisfy one departmental/program major degree requirement within a unique plan of study.
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- Thematic Area Selective Requirement
 - Option I: Any University - approved minor
 - Option II: 6 credit hours of 20000 or higher-level courses AND 6 credit hours of 30000 or higher-level courses from any of the following departments: AT, AFT, EAPS, ECON, ENTR, HTM, MGMT, OBHR, OLS, POL, or TLI
 - Option III: 12 consecutive credit hours in a foreign language
 - Option IV: 9 credit hours of 50000 level courses AND 3 credit hours of 30000 or higher-level courses

Aviation Management Selective Requirement

Aviation Management selectives may consist of any 30000, 40000, or 50000 level AT prefixed courses. In addition, AFT 35100 and AFT 36100 may be used as AM selectives.

- Airline Management - Recommended courses for the Airline Management focus area are AT 33800 and AT 43800.

Non-course / Non-credit Requirements

- Internship Requirement

- Globalization Requirement

Pass/No Pass Policy

A student may elect the Pass/Not-Pass (P/NP) grading option for courses without an AT prefix. A student may not elect this option for more than 20 percent of the total credit hours required for graduation. AT prefix courses may be taken for P/NP only under extenuating circumstances and in close coordination with advisors and faculty. Some AT prefix courses have been established as P/NP for all students and are therefore required to be taken in that manner. For further information regarding P/NP, students should refer to the Purdue Regulations, Grades and Grade Reports, Pass/Not-Pass Option & Scholastic Indexes.

Transfer Credit Policy

- SATT adheres to the admissions office Transfer Credit Course Equivalency Guide.
- Students may submit requests (with accompanied Syllabi) for Non-Purdue course evaluations for AT courses that are not reflective in the Transfer Credit Course Equivalency Guide.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Semester

- AT 10000 - Introduction To Aviation Technology **Credits: 1.00**
- AT 10600 - Basic Aircraft Science **Credits: 3.00**
- AT 14400 - Private Pilot Lectures **Credits: 4.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦

14 Credits

Spring 1st Year

- AT 10200 - Aviation Business **Credits: 3.00**
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** ♦
- MA 16010 - Applied Calculus I **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦

15 Credits

Fall 2nd Year

- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations **Credits: 3.00**
- AT 20300 - Aviation Operations Management **Credits: 3.00**
- AT 25200 - Aviation Projects **Credits: 3.00**
- MGMT 20000 - Introductory Accounting **Credits: 3.00** ♦
- Science Core Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- AT 36201 - Aviation Operations **Credits: 3.00**
- MGMT 20100 - Management Accounting I **Credits: 3.00** ♦
- PHYS 22000 - General Physics **Credits: 4.00** ♦
- Behavioral / Social Science Selective - Credit Hours: 3.00
- Cornerstone Level II Selective List - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- AT 35900 - Airport Management **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** ♦
- Aviation Management Selective - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- AT 42101 - Managerial Economics In Aviation **Credits: 3.00**
- AT 47500 - Aviation Law **Credits: 3.00**
- Cornerstone Level III Selective List - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- AT 41200 - Aviation Finance **Credits: 3.00**
- AT 45100 - Airport Operations **Credits: 3.00**
- AT 48100 - Aviation Safety Problems **Credits: 3.00**
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- AT 45900 - Airport Manager Certification **Credits: 3.00**
- AT 49800 - Aviation Technology Capstone **Credits: 3.00**
- Cornerstone Level III Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Aviation Management, BS

About the Program

At any given time there are thousands of airplanes crisscrossing the globe. Operations on the ground -- airports, airline companies, air traffic controllers, and more -- help ensure passenger safety, efficient logistics and healthy business practices. For these roles, the industry requires knowledgeable individuals with excellent critical thinking skills. With an aviation management degree, you will gain the knowledge and skills to be an important part of the complex airline industry.

The Aviation Management major is part of the Aviation Management program. The Aviation Management program is accredited by the Aviation Accreditation Board International, www.aabi.aero

Aviation Management Website

Aviation & Transportation Technology Department Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (59 credits)

Required Major Courses (59 credits)

- AT 10000 - Introduction To Aviation Technology **Credits:** 1.00
- AT 10200 - Aviation Business **Credits:** 3.00
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems **Credits:** 3.00

- AT 10600 - Basic Aircraft Science **Credits: 3.00**
- AT 14400 - Private Pilot Lectures **Credits: 4.00**
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations **Credits: 3.00**
- AT 20300 - Aviation Operations Management **Credits: 3.00**
- AT 25200 - Aviation Projects **Credits: 3.00**
- AT 36201 - Aviation Operations **Credits: 3.00**
- AT 41200 - Aviation Finance **Credits: 3.00**
- AT 42101 - Managerial Economics In Aviation **Credits: 3.00**
- AT 47500 - Aviation Law **Credits: 3.00**
- AT 48100 - Aviation Safety Problems **Credits: 3.00**
- AT 49800 - Aviation Technology Capstone **Credits: 3.00**
- MGMT 20000 - Introductory Accounting **Credits: 3.00** ♦
- MGMT 20100 - Management Accounting I **Credits: 3.00** ♦
- Aviation Management Selectives - Credit Hours: 12.00

Other Departmental /Program Course Requirements (52 credits)

- PHYS 22000 - General Physics **Credits: 4.00** ♦ (satisfies Science for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ (satisfies Written Communication for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦ (satisfies Oral Communication for core)
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** ♦ (satisfies Information Literacy Selective for core)
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** (satisfies Quantitative Reasoning Selective for core)
- MA 16010 - Applied Calculus I **Credits: 3.00** (satisfies Quantitative Reasoning Selective for core)
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- Cornerstone Level II Selective - Credit Hours: 3.00
- Cornerstone Level III Selective - Credit Hours: 3.00
- Cornerstone Level III Selective (satisfies Human Culture Humanities for core) - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Science Core Selective (satisfies Science Selective for core) - Credit Hours: 3.00
- Any University - approved minor or departmentally - approved thematic area of study - Credit Hours: 12.00

Electives (9 credits)

Electives (any course, any subject) - Credit Hours: 9.00

Supplemental List

[Click here for Aviation Technology Supplemental Information .](#)

Grade Requirements

- Students must earn a "C" or better in all AT courses.
- Purdue policy states that a student may attempt a course no more than three times. An attempt is defined as all courses displayed on a student transcript having grades of (including, but not limited to) A, B, C, D, E, F, W, WF, I and IF.

GPA Requirements

2.0 Graduation GPA required for Bachelor of Science degree.

Course Requirements and Notes

- A course can only satisfy one departmental/program major degree requirement within a unique plan of study.
- A course may be used to satisfy two separate departmental/program major degree requirements
- Thematic Area Selective Requirement
 - Option I: Any University - approved minor
 - Option II: 6 credit hours of 20000 or higher-level courses AND 6 credit hours of 30000 or higher-level courses from any of the following departments: AT, AFT, EAPS, ECON, ENTR, HTM, MGMT, OBHR, OLS, POL, or TLI
 - Option III: 12 consecutive credit hours in a foreign language
 - Option IV: 9 credit hours of 50000 level courses AND 3 credit hours of 30000 or higher-level courses

Aviation Management Selective Requirement

Aviation Management selectives may consist of any 30000, 40000, or 50000 level AT prefixed courses. In addition, AFT 35100 and AFT 36100 may be used as AM selectives.

- Airport Management - Recommended courses for the Airport Management focus area are AT 35900, AT 45100, and AT 45900.
- Airline Management - Recommended courses for the Airline Management focus area are AT 33800 and AT 43800.

Non-course / Non-credit Requirements

- Internship Requirement
- Globalization Requirement

Pass/No Pass Policy

A student may elect the Pass/Not-Pass (P/NP) grading option for courses without an AT prefix. A student may not elect this option for more than 20 percent of the total credit hours required for graduation. AT prefix courses may be taken for P/NP only under extenuating circumstances and in close coordination with advisors and faculty. Some AT prefix courses have been established as P/NP for all students and are therefore required to be taken in that manner. For further information regarding P/NP, students should refer to the Purdue Regulations, Grades and Grade Reports, Pass/Not-Pass Option & Scholastic Indexes.

Transfer Credit Policy

- SATT adheres to the admissions office Transfer Credit Course Equivalency Guide.
- Students may submit requests (with accompanied Syllabi) for Non-Purdue course evaluations for AT courses that are not reflective in the Transfer Credit Course Equivalency Guide.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- AT 10000 - Introduction To Aviation Technology **Credits:** 1.00
- AT 10600 - Basic Aircraft Science **Credits:** 3.00
- AT 14400 - Private Pilot Lectures **Credits:** 4.00
- MA 15800 - Precalculus - Functions And Trigonometry **Credits:** 3.00
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00 ♦

14 Credits

Spring 1st Year

- AT 10200 - Aviation Business **Credits: 3.00** ♦
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦

15 Credits

Fall 2nd Year

- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations **Credits: 3.00**
- AT 20300 - Aviation Operations Management **Credits: 3.00**
- AT 25200 - Aviation Projects **Credits: 3.00**
- MGMT 20000 - Introductory Accounting **Credits: 3.00** ♦
- Science Core Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- AT 36201 - Aviation Operations **Credits: 3.00**
- MGMT 20100 - Management Accounting I **Credits: 3.00** ♦
- PHYS 22000 - General Physics **Credits: 4.00** ♦
- Behavioral/Social Science Selective - Credit Hours: 3.00
- Cornerstone Level II Selective List - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** ♦
- Aviation Management Selective - Credit Hours: 3.00
- Aviation Management Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- AT 42101 - Managerial Economics In Aviation **Credits: 3.00**

- AT 47500 - Aviation Law **Credits: 3.00**
- Thematic Area Selective - Credit Hours: 3.00
- Cornerstone Level III Selective List - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- AT 41200 - Aviation Finance **Credits: 3.00**
- AT 48100 - Aviation Safety Problems **Credits: 3.00**
- Aviation Management Selective - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- AT 49800 - Aviation Technology Capstone **Credits: 3.00**
- Thematic Area Selective - Credit Hours: 3.00
- Cornerstone Level III Humanities Selective - Credit Hours: 3.00
- Aviation Management Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

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Professional Flight Technology, BS

About the Program

Purdue offers a bachelor's degree in professional flight that provides you with a comprehensive perspective of the aviation industry. Classes focus on aspects of leadership, teamwork, decision-making, communication, resilience, and technical excellence encompassing the many facets of the aviation ecosystem. You will learn by flying in our state-of-art fleet and matching simulators, and from aviation professionals with significant industry experience. The School of Aviation and Transportation Technology encourages you to obtain the highest level of certification possible during your time at Purdue.

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (117 credits)

Required Major Courses (65 credits)

- AT 10000 - Introduction To Aviation Technology **Credits: 1.00**
- AT 10200 - Aviation Business **Credits: 3.00**
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems **Credits: 3.00**
- AT 11200 - Introduction To Operational Aviation Safety **Credits: 1.00**
- AT 14400 - Private Pilot Lectures **Credits: 4.00**
- AT 14500 - Private Pilot Flight **Credits: 2.00**
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations **Credits: 3.00**
- AT 20300 - Aviation Operations Management **Credits: 3.00**
- AT 21000 - Ground Trainer I **Credits: 1.00**
- AT 21100 - Ground Trainer II **Credits: 1.00**
- AT 21200 - Operational Risk Assessment **Credits: 1.00**
- AT 22300 - Human Factors For Flight Crews **Credits: 3.00**
- AT 24302 - Commercial Flight I Under Federal Aviation Regulations Part 141 **Credits: 2.00**
- AT 24802 - Commercial Flight II Under Federal Aviation Regulations Part 141 **Credits: 2.00**
- AT 24900 - Instrument Flight Lectures **Credits: 3.00**
- AT 25302 - Instrument Flight Under Federal Aviation Regulations Part 141 **Credits: 2.00**
- AT 25400 - Commercial Flight Lectures **Credits: 3.00**
- AT 31400 - Operational Safety Mitigation **Credits: 1.00**
- AT 32501 - Advanced Aviation Meteorology **Credits: 3.00**
- AT 32700 - Advanced Transport Flight Operations **Credits: 3.00**
- AT 35300 - Multi-Engine Flight **Credits: 1.00**
- AT 35400 - Turbine Flight Operations Lecture **Credits: 2.00**
- AT 38700 - Turbine Aircraft Simulation Lab **Credits: 2.00**

- AT 38800 - Large Aircraft Systems **Credits: 3.00**
- AT 41600 - Airline Indoctrination **Credits: 2.00**
- AT 43900 - Aviation Command Leadership **Credits: 2.00**
- AT 47500 - Aviation Law **Credits: 3.00**
- AT 48700 - Transport Aircraft Simulation Laboratory **Credits: 2.00**
- AT 49401 - Capstone Project Proposal **Credits: 2.00**
- AT 49501 - Applied Capstone Research Project **Credits: 1.00**

Other Departmental /Program Course Requirements (52 credits)

- PHYS 22000 - General Physics **Credits: 4.00** ♦ (satisfies Science for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ (satisfies Written Communication for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦ (satisfies Oral Communication for core)
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** ♦ (satisfies Information Literacy Selective for core)
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** (satisfies Quantitative Reasoning Selective for core)
- MA 16010 - Applied Calculus I **Credits: 3.00** (satisfies Quantitative Reasoning Selective for core)
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** ♦
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- Cornerstone Level II Selective - Credit Hours: 3.00
- Cornerstone Level III Selective - Credit Hours: 3.00
- Cornerstone Level III Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Science Foundational Selective (satisfies Science Selective for core) - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Any University-approved minor or departmentally-approved thematic area of study - Credit Hours: 12.00

Electives (3 credits)

Any Course, any subject. Credit Hours: 3.00

Supplemental List

[Click here for Aviation Technology Supplemental Information.](#)

Grade Requirements

- Students must earn a "C" or better in all AT courses.
- Purdue policy states that a student may attempt a course no more than three times. An attempt is defined as all courses displayed on a student transcript having grades of (including, but not limited to) A, B, C, D, E, F, W, WF, I and IF.

GPA Requirements

2.0 Graduation GPA required for Bachelor of Science degree.

Course Requirements and Notes

- A course can only satisfy one departmental/program major degree requirement within a unique plan of study.
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- Internship Requirement
- Globalization Requirement

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- The following courses are only offered as Pass/No Pass: AT 14500, 14502, 21000, 21100, 24300, 24302, 24500, 24800, 24802, 25300, 25302, 35100, 35300, 36500, 36600, 36700, 36800, 38300, 38700, 48700, 48800

Transfer Credit Policy

- SATT adheres to the admissions office Transfer Credit Course Equivalency Guide.
- Students may submit requests (with accompanied Syllabi) for Non-Purdue course evaluations for AT courses that are not reflective in the Transfer Credit Course Equivalency Guide.

University Requirements

University Core Requirements

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- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

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Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
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Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Additional Information

Students of Purdue University School of Aviation and Transportation Technology (SATT) are required to fly in the University's training aircraft during several courses within the Professional Flight Training Plan of Study. SATT operates Piper Archer and Seminole as the primary trainer fleet. Although these aircraft are very capable, height, size and weight specifications vary by aircraft. Students whose personal size (height, weight, width, etc.) is significantly larger or smaller than average may require additional assessment to ensure their ability to safely pilot University training aircraft. Please review the aircraft configurations highlighted on the Fleet - Purdue Polytechnic Institute website to determine if an additional assessment is warranted. Contact the Aviation Safety Manager at avsafety@purdue.edu to set up an appointment to discuss options and/or questions prior to the course beginning.

Sample 4-Year Plan

Fall 1st Year

- AT 10000 - Introduction To Aviation Technology **Credits: 1.00**
- AT 10200 - Aviation Business **Credits: 3.00**
- AT 14400 - Private Pilot Lectures **Credits: 4.00**
- AT 14500 - Private Pilot Flight **Credits: 2.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦

16 Credits

Spring 1st Year

- AT 11200 - Introduction To Operational Aviation Safety **Credits: 1.00**
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems **Credits: 3.00**
- AT 21000 - Ground Trainer I **Credits: 1.00**
- AT 24900 - Instrument Flight Lectures **Credits: 3.00**
- AT 25302 - Instrument Flight Under Federal Aviation Regulations Part 141 **Credits: 2.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00**

16 Credits

Fall 2nd Year

- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations **Credits: 3.00**
- AT 20300 - Aviation Operations Management **Credits: 3.00**
- AT 21100 - Ground Trainer II **Credits: 1.00**
- AT 21200 - Operational Risk Assessment **Credits: 1.00**
- AT 22300 - Human Factors For Flight Crews **Credits: 3.00**
- AT 24302 - Commercial Flight I Under Federal Aviation Regulations Part 141 **Credits: 2.00**
- AT 25400 - Commercial Flight Lectures **Credits: 3.00**

16 Credits

Spring 2nd Year

- AT 31400 - Operational Safety Mitigation **Credits: 1.00**
- AT 24802 - Commercial Flight II Under Federal Aviation Regulations Part 141 **Credits: 2.00**
- PHYS 22000 - General Physics **Credits: 4.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦
- Behavior/Social Science Selective List - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- AT 32501 - Advanced Aviation Meteorology **Credits: 3.00**
- AT 35300 - Multi-Engine Flight **Credits: 1.00**
- AT 35400 - Turbine Flight Operations Lecture **Credits: 2.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** ♦
- Cornerstone Level III Selective List - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- AT 32700 - Advanced Transport Flight Operations **Credits: 3.00**
- AT 38700 - Turbine Aircraft Simulation Lab **Credits: 2.00**
- AT 38800 - Large Aircraft Systems **Credits: 3.00**
- AT 41600 - Airline Indoctrination **Credits: 2.00**
- AT 47500 - Aviation Law **Credits: 3.00**
- Cornerstone Level II Selective List - Credit Hours: 3.00

16 Credits

Fall 4th Year

- AT 43900 - Aviation Command Leadership **Credits: 2.00**
- AT 48700 - Transport Aircraft Simulation Laboratory **Credits: 2.00**
- Thematic Area Selective - Credit Hours: 3.00
- Cornerstone Level III Selective List (satisfies Human Culture Humanities for core) - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00

13 Credits

Spring 4th Year

- AT 49401 - Capstone Project Proposal **Credits: 2.00**
- AT 49501 - Applied Capstone Research Project **Credits: 1.00**
- Thematic Area Selective - Credit Hours: 3.00
- Science Core Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

12 Credits

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

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Unmanned Aerial Systems, BS

About the Program

Drones, or unmanned aircraft, will be soon be part of everyday life. Companies who adopt the technology will need experts to help them navigate flight paths as well as rules and regulations. A major in unmanned aerial systems (UAS) will equip you to be a leader in this new career field. In fact, the Association for Unmanned Vehicle Systems International believes 70,000 new jobs will be created in the three years after unmanned aircraft are integrated into the U.S. airspace system.

Unmanned Aerial Systems Website

Aviation & Transportation Technology Department Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (64 credits)

Required Major Courses (64 credits)

- AT 10000 - Introduction To Aviation Technology **Credits: 1.00**
- AT 10200 - Aviation Business **Credits: 3.00**
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems **Credits: 3.00**
- AT 10600 - Basic Aircraft Science **Credits: 3.00**
- AT 10901 - Introduction To Uncrewed Aircraft System Operations **Credits: 3.00 ♦**
- AT 11901 - Uncrewed Aerial Systems: Safety And Risk Management **Credits: 3.00**
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations **Credits: 3.00**
- AT 20300 - Aviation Operations Management **Credits: 3.00**
- AT 20900 - Autonomous Aircraft Technology And Maintenance I **Credits: 3.00**
- AT 21900 - Autonomous Aircraft Technology And Maintenance II **Credits: 3.00**
- AT 26502 - Aircraft Electrical Systems **Credits: 3.00**
- AT 30901 - Introduction To UAS Sensor Technology **Credits: 3.00**
- AT 31900 - Uncrewed Aircraft Systems: Applications, Data, And Documentation **Credits: 3.00**
- AT 33502 - Avionics Systems **Credits: 3.00**
- AT 40900 - Advanced Air Mobility: Management And Operations **Credits: 3.00**
- AT 41901 - Advanced Air Mobility Capstone **Credits: 3.00**
- UAS Related Selectives - Credit Hours: 18.00

Other Departmental /Program Course Requirements (40 credits)

- PHYS 22000 - General Physics **Credits: 4.00** ♦ (satisfies Science for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ (satisfies Written Communication for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦ (satisfies Oral Communication for core)
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** ♦ (satisfies Information Literacy Selective for core)
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** (satisfies Quantitative Reasoning Selective for core)
- MA 16010 - Applied Calculus I **Credits: 3.00** (satisfies Quantitative Reasoning Selective for core)
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** ♦
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- Cornerstone Level II Selective - Credit Hours: 3.00
- Cornerstone Level III Selective - Credit Hours: 3.00
- Cornerstone Level III Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Science Core Selective (satisfies Science Selective for core) - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00

Electives (16 credits)

Elective (any course, any subject) - Credit Hours: 16.00

Supplemental Lists

[Click here for Aviation Technology Supplemental Information.](#)

[Click here for Unmanned Aerial Systems Supplemental Information .](#)

Grade Requirements

- Students must earn a "C" or better in all AT courses.
- Purdue policy states that a student may attempt a course no more than three times. An attempt is defined as all courses displayed on a student transcript having grades of (including, but not limited to) A, B, C, D, E, F, W, WF, I and IF.

GPA Requirements

2.0 Graduation GPA required for Bachelor of Science degree.

Course Requirements and Notes

- A course can only satisfy one departmental/program major degree requirement within a unique plan of study.
- A course may be used to satisfy two separate departmental/program major degree requirements.
- UAS Related Selectives - See Unmanned Aerial Systems Supplemental Information.

Non-course / Non-credit Requirements

- Internship Requirement
- Globalization Requirement

Pass/No Pass Policy

A student may elect the Pass/Not-Pass (P/NP) grading option for courses without an AT prefix. A student may not elect this option for more than 20 percent of the total credit hours required for graduation. AT prefix courses may be taken for P/NP only under extenuating circumstances and in close coordination with advisors and faculty. Some AT prefix courses have been established as P/NP for all students and are therefore required to be taken in that manner. For further information regarding P/NP, students should refer to the Purdue Regulations, Grades and Grade Reports, Pass/Not-Pass Option & Scholastic Indexes.

Transfer Credit Policy

- SATT adheres to the admissions office Transfer Credit Course Equivalency Guide.
- Students may submit requests (with accompanied Syllabi) for Non-Purdue course evaluations for AT courses that are not reflective in the Transfer Credit Course Equivalency Guide.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency Website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or

- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- AT 10000 - Introduction To Aviation Technology **Credits: 1.00**
- AT 10600 - Basic Aircraft Science **Credits: 3.00**
- AT 10901 - Introduction To Uncrewed Aircraft System Operations **Credits: 3.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦

16 Credits

Spring 1st Year

- AT 10200 - Aviation Business **Credits: 3.00**
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems **Credits: 3.00**
- AT 11901 - Uncrewed Aerial Systems: Safety And Risk Management **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦

15 Credits

Fall 2nd Year

- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations **Credits: 3.00**
- AT 20900 - Autonomous Aircraft Technology And Maintenance I **Credits: 3.00**
- AT 26502 - Aircraft Electrical Systems **Credits: 3.00**
- PHYS 22000 - General Physics **Credits: 4.00** ♦
- Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- AT 20300 - Aviation Operations Management **Credits: 3.00**
- AT 21900 - Autonomous Aircraft Technology And Maintenance II **Credits: 3.00**
- AT 33502 - Avionics Systems **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- Cornerstone Level II Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- AT 30901 - Introduction To UAS Sensor Technology **Credits: 3.00** ♦
- UAS Related Selective - Credit Hours: 3.00
- UAS Related Selective - Credit Hours: 3.00
- Cornerstone Level III Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- AT 31900 - Uncrewed Aircraft Systems: Applications, Data, And Documentation **Credits: 3.00**
- UAS Related Selective - Credit Hours: 3.00
- UAS Related Selective - Credit Hours: 3.00
- Behavioral/Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- AT 40900 - Advanced Air Mobility: Management And Operations **Credits: 3.00**
- UAS Related Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Cornerstone Level III Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- AT 41901 - Advanced Air Mobility Capstone **Credits: 3.00**
- UAS Related Selective - Credit Hours: 3.00
- Science Core Selective - Credit Hours: 3.00

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 1.00

13 Credits

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

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Minor

Unmanned Aerial Systems Minor

Requirements for the Minor (15 credits)

Required Courses (15 credits)

- AT 10901 - Introduction To Uncrewed Aircraft System Operations **Credits: 3.00**
- AT 11901 - Uncrewed Aerial Systems: Safety And Risk Management **Credits: 3.00**
- AT 20900 - Autonomous Aircraft Technology And Maintenance I **Credits: 3.00**
- AT 21900 - Autonomous Aircraft Technology And Maintenance II **Credits: 3.00**
- AT 30901 - Introduction To UAS Sensor Technology **Credits: 3.00**

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

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The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

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Program Information

Aviation Technology Supplemental Information

Behavioral/Social Science Foundational Selective

The following courses are approved to meet the Globalization Requirement and satisfies Human Cultures: Behavioral/Social Science for core.

- AGR 20100 - Communicating Across Culture **Credits: 3.00**
- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- HDFS 20100 - Introduction To Relationship And Family Science **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- POL 13000 - Introduction To International Relations **Credits: 3.00**
- POL 14100 - Governments Of The World **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23100 - Introduction To United States Foreign Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 32600 - Black Political Participation In America **Credits: 3.00**
- POL 32700 - Global Green Politics **Credits: 3.00**
- POL 33500 - China And The Challenges Of Globalization **Credits: 3.00**
- POL 36000 - Women And The Law **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- SOC 22000 - Social Problems **Credits: 3.00**
- SOC 35200 - Drugs, Culture, And Society **Credits: 3.00**
- SOC 42900 - Sociology Of Protest **Credits: 3.00**
- WGSS 28000 - Women's, Gender, And Sexuality Studies: An Introduction **Credits: 3.00**
- WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**

Globalization

Globalization is a requirement for graduation and is embedded within the plan of study using the Behavioral/Social Science Foundational Selective.

Cornerstone Certificate

Cornerstone Certificate is a requirement for graduation and is embedded within the plan of study. Exceptions are provided due to change of catalog term, re-entry students, readmit students, transfer students, change of major within Purdue, or other situations on a per case basis.

Cornerstone Level III: Human Cultures Humanities Selective

Satisfies Human Cultures, Humanities for core.

- CLCS 38500 - Science, Medicine And Magic In The Ancient West **Credits: 3.00**
- ENGL 32200 - Word, Image, Media **Credits: 3.00**
- ENGL 36700 - Mystery And Detective Fiction **Credits: 3.00**
- ENGL 37300 - Science Fiction And Fantasy **Credits: 3.00**
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits: 3.00**
- HIST 31405 - Science, Technology, Engineering And Mathematics (STEM) And Gender **Credits: 3.00**
- HIST 31505 - American Beauty **Credits: 3.00**
- HIST 33805 - History Of Human Rights **Credits: 3.00**
- HIST 35205 - Death, Disease And Medicine In Twentieth Century American History **Credits: 3.00**
- HIST 36305 - The History Of Medicine And Public Health **Credits: 3.00**
- HIST 38001 - History Of United States Agriculture **Credits: 3.00**
- HIST 38200 - American Constitutional History **Credits: 3.00**
- HIST 38300 - Recent American Constitutional History **Credits: 3.00**
- HIST 38400 - History Of Aviation **Credits: 3.00**
- HIST 38700 - History Of The Space Age **Credits: 3.00**
- HIST 47005 - Women And Health In America **Credits: 3.00**
- PHIL 41100 - Modern Ethical Theories **Credits: 3.00**
- PHIL 42400 - Recent Ethical Theory **Credits: 3.00**

Economics Selectives

- AGECE 21700 - Economics **Credits: 3.00**
- CSR 34200 - Personal Finance **Credits: 3.00**
- ECON 21000 - Principles Of Economics **Credits: 3.00**
- ECON 25100 - Microeconomics **Credits: 3.00**
- ECON 25200 - Macroeconomics **Credits: 3.00**

Thematic Area Selective Requirement (Can be fulfilled by any of the following):

- Option I: Any University - approved minor
- Option II: 6 credit hours of 20000 or higher-level courses AND 6 credit hours of 30000 or higher-level courses from any of the following departments: AT, AFT, EAPS, ECON, ENTR, HTM, MGMT, OBHR, OLS, POL, or TLI
- Option III: 12 consecutive credit hours in a foreign language
- Option IV: 9 credit hours of 50000 level courses AND 3 credit hours of 30000 or higher-level courses

- **NOTE: This requirement is not required for Aeronautical Engineering Technology and Unmanned Aerial Systems majors.**

Aviation Management

Aviation Management selectives may consist of any 30000, 40000, or 50000 level AT prefixed courses. In addition, AFT 35100 and AFT 36100 may be used as AM selectives.

- **Airport Management** - Recommended courses for the Airport Management focus area are AT 35900, AT 45100, and AT 45900.
- **Airline Management** - Recommended courses for the Airline Management focus area are AT 33800 and AT 43800.

Internship/Professional Experience

The School of Aviation and Transportation Technology (SATT) requires an internship or professional experience for all SATT majors. A minimum of 160 hours of work experience is required. This requirement may be satisfied through documented work experience at an approved employer or service agency. Examples of such organizations include, but are not limited to, Purdue Aviation LLC, aviation or aerospace companies, government agencies, or non-aviation companies that are of specific career interest to the student. Students who need academic credit should discuss AT 43300 with an advisor and must register before starting the internship.

Unmanned Aerial Systems Supplemental Information

UAS Selectives

UAS Related Selectives - Credit Hours: 18.00

Each student must have 32 credit hours of 300- or 400-level Purdue courses for graduation. It is highly recommended that you plan ahead using the selectives below.

- AD 11900 - Color Photography **Credits: 3.00**
- AFT 35100 - Leading People And Effective Communication I **Credits: 3.00**
- AFT 36100 - Leading People And Effective Communication II **Credits: 3.00**
- AT 14400 - Private Pilot Lectures **Credits: 4.00**
- AT 20501 - Statics For Aerostructures **Credits: 3.00**
- AT 20802 - Aircraft Materials **Credits: 3.00**
- AT 22300 - Human Factors For Flight Crews **Credits: 3.00**
- AT 24900 - Instrument Flight Lectures **Credits: 3.00**
- AT 25200 - Aviation Projects **Credits: 3.00**
- AT 25400 - Commercial Flight Lectures **Credits: 3.00**
- AT 26200 - Basic Aircraft Powerplant Technology **Credits: 4.00**
- AT 26700 - Fixed And Rotary Wing Assemblies **Credits: 3.00**
- AT 27200 - Introduction To Composite Technology **Credits: 3.00**
- AT 27800 - Nondestructive Testing For Aircraft **Credits: 3.00**
- AT 28600 - National Airspace Systems Operations **Credits: 3.00**
- AT 30702 - Advanced Aircraft Systems **Credits: 3.00**
- AT 30802 - Aircraft Materials Processes **Credits: 3.00**
- AT 32001 - Advanced Aviation Operations **Credits: 3.00**

- AT 32501 - Advanced Aviation Meteorology **Credits: 3.00** or
- EAPS 32500 - Aviation Meteorology **Credits: 3.00**
- AT 32700 - Advanced Transport Flight Operations **Credits: 3.00**
- AT 33800 - Airline Management **Credits: 3.00**
- AT 34001 - Aerospace Business Statistics **Credits: 3.00**
- AT 35400 - Turbine Flight Operations Lecture **Credits: 2.00**
- AT 35900 - Airport Management **Credits: 3.00**
- AT 36201 - Aviation Operations **Credits: 3.00**
- AT 36302 - Fundamentals Of Powerplant Systems **Credits: 4.00**
- AT 37200 - Aircraft Maintenance Practices **Credits: 3.00**
- AT 37600 - Aircraft Gas Turbine Engine Technology I **Credits: 4.00**
- AT 38100 - Aviation Security **Credits: 3.00**
- AT 38500 - Design Support Analysis **Credits: 2.00**
- AT 38800 - Large Aircraft Systems **Credits: 3.00**
- AT 41200 - Aviation Finance **Credits: 3.00**
- AT 42101 - Managerial Economics In Aviation **Credits: 3.00**
- AT 42201 - Aerospace Risk Management **Credits: 3.00**
- AT 43800 - Airline Operations **Credits: 3.00**
- AT 44502 - Aircraft Electronics **Credits: 3.00**
- AT 45100 - Airport Operations **Credits: 3.00**
- AT 45900 - Airport Manager Certification **Credits: 3.00**
- AT 47200 - Advanced Composite Technology **Credits: 3.00**
- AT 47500 - Aviation Law **Credits: 3.00**
- AT 47600 - Aircraft Gas Turbine Engine Technology II **Credits: 3.00**
- AT 48100 - Aviation Safety Problems **Credits: 3.00**
- AT 49200 - Aircraft Airworthiness Assurance **Credits: 3.00**
- FNR 35700 - Fundamental Remote Sensing **Credits: 3.00**
- FLM 24100 - Foundations Of Cinema Production **Credits: 3.00**
- MGMT 20000 - Introductory Accounting **Credits: 3.00**
- MGMT 20100 - Management Accounting I **Credits: 3.00**
- MGMT 30400 - Introduction To Financial Management **Credits: 3.00**

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School of Construction Management Technology

Overview

Purdue University's School of Construction Management Technology offers a bachelor's degrees accredited by the American Council for Construction Education, awarded for the high level of educational experience and quality provided. One of the strengths of the program comes from the hands-on learning that provides applicable experience in a real-world environment. A part of this experience comes from the minimum 800 hours of construction experience that each undergraduate student is required to complete prior to graduation. Because of its history and leadership within the industry, the school benefits from an extensive list of industry partners.

Faculty

Contact Information

Building Construction Management Department

Knoy Hall, Room 453
401 N. Grant St.
West Lafayette, IN 47907
Phone: 765.494.2459
Email: cminfo@purdue.edu

Graduate Information

For Graduate Information please see Building Construction Management Graduate Program Information.

Baccalaureate

Building Information Modeling, BS

About the Program

BIM (Building Information Modeling) should be understood as a process starting with the creation of a 3D model that is facilitated by the latest digital design technology and providing a holistic approach to construction that unifies design, building and documentation across a product's lifespan. BIM has caused a considerable positive disruption to the construction industry help transform the architecture, engineering and construction (AEC) industry through it's communicative and collaborative approach. Virtual Design & Construction (VDC) is action taken on BIM. VDC is simply a visual management methodology using BIM as part of our proven construction analysis and work processes. When you major in Building Information Modeling at Purdue University, you'll gain skills that will help a construction team create detailed designs of a 3D model generating a set of construction documentation to utilize in managing the buildings construction process from inception to facility management and beyond. You will learn about a wide range of topics necessary in the field, such as construction graphics, documentation, modeling, materials, methods of construction, casework, steelwork, carpentry, and MEPF trades. You will also learn about jobsite management and safety as well as the codes governing the construction & management structures.

The Building Information Modeling major is part of the Computer Graphics Technology program. The Computer Graphics Technology program is accredited by the Engineering Technology Accreditation Commission of ABET.

[Building Information Modeling Website](#)

[Building Information Modeling Major Change \(CODO\) Requirements](#)

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (45 credits)

Required Major Courses (36 credits)

- CGT 11800 - Fundamentals Of Imaging Technology **Credits: 3.00**
- CGT 14100 - Internet Foundations Technologies And Development **Credits: 3.00**
- CGT 17208 - User Experience Design Studio I: Fundamentals **Credits: 3.00** (satisfies Science, Technology, & Society for core)
- CGT 21500 - Computer Graphics Programming I **Credits: 3.00**
- CGT 25001 - Computer Graphics Professional Practices I **Credits: 1.00**
- CM 26000 - Introduction To Modeling For BIM **Credits: 3.00**
- CM 26200 - Introduction To Construction Graphics **Credits: 3.00**
- CGT 27000 - Introduction To Data Visualization **Credits: 3.00**
- CM 36000 - Applications Of Construction Documentation I **Credits: 3.00**
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I **Credits: 2.00**
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II **Credits: 2.00**
- CGT 45001 - Computer Graphics Professional Practices II **Credits: 1.00**
- CM 46000 - Building Information Modeling For Commercial Construction **Credits: 3.00**
- CM 46200 - Applications Of Construction Documentation II **Credits: 3.00**
- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

Major Selectives* - Choose 3 courses (9 credits)

- CGT Selective - Credit Hours: 3.00
- CGT Selective - Credit Hours: 3.00
- CGT Selective - Credit Hours: 3.00

Other Departmental/Program Course Requirements (58 credits)

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ (satisfies *Written Communication AND Information Literacy* for core & a Cornerstone Area A)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦ (satisfies *Oral Communication* for core & a Cornerstone Area A)
- ECON 21000 - Principles Of Economics **Credits: 3.00** ♦ (satisfies *Human Culture Behavior/Social Science* for core)
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** (satisfies *Quantitative Reasoning Selective* for core)
- MA 16010 - Applied Calculus I **Credits: 3.00** (satisfies *Quantitative Reasoning Selective* for core)
- MGMT 45500 - Legal Background For Business I **Credits: 3.00** ♦
- PHYS 22000 - General Physics **Credits: 4.00** ♦ (satisfies Science for core)
Advanced English Selective - 1 Course (possible Cornerstone Selective)
- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00**
Statistics Selective - 1 Course

- IET 31600 - Statistical Quality Control **Credits: 3.00** or
- PSY 20100 - Introduction To Statistics In Psychology **Credits: 3.00** or
- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** or
- STAT 35000 - Introduction To Statistics **Credits: 3.00**
- Human Cultures:Behavioral/Social Sciences (BSS) Core - Credit Hours: 3.00 (*satisfies Human Culture Behavioral/Social Science for core*)
- Human Cultures: Humanities (HUM) Core (*satisfies Humanities for Core & a Cornerstone Selective*) - Credit Hours: 3.00
- Humanities Elective (possible Cornerstone Selective) - Credit Hours: 3.00
- Science (SCI) Core (*satisfies Science Selective for core*) - Credit Hours: 3.00
- Communication Selective (possible Cornerstone Selective) - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00
- CGT Global Selective (possible Cornerstone Selective) - Credit Hours: 3.00
- Technical Electives - Credit Hours: 9.00

Electives (17 credits)

Any course, any subject. Credit Hours: 17.00

Cornerstone Certificate

Cornerstone Certificate required for this major.

Supplemental List

[Click here for Building Information Modeling Supplemental Information .](#)

Grade Requirements

- Students must earn a "C-" or better in all CGT courses.
- Purdue policy states that a student may attempt a course no more than three (3) times. An attempt is defined as all courses displayed on a student's transcript including, but not limited to A,B,C,D,E,F,W,WF,I and IF.

GPA Requirements

- 2.0 Graduation GPA required for Bachelor of Science degree.

Course Requirements and Notes

A course can only satisfy one degree requirement in the plan of study.

Non-course / Non-credit Requirements

- Intercultural Requirement - Credit Hours: 0.00

- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

See Supplemental Information for details.

Pass/No Pass Policy

- Pass/No Pass may be allowed for Electives or Technical Electives only.

Transfer Credit Policy

CGT adheres to the admissions office Transfer Credit Course Equivalency Guide.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.

- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Additional Information

Sample 4-Year Plan

Fall 1st Year

- CGT 11800 - Fundamentals Of Imaging Technology **Credits: 3.00**
- CGT 14100 - Internet Foundations Technologies And Development **Credits: 3.00**
- CGT 27000 - Introduction To Data Visualization **Credits: 3.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00 ♦**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00 ♦** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00 ♦**

15 Credits

Spring 1st Year

- CGT 17208 - User Experience Design Studio I: Fundamentals **Credits: 3.00**
- CM 26000 - Introduction To Modeling For BIM **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00 ♦** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00 ♦**
- Human Cultures: Behavioral Social Sciences (BSS) Core - Credit Hours: 3.00

15 Credits

Fall 2nd Year

- CGT 21500 - Computer Graphics Programming I **Credits: 3.00**
- CM 26200 - Introduction To Construction Graphics **Credits: 3.00**
- PHYS 22000 - General Physics **Credits: 4.00 ♦**
- Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- CGT 25001 - Computer Graphics Professional Practices I **Credits: 1.00**
- CM 36000 - Applications Of Construction Documentation I **Credits: 3.00**

- ECON 21000 - Principles Of Economics **Credits: 3.00** ♦
- Human Cultures: Humanities (HUM) Core - Credit Hours: 3.00
- Science (SCI) Core - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- CM 46200 - Applications Of Construction Documentation II **Credits: 3.00**
Advanced English Selective - 1 Course (possible Cornerstone Selective)
- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00**
- CGT Selective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- CM 46000 - Building Information Modeling For Commercial Construction **Credits: 3.00**
Statistics Selective - 1 Course (possible Cornerstone Selective)
- IET 31600 - Statistical Quality Control **Credits: 3.00** or
- PSY 20100 - Introduction To Statistics In Psychology **Credits: 3.00** or
- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** or
- STAT 35000 - Introduction To Statistics **Credits: 3.00**
- CGT Selective - Credit Hours: 3.00
- CGT Globalization Selective - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- CGT 41101 - Contemporary Problems In Applied Computer Graphics I **Credits: 2.00**
- MGMT 45500 - Legal Background For Business I **Credits: 3.00** ♦
- CGT Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

16 Credits

Spring 4th Year

- CGT 41201 - Contemporary Problems In Applied Computer Graphics II **Credits: 2.00**
- CGT 45001 - Computer Graphics Professional Practices II **Credits: 1.00**
- Communication Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

12 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Construction Management, BS

About the Program

From the world's tallest building to the home being constructed down the block, all construction projects need leadership and management expertise. In Purdue's construction management program, you'll gain skills to be a leader in the growing global construction industry. You'll learn what it takes to successfully build all kinds of projects from idea to completion. The curriculum can prepare you to be a future executive in this increasingly fast-paced and high-tech sector.

SCMT offers students the opportunity to complete a bachelor's degree in construction management technology in three years, allowing students to enter the work force or graduate school a year earlier than traditional plans of study. For more information about the degree-in-3 reach out to the CM major advisors.

The Construction Management Technology major is part of the Construction Management Technology program. The Construction Management Technology program is accredited by the American Council for Construction Education, www.acce-hq.org.

Accredited by the American Council for Construction Education (ACCE)

Construction Management Website

Construction Management Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (62 credits)

- CM 10000 - Introduction To Construction Management **Credits: 3.00**
- CM 15000 - Construction Management Fundamentals **Credits: 6.00**
- CM 16000 - Surveying **Credits: 3.00**
- CM 16400 - Graphics For Civil Engineering And Construction **Credits: 2.00** or
- CM 26200 - Introduction To Construction Graphics **Credits: 3.00**
- CM 20002 - Intermediate Pre-Construction Management **Credits: 4.00**
- CM 21500 - Mechanical Construction **Credits: 3.00**
- CM 21601 - Electrical Construction **Credits: 2.00**
- CM 27000 - Statics **Credits: 3.00**
- CM 30002 - Advanced Pre-Construction Management **Credits: 4.00**
- CM 30101 - Introduction To Construction Company Financial Management **Credits: 2.00**
- CM 31000 - Equipment And Field Operations **Credits: 3.00**
- CM 36400 - Jobsite Management **Credits: 3.00**
- CM 36500 - BIM For Project Managers And Field Supervision **Credits: 2.00**
- CM 38000 - Soils And Foundations **Credits: 3.00**
- CM 40000 - Construction Capstone I **Credits: 6.00**
- CM 43300 - Risk Management And Legal Issues In Design And Construction Integration **Credits: 2.00**
- CM 45001 - Construction Capstone II **Credits: 3.00**
- CM 47500 - Construction Costs **Credits: 2.00**
- CM Selective - Credit Hours: 3.00
- CM Selective - Credit Hours: 3.00
- CM 45701 - Construction Safety **Credits: 3.00**

Other Departmental/Program Course Requirements (46 credits)

- Economics Selective - **Credit Hours: 3.00** (satisfies Human Cultures: Humanities for core)
- ECON 21000 - Principles Of Economics **Credits: 3.00**
- AGECE 21700 - Economics **Credits: 3.00**
- ECON 25100 - Microeconomics **Credits: 3.00**
- ECON 25200 - Macroeconomics **Credits: 3.00**

- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** (satisfies Quantitative Reasoning Selective for core)
Calculus Selective - Credit Hours: 3.00-5.00 (satisfies Quantitative Reasoning Selective for core)
- MA 16010 - Applied Calculus I **Credits: 3.00**
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00**
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**
- MGMT 20000 - Introductory Accounting **Credits: 3.00** ♦ or
- MGMT 21200 - Business Accounting **Credits: 3.00**
- MGMT 25400 - Legal Foundations Of Business I **Credits: 3.00** ♦ or
- MGMT 45500 - Legal Background For Business I **Credits: 3.00**
- PHYS 22000 - General Physics **Credits: 4.00** ♦ (satisfies Science for core) or
- PHYS 17200 - Modern Mechanics **Credits: 4.00** ♦ (satisfies Science for core)
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** ♦ (satisfies Information Literacy & Science, Technology and Society for core)
OR
- ENGR 13100 - Transforming Ideas To Innovation I **Credits: 2.00** and
- ENGR 13200 - Transforming Ideas To Innovation II **Credits: 2.00**
Written Communication Selective - Credit Hours: 3.00-4.00
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**
Oral Communication Selective - Credit Hours: 3.00
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- COM 21700 - Science Writing And Presentation **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**
- Advanced Communication/English Selective - Credit Hours: 3.00
- Global Selective - Credit Hours: 3.00
- Human Cultures: Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00
- Science Selective (satisfies Science #2 for core) - Credit Hours: 3.00
- Intercultural Requirement - Credit Hours: 0.00
See Supplemental Information for Selective lists

Intercultural Requirement

1. Complete Intercultural Development Inventory (IDI) pre-test and post test.
2. Complete Beliefs, Events, and Values Inventory (BEVI) pre-test and post test.

Electives (12 credits)

- Electives - Credit Hours: 12.00

Optional Concentrations

- Disaster Recovery and Demolition Management Concentration for Construction Mgmt & Design and Construction Integration
- Healthcare Construction Management Concentration
- Infrastructure Construction Management Concentration for CM & DCI
- Mechanical and Electrical Construction Management Concentration
- Residential Construction Management Concentration

Supplemental List

Click here for Construction Management Supplemental Information.

Grade Requirements

- "C-" or better is required in all CM courses.
- Any course taken at Purdue can be attempted no more than three times (inclusive of W, WF, WN, and IF).
- Failure to meet these standards will require the student to CODO out of the School of Construction Management. The "C-" grade must be earned before enrolling in subsequent courses. CM courses can be repeated only once.

GPA Requirements

- 2.0 Graduation GPA required for Bachelor of Science degree.

Construction Work Experience Requirement

A minimum of 800 hours of post high school Architecture, Engineering or Construction (AEC) related work experience is required for graduation with a baccalaureate degree. Summer jobs, internships, or Co-op programs may be used to satisfy this requirement. If you have questions or doubts about this requirement, contact your advisor. To document your work hours, go to the CM website and look for Work Experience Form. You can also find the website in your advisor's email signature.

Pass/No Pass Policy

- Pass/No Pass may be allowed for electives only.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
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- Information Literacy (IL)
- Oral Communication (OC)
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- Science #1 (SCI)

- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

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Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- CM 10000 - Introduction To Construction Management **Credits: 3.00** ♦
- CM 16400 - Graphics For Civil Engineering And Construction **Credits: 2.00** ♦ or
- CM 26200 - Introduction To Construction Graphics **Credits: 3.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** ♦
- OR
- ENGR 13100 - Transforming Ideas To Innovation I **Credits: 2.00** and
- ENGR 13200 - Transforming Ideas To Innovation II **Credits: 2.00**
Written Communication - Credit Hours: 3.00-4.00
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

14-17 Credits

Spring 1st Year

- CM 15000 - Construction Management Fundamentals **Credits: 6.00** ♦
- CM 16000 - Surveying **Credits: 3.00**
Oral Communication Selective - Credit Hours: 3.00
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**
Calculus Selective I - Credit Hours: 3.00-5.00
- MA 16010 - Applied Calculus I **Credits: 3.00**
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00**
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**

15-17 Credits

Fall 2nd Year

- CM 20002 - Intermediate Pre-Construction Management **Credits: 4.00**
- CM 21601 - Electrical Construction **Credits: 2.00**
- MGMT 20000 - Introductory Accounting **Credits: 3.00** or
- MGMT 21200 - Business Accounting **Credits: 3.00**
- PHYS 17200 - Modern Mechanics **Credits: 4.00** ♦ or
- PHYS 22000 - General Physics **Credits: 4.00** ♦
- Human Cultures: Humanities Selective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- CM 21500 - Mechanical Construction **Credits: 3.00**
- CM 27000 - Statics **Credits: 3.00**
- CM 31000 - Equipment And Field Operations **Credits: 3.00**
- Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- CM 30002 - Advanced Pre-Construction Management **Credits: 4.00**
- CM 36500 - BIM For Project Managers And Field Supervision **Credits: 2.00**
- CM 38000 - Soils And Foundations **Credits: 3.00**
- CM Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- CM 30101 - Introduction To Construction Company Financial Management **Credits: 2.00**
- CM 36400 - Jobsite Management **Credits: 3.00**
- CM 45701 - Construction Safety **Credits: 3.00**
- MGMT 25400 - Legal Foundations Of Business I **Credits: 3.00** ♦ or
- MGMT 45500 - Legal Background For Business I **Credits: 3.00**
- CM Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

17 Credits

Fall 4th Year

- CM 40000 - Construction Capstone I **Credits: 6.00**
- CM 47500 - Construction Costs **Credits: 2.00**
Economics Selective - Credit Hours: 3.00
- ECON 21000 - Principles Of Economics **Credits: 3.00**
- AGECE 21700 - Economics **Credits: 3.00**
- ECON 25100 - Microeconomics **Credits: 3.00**
- ECON 25200 - Macroeconomics **Credits: 3.00**
- Advanced Communication/English Selective - Credit Hours: 3.00

14 Credits

Spring 4th Year

- CM 43300 - Risk Management And Legal Issues In Design And Construction Integration **Credits: 2.00**
- CM 45001 - Construction Capstone II **Credits: 3.00**
- Global Selective - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

14 Credits

World Language Courses

World Language proficiency requirements vary by program. The following list is inclusive of all world languages PWL offers for credit; for acceptable languages and proficiency levels, see your advisor. (ASL-American Sign Language; ARAB-Arabic; CHNS-

Chinese; FR-French; GER-German; GREK-Greek(Ancient); HEBR-Hebrew(Biblical); HEBR-Hebrew(Modern); ITAL-Italian; JPNS-Japanese; KOR-Korean; LATN-Latin; PTGS=Portuguese; RUSS-Russian; SPAN-Spanish)

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

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Design and Construction Integration, BS

About the Program

Increased project complexity and owner's expectations, collaborative delivery methods and ever changing technology in the Architecture, Engineering and Construction (AEC) industry has stressed the need for more collaboration between different stakeholders. The Design and Construction Integration Major focuses on the management of the design and construction process through collaboration of different parties. Graduates of the major are expected to act as liaison between different construction stakeholders, such as designers, contractors and owners. The major is conceptualized to have a core in construction management and supporting courses that provide students with a fundamental understanding of the design process (from within and outside the Purdue Polytechnic Institute).

School of Construction Management Technology

Design and Construction Integration Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (68 credits)

Required Major Courses (67-68 credits)

- CM 10000 - Introduction To Construction Management **Credits:** 3.00
- CM 15000 - Construction Management Fundamentals **Credits:** 6.00
- CM 16000 - Surveying **Credits:** 3.00
- CM 20002 - Intermediate Pre-Construction Management **Credits:** 4.00
- CM 23301 - Mechanical, Electrical And Piping Systems In The Built Environment **Credits:** 3.00
- CM 26200 - Introduction To Construction Graphics **Credits:** 3.00 or
- CM 16400 - Graphics For Civil Engineering And Construction **Credits:** 2.00
- CM 27000 - Statics **Credits:** 3.00
- CM 30002 - Advanced Pre-Construction Management **Credits:** 4.00
- CM 30101 - Introduction To Construction Company Financial Management **Credits:** 2.00
- CM 33000 - Design And Construction I **Credits:** 6.00
- CM 33100 - Design And Construction II **Credits:** 6.00
- CM 33200 - Architectural Design, Construction Techniques And Society **Credits:** 3.00 or
- AD 28000 - Human Behavior And Designed Environment **Credits:** 3.00
- CM 36000 - Applications Of Construction Documentation I **Credits:** 3.00
- CM 38000 - Soils And Foundations **Credits:** 3.00
- CM 40000 - Construction Capstone I **Credits:** 6.00
- CM 43300 - Risk Management And Legal Issues In Design And Construction Integration **Credits:** 2.00
- CM 45001 - Construction Capstone II **Credits:** 3.00
- CM 45701 - Construction Safety **Credits:** 3.00
- CM 47500 - Construction Costs **Credits:** 2.00

Other Departmental Course Requirements (43-47 credits)

- MA 15800 - Precalculus - Functions And Trigonometry **Credits:** 3.00 (satisfies Quantitative Reasoning Selective for core)
- MA 16010 - Applied Calculus I **Credits:** 3.00 or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits:** 5.00 or
- MA 16500 - Analytic Geometry And Calculus I **Credits:** 4.00
- MGMT 21200 - Business Accounting **Credits:** 3.00 ♦ or
- MGMT 20000 - Introductory Accounting **Credits:** 3.00
- MGMT 45500 - Legal Background For Business I **Credits:** 3.00 or
- MGMT 25400 - Legal Foundations Of Business I **Credits:** 3.00 ♦
- PHYS 22000 - General Physics **Credits:** 4.00 ♦ (satisfies Science for core) or
- PHYS 17200 - Modern Mechanics **Credits:** 4.00 (satisfies Science for core)
- TECH 12000 - Design Thinking In Technology **Credits:** 3.00 ♦ (satisfies Information Literacy Selective as well as the Science, Technology and Society Selective for core) or
- ENGR 13100 - Transforming Ideas To Innovation I **Credits:** 2.00
and
- ENGR 13200 - Transforming Ideas To Innovation II **Credits:** 2.00
- ECON 21000 - Principles Of Economics **Credits:** 3.00 (satisfies Human Cultures Behavioral/Social Science selective for core) or

- AGECE 21700 - Economics **Credits: 3.00** (satisfies Human Cultures Behavioral/Social Science selective for core) or
 - ECON 25100 - Microeconomics **Credits: 3.00** (satisfies Human Cultures Behavioral/Social Science selective for core) or
 - ECON 25200 - Macroeconomics **Credits: 3.00** (satisfies Human Cultures Behavioral/Social Science selective for core)
- Written Communication Selective**
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** (satisfies Written Communication for core) or
 - ENGL 10800 - First Year Composition **Credits: 3.00** (satisfies Written Communication for core) or
 - SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** (satisfies Written Communication for core)
- Oral Communication Selective**
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** (satisfies Oral Communication for core) or
 - COM 21700 - Science Writing And Presentation **Credits: 3.00** (satisfies Oral Communication for core) or
 - EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00** (satisfies Oral Communication for core) or
 - SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** (satisfies Oral Communication for core)
 - Business Selective - Credit Hours: 3.00 (see DCI list)
 - Cross Cultural Selective - Credit Hours: 3.00 (see DCI list)
 - Management Selective - Credit Hours: 3.00 (see DCI list)
 - Science Selective (satisfies second Science Selective for core) - Credit Hours: 3.00
 - Human Cultures: Humanities - Any course from the human cultures: humanities (HUM) university core list. - Credit Hours: 3.00

Intercultural Requirement

1. Complete Intercultural Development Inventory (IDI) pre-test and post test.
2. Complete Beliefs, Events, and Values Inventory (BEVI) pre-test and post test.

Electives (5-10 credits)

- Electives (any course, any subject) - Credit Hours: 5.00-10.00

Supplemental List

Design and Construction Integration Supplemental Information

Optional Concentrations

- Disaster Recovery and Demolition Management Concentration for Construction Mgmt & Design and Construction Integration
- Healthcare Construction Management Concentration
- Infrastructure Construction Management Concentration for CM & DCI
- Mechanical and Electrical Construction Management Concentration
- Residential Construction Management Concentration

Grade and Progression Requirements

- "C-" or better is required in all CM courses.
- Any course taken at Purdue can be attempted no more than three times (inclusive of W, WF, WN, and IF).
- Students must meet the following requirements to progress in the DCI major. Failure to meet these standards will require the student to CODO out of the School of Construction Management. DCI majors must earn a grade of "C-" or better in all CM courses. The "C-" grade must be earned before enrolling in subsequent courses. CM courses can be repeated only once.

GPA Requirements

- 2.0 Graduation GPA required for Bachelor of Science degree.

Construction Work Experience

A minimum of 800 hours of post high school Architecture, Engineering or Construction (AEC) related work experience is required for graduation with a baccalaureate degree. Summer jobs, internships, or Co-op programs may be used to satisfy this requirement. If you have questions or doubts about this requirement, contact your advisor. To document your work hours, go to the CM website and look for Work Experience Form. You can also find the website in your advisor's email signature.

Pass/No Pass Policy

- Pass/No Pass may be allowed for free electives only.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency Website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- CM 10000 - Introduction To Construction Management **Credits:** 3.00
- CM 16400 - Graphics For Civil Engineering And Construction **Credits:** 2.00 or
- CM 26200 - Introduction To Construction Graphics **Credits:** 3.00 ♦
- MA 15800 - Precalculus - Functions And Trigonometry **Credits:** 3.00
- TECH 12000 - Design Thinking In Technology **Credits:** 3.00 ♦
- ENGL 10600 - First Year Composition With Conferences **Credits:** 4.00 or
- ENGL 10800 - First Year Composition **Credits:** 3.00 or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00

14-17 Credits

Spring 1st Year

- CM 15000 - Construction Management Fundamentals **Credits:** 6.00
- CM 16000 - Surveying **Credits:** 3.00
- MA 16010 - Applied Calculus I **Credits:** 3.00 or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits:** 5.00 or

- MA 16500 - Analytic Geometry And Calculus I **Credits:** 4.00
- COM 11400 - Fundamentals Of Speech Communication **Credits:** 3.00 or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits:** 3.00 or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits:** 3.00 or
- COM 21700 - Science Writing And Presentation **Credits:** 3.00

15-17 Credits

Fall 2nd Year

- CM 20002 - Intermediate Pre-Construction Management **Credits:** 4.00
- CM 23301 - Mechanical, Electrical And Piping Systems In The Built Environment **Credits:** 3.00
- MGMT 21200 - Business Accounting **Credits:** 3.00 ♦
Cross Cultural Selective (Language 200 level or higher)
- PHYS 22000 - General Physics **Credits:** 4.00

17 Credits

Spring 2nd Year

- CM 33000 - Design And Construction I **Credits:** 6.00
- CM 36000 - Applications Of Construction Documentation I **Credits:** 3.00 ♦
- CM 27000 - Statics **Credits:** 3.00 ♦
- AGECE 21700 - Economics **Credits:** 3.00 or
- ECON 21000 - Principles Of Economics **Credits:** 3.00

15 Credits

Fall 3rd Year

- CM 30002 - Advanced Pre-Construction Management **Credits:** 4.00 ♦
- CM 33200 - Architectural Design, Construction Techniques And Society **Credits:** 3.00 or
- AD 28000 - Human Behavior And Designed Environment **Credits:** 3.00
- CM 38000 - Soils And Foundations **Credits:** 3.00 Elective - Credit Hours: 3.00 Business Selective - Credit Hours: 3.00 Credit Hours: 3.00

16 Credits

Spring 3rd Year

- CM 30101 - Introduction To Construction Company Financial Management **Credits: 2.00**
- CM 33100 - Design And Construction II **Credits: 6.00**
- CM 45701 - Construction Safety **Credits: 3.00**
- MGMT 45500 - Legal Background For Business I **Credits: 3.00**

14 Credits

Fall 4th Year

- CM 40000 - Construction Capstone I **Credits: 6.00**
- CM 47500 - Construction Costs **Credits: 2.00** Management Selective Credit Hours: 3.00
Human Cultures: Humanities **Credit Hours: 3.00**

14 Credits

Spring 4th Year

- CM 43300 - Risk Management And Legal Issues In Design And Construction Integration **Credits: 2.00**
- CM 45001 - Construction Capstone II **Credits: 3.00** Elective - Credit Hours: 4.00-5.00 Science Selective - any class from the science (SCI) university core list

12-13 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

World Language Courses

World Language proficiency requirements vary by program. The following list is inclusive of all world languages PWL offers for credit; for acceptable languages and proficiency levels, see your advisor. (ASL-American Sign Language; ARAB-Arabic; CHNS-Chinese; FR-French; GER-German; GREK-Greek(Ancient); HEBR-Hebrew(Biblical); HEBR-Hebrew(Modern); ITAL-Italian; JPNS-Japanese; KOR-Korean; LATN-Latin; PTGS=Portuguese; RUSS-Russian; SPAN-Spanish)

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

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Interior Architecture, BS (Indianapolis Only)

About the Program

Interior Architecture (Indianapolis Only) Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (78 credits)

- ARCH 11700 - Construction Drafting And CAD **Credits: 3.00**
- ARCH 12000 - Introduction To Construction Drafting With Building Information Modeling (BIM) **Credits: 3.00**
- ARCH 15500 - Residential Construction **Credits: 3.00**
- ARCH 21000 - History Of Architecture I **Credits: 3.00**
- ARCH 22200 - Commercial Construction **Credits: 3.00**
- ARCH 22300 - 3D Architectural Modeling I **Credits: 3.00**

- ARCH 32300 - 3D Architectural Modeling II **Credits: 3.00**
- ARCH 32500 - Building Science & Energy **Credits: 3.00**
- INT 10300 - Introduction To Interior Design **Credits: 3.00**
- INT 12400 - Space Planning For Interiors **Credits: 3.00**
- INT 12500 - Color And Lighting Of Interiors **Credits: 3.00**
- INT 15100 - Textiles For Interiors **Credits: 3.00**
- INT 20200 - Interior Materials And Applications **Credits: 3.00**
- INT 20400 - History Of Interiors And Furniture I **Credits: 3.00**
- INT 22400 - Residential Interior Design Studio **Credits: 3.00**
- INT 22600 - Commercial Interiors I **Credits: 3.00**
- INT 30200 - Three-Dimensional Design **Credits: 3.00**
- INT 30400 - History Of Interiors And Furniture II **Credits: 3.00**
- INT 32400 - Residential II: Housing Design **Credits: 3.00**
- INT 32600 - Commercial Interior Design Studio II **Credits: 3.00**
- INT 42600 - Evidence-Based Design **Credits: 3.00**
- INT 42800 - Interior Design Capstone Design Project **Credits: 3.00**
- INT 45200 - Interior Building Systems **Credits: 3.00**
- INT 45300 - Business Practices Of Interior Design **Credits: 3.00**
- INT 48000 - Senior Portfolio **Credits: 3.00**
- INT 49500 - Sustainable Design In Engineering And Technology **Credits: 3.00**

Other Departmental/Program Course Requirements (42 credits)

- AD 10500 - Design I **Credits: 3.00**
- AD 11300 - Basic Drawing **Credits: 3.00** (satisfies Human Cultures: Humanities for core)
- AD 22700 - History Of Art Since 1400 **Credits: 3.00**
- CGT 21100 - Raster Imaging For Computer Graphics **Credits: 3.00**
- MA 15300 - College Algebra **Credits: 3.00** (satisfies Quantitative Reasoning Selective for core)
- OLS 37100 - Project Management **Credits: 3.00**
- TECH 39699 - Professional Practice Internship **Credits: 0.00 to 3.00** - Credit Hours: 3.00
- Human Cultures: Behavioral/Social Sciences Selective - Credit Hours: 3.00 (satisfies Human Cultures: BSS for core)
- Information Literacy Selective - Credit Hours: 3.00 (satisfies Information Literacy for core)
- Science #1 Selective - Credit Hours: 3.00 (satisfies Science #1 for core)
- Science #2 Selective - Credit Hours: 3.00 (satisfies Science #1 for core)
- Science, Technology & Society Selective - Credit Hours: 3.00 (satisfies Science, Technology & Society for core)
- Oral Communication Selective - Credit Hours: 3.00 (satisfies Oral Communication for core)
- Written Communication Selective - Credit Hours: 3.00 (satisfies Written Communication for core)

Supplemental List

[Click here for Construction Management & Interior Architecture Supplemental Information.](#)

Grade Requirements

- A grade of "C" or higher must be obtained in all INTR and ARCH courses in order to progress in the program..

- Any course taken at Purdue can be attempted no more than three times (inclusive of W, WF, WN, and IF).

GPA Requirements

- 2.0 Graduation GPA required for Bachelor of Science degree.

Pass/No Pass Policy

- Pass/No Pass may be allowed for electives only.

Transfer Credit Policy

- Pass/No Pass may be allowed for electives only.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- AD 10500 - Design I **Credits: 3.00**
- INT 10300 - Introduction To Interior Design **Credits: 3.00**
- MA 15300 - College Algebra **Credits: 3.00**
- Information Literacy Selective - Credit Hours: 3.00
- Written Communication Selective - Credit Hours: 3.00

15 Credits

Spring 1st Year

- AD 11300 - Basic Drawing **Credits: 3.00**
- ARCH 11700 - Construction Drafting And CAD **Credits: 3.00**
- ARCH 12000 - Introduction To Construction Drafting With Building Information Modeling (BIM) **Credits: 3.00**
- INT 15100 - Textiles For Interiors **Credits: 3.00**
- Oral Communication Selective - Credit Hours: 3.00

15 Credits

Fall 2nd Year

- ARCH 15500 - Residential Construction **Credits: 3.00**
- CGT 21100 - Raster Imaging For Computer Graphics **Credits: 3.00**
- INT 12400 - Space Planning For Interiors **Credits: 3.00**
- INT 12500 - Color And Lighting Of Interiors **Credits: 3.00**
- INT 20200 - Interior Materials And Applications **Credits: 3.00**

15 Credits

Spring 2nd Year

- ARCH 21000 - History Of Architecture I **Credits: 3.00**
- ARCH 22200 - Commercial Construction **Credits: 3.00**
- INT 20400 - History Of Interiors And Furniture I **Credits: 3.00**
- INT 22400 - Residential Interior Design Studio **Credits: 3.00**
- INT 22600 - Commercial Interiors I **Credits: 3.00**

15 Credits

Fall 3rd Year

- ARCH 22300 - 3D Architectural Modeling I **Credits: 3.00**
- ARCH 32500 - Building Science & Energy **Credits: 3.00**
- INT 30200 - Three-Dimensional Design **Credits: 3.00**
- INT 30400 - History Of Interiors And Furniture II **Credits: 3.00**
- INT 32400 - Residential II: Housing Design **Credits: 3.00**

15 Credits

Spring 3rd Year

- AD 22700 - History Of Art Since 1400 **Credits: 3.00**
- ARCH 32300 - 3D Architectural Modeling II **Credits: 3.00**
- INT 32600 - Commercial Interior Design Studio II **Credits: 3.00**
- OLS 37100 - Project Management **Credits: 3.00**
- Science, Technology & Society Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- INT 42600 - Evidence-Based Design **Credits: 3.00**
- INT 45200 - Interior Building Systems **Credits: 3.00**
- INT 48000 - Senior Portfolio **Credits: 3.00**
- TECH 39699 - Professional Practice Internship **Credits: 0.00 to 3.00** - Credit Hours: 3.00
- Science #1 Selective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- INT 42800 - Interior Design Capstone Design Project **Credits: 3.00**
- INT 45300 - Business Practices Of Interior Design **Credits: 3.00**
- INT 49500 - Sustainable Design In Engineering And Technology **Credits: 3.00**
- Human Cultures: Behavior/Social Sciences Selective - Credit Hours: 3.00
- Science #2 Selective - Credit Hours: 3.00

15 Credits

World Language Courses

World Language proficiency requirements vary by program. The following list is inclusive of all world languages PWL offers for credit; for acceptable languages and proficiency levels, see your advisor. (ASL-American Sign Language; ARAB-Arabic; CHNS-Chinese; FR-French; GER-German; GREK-Greek(Ancient); HEBR-Hebrew(Biblical); HEBR-Hebrew(Modern); ITAL-Italian; JPNS-Japanese; KOR-Korean; LATN-Latin; PTGS=Portuguese; RUSS-Russian; SPAN-Spanish)

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

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The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

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Minor

Construction Graphics Minor

About the Minor

The BIM minor gives students access to the latest modeling technologies in the architecture, engineering and construction (AEC) industry. Students who complete the minor will gain knowledge in current and emerging graphics theories, practices and technologies associated with design, documentation, and modeling all areas within construction management and graphics.

Requirements for the Minor (11-12 credits)

Required Courses (11-12 credits)

- CM 26200 - Introduction To Construction Graphics **Credits: 3.00** - credit given to students who successfully complete CGT 16400 or CM 16400.
- CM 36000 - Applications Of Construction Documentation I **Credits: 3.00**
- CM 46000 - Building Information Modeling For Commercial Construction **Credits: 3.00**
- CM 46200 - Applications Of Construction Documentation II **Credits: 3.00**

Notes

- All courses in the minor must be taken for a grade. P/NP is not an option.
- A grade of "C-" or better must be obtained in all BIM minor classes.
- Only students pursuing four-year degrees are eligible for the BIM minor.
- Other independent courses may be offered upon student request to the major professor in charge of BIM.

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The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

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Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Construction Management Minor

The CM minor will expose students in other disciplines to more in-depth construction management principles to better prepare individuals seeking employment in one of the many related professions in the built environment. This minor will help to create basic understanding of daily construction operations at the project and corporate levels.

Requirements for the Minor (16 credits)

Required Courses (16 credits)

- CM 10000 - Introduction To Construction Management **Credits: 3.00**
- CM 11000 - Construction OSHA Ten-Hour Certification **Credits: 1.00**
- CM 15000 - Construction Management Fundamentals **Credits: 6.00**
- CM 20001 - Intermediate Pre-Construction Management **Credits: 6.00**

Notes

- All CM courses require a C- or higher.
- CM 15000 and CM 11000 must be taken concurrently unless permitted otherwise.
- Course registration will be controlled by the School of Construction Management.
- Some CM minor courses may require an override from a CM advisor.
- All CM minor courses must be taken for a grade on the Purdue University, West Lafayette Campus.
- Students are not allowed to take more than 21 credits of CM coursework while enrolled in the CM minor.
- Space in CM courses is not guaranteed.
- Space in some CM courses might not be available until open enrollment.
- Successful completion of the CM Minor **does not guarantee** admissions into the PICM-BS program.
- Students are subject to dismissal from this minor if they receive a failing grade in any CM course.

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Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Design and Construction Integration Minor

Increased project complexity and owner's expectations, collaborative delivery methods and ever changing technology in the Architecture, Engineering and Construction (AEC) industry has stressed the need for more collaboration between different stakeholders. The Design and Construction Integration Minor focuses on the appreciation of design as socio-technical discipline and the understanding of management of design and construction integration. Graduates of this minor are expected to facilitate the collaboration of construction stakeholders, such as designers, contractors and owners.

Requirements for the Minor (17 credits)

Design and Construction Minor Required Courses

- CM 10000 - Introduction To Construction Management **Credits:** 3.00
- CM 33000 - Design And Construction I **Credits:** 6.00
- CM 33200 - Architectural Design, Construction Techniques And Society **Credits:** 3.00
- CM 43300 - Risk Management And Legal Issues In Design And Construction Integration **Credits:** 2.00

Cross Cultural Experience Selective (3 credits)

- ANTH 20500 - Human Cultural Diversity **Credits:** 3.00
- ARAB 20100 - Standard Arabic Level III **Credits:** 3.00

- ASL 20100 - American Sign Language III **Credits: 3.00**
- CHNS 20100 - Chinese Level III **Credits: 4.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- FR 20100 - French Level III **Credits: 3.00**
- GER 20100 - German Level III **Credits: 3.00**
- HEBR 20100 - Modern Hebrew Level III **Credits: 3.00**
- ITAL 20100 - Italian Level III **Credits: 3.00**
- JPNS 20100 - Japanese Level III **Credits: 3.00 or 4.00**
- PTGS 20100 - Portuguese Level III **Credits: 3.00**
- RUSS 20100 - Russian Level III **Credits: 4.00**
- SPAN 20100 - Spanish Level III **Credits: 3.00**
- Study Abroad - Credits Hours: 3.00

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Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Program Information

Design and Construction Integration Supplemental Information

Business Selective - Credit Hours: 3.00

- IET 23500 - Introduction To Systems Thinking And Process Improvement **Credits: 3.00**
- IET 31600 - Statistical Quality Control **Credits: 3.00**
- MGMT 30400 - Introduction To Financial Management **Credits: 3.00**
- MGMT 31000 - Financial Management **Credits: 3.00**
- STAT 22500 - Introduction To Probability Models **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**

Cross Cultural Selective - Credit Hours: 3.00

- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 38500 - Community Engagement In Anthropology **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**

- Any World Language course at 20100-level or higher
- Semester Abroad (see advisor)

Management Selective - Credit Hours: 3.00

- MGMT 44301 - Management Of Human Resources **Credits: 3.00**
- OBHR 33000 - Introduction To Organizational Behavior **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 15200 - Business Principles For Organizational Leadership **Credits: 3.00**
- TLI 21300 - Project Management **Credits: 3.00**

Disaster Recovery and Demolition Management Concentration for Construction Mgmt & Design and Construction Integration

Required Courses (9 credits)

- CM 42100 - Construction Management And Technologies For Disaster Recovery **Credits: 3.00**
- CM 42200 - Structural Demolition For Construction Managers **Credits: 3.00**
- **Concentration Selective - Credit Hours : 3.00**
- CM 36000 - Applications Of Construction Documentation I **Credits: 3.00**
- CM 37000 - Heavy Civil Construction Management **Credits: 3.00**
- CM 37100 - Industrial Construction Management **Credits: 3.00**
- CM 37200 - Planning, Design, And Construction Process For The Healthcare Built Environment **Credits: 3.00**
- CM 37300 - Healthcare Construction Management - Systems, Occupied Space Work, And Related Industries **Credits: 3.00**
- CM 37400 - Mechanical And Electrical Construction Management I **Credits: 3.00**
- CM 37500 - Mechanical And Electrical Construction Management II **Credits: 3.00**
- CM 37600 - Residential Construction Management-Green Construction And Sustainability **Credits: 3.00**
- CM 37700 - Residential Construction Management Design-Build **Credits: 3.00**

Infrastructure Construction Management Concentration for CM & DCI

The Infrastructure Construction Management Concentration focuses on the study of methods, materials, equipment, and procedures used in the design and construction of heavy civil and industrial systems. The heavy civil portion of the curriculum will focus on the construction of roads, bridges, and other major transportation infrastructure. The industrial portion of the curriculum will include design and construction of infrastructure for energy, chemical, and water/wastewater systems which represents a major portion of the global construction industry.

Infrastructure Construction Management Concentration for Construction Management Technology Majors

Concentration Courses (9 credits)

Required Courses (6 credits)

- CM 37000 - Heavy Civil Construction Management **Credits: 3.00**
- CM 37100 - Industrial Construction Management **Credits: 3.00**

Selective Courses (3 credits)

Choose one of the following:

- CM 37200 - Planning, Design, And Construction Process For The Healthcare Built Environment **Credits: 3.00**
- CM 37300 - Healthcare Construction Management - Systems, Occupied Space Work, And Related Industries **Credits: 3.00**
- CM 37400 - Mechanical And Electrical Construction Management I **Credits: 3.00**
- CM 37500 - Mechanical And Electrical Construction Management II **Credits: 3.00**
- CM 37600 - Residential Construction Management-Green Construction And Sustainability **Credits: 3.00**
- CM 37700 - Residential Construction Management Design-Build **Credits: 3.00**
- CM 42100 - Construction Management And Technologies For Disaster Recovery **Credits: 3.00**
- CM 42200 - Structural Demolition For Construction Managers **Credits: 3.00**

Notes

Mechanical and Electrical Construction Management Concentration

Required Courses (9 Credits)

- CM 37400 - Mechanical And Electrical Construction Management I **Credits: 3.00**
- CM 37500 - Mechanical And Electrical Construction Management II **Credits: 3.00**
- Concentration Selective - Credit Hours: 3.00
- CM 36000 - Applications Of Construction Documentation I **Credits: 3.00**
- CM 37000 - Heavy Civil Construction Management **Credits: 3.00**
- CM 37100 - Industrial Construction Management **Credits: 3.00**
- CM 37200 - Planning, Design, And Construction Process For The Healthcare Built Environment **Credits: 3.00**
- CM 37300 - Healthcare Construction Management - Systems, Occupied Space Work, And Related Industries **Credits: 3.00**
- CM 37600 - Residential Construction Management-Green Construction And Sustainability **Credits: 3.00**
- CM 37700 - Residential Construction Management Design-Build **Credits: 3.00**
- CM 42100 - Construction Management And Technologies For Disaster Recovery **Credits: 3.00**
- CM 42200 - Structural Demolition For Construction Managers **Credits: 3.00**

Residential Construction Management Concentration

Required Courses (9 Credits)

- CM 37600 - Residential Construction Management-Green Construction And Sustainability **Credits: 3.00**
- CM 37700 - Residential Construction Management Design-Build **Credits: 3.00**
- Concentration Selective - Credit Hours: 3.00
- CM 36000 - Applications Of Construction Documentation I **Credits: 3.00**
- CM 37000 - Heavy Civil Construction Management **Credits: 3.00**
- CM 37100 - Industrial Construction Management **Credits: 3.00**
- CM 37200 - Planning, Design, And Construction Process For The Healthcare Built Environment **Credits: 3.00**
- CM 37300 - Healthcare Construction Management - Systems, Occupied Space Work, And Related Industries **Credits: 3.00**
- CM 37400 - Mechanical And Electrical Construction Management I **Credits: 3.00**
- CM 37500 - Mechanical And Electrical Construction Management II **Credits: 3.00**
- CM 42100 - Construction Management And Technologies For Disaster Recovery **Credits: 3.00**
- CM 42200 - Structural Demolition For Construction Managers **Credits: 3.00**

Other Programs

Healthcare Construction Management Concentration

Required Courses (9 Credits)

- CM 37200 - Planning, Design, And Construction Process For The Healthcare Built Environment **Credits: 3.00**
- CM 37300 - Healthcare Construction Management - Systems, Occupied Space Work, And Related Industries **Credits: 3.00**
- **Concentration Selective - Credit Hours: 3.00**
- CM 36000 - Applications Of Construction Documentation I **Credits: 3.00**
- CM 37000 - Heavy Civil Construction Management **Credits: 3.00**
- CM 37100 - Industrial Construction Management **Credits: 3.00**
- CM 37400 - Mechanical And Electrical Construction Management I **Credits: 3.00**
- CM 37500 - Mechanical And Electrical Construction Management II **Credits: 3.00**
- CM 37600 - Residential Construction Management-Green Construction And Sustainability **Credits: 3.00**
- CM 37700 - Residential Construction Management Design-Build **Credits: 3.00**
- CM 42100 - Construction Management And Technologies For Disaster Recovery **Credits: 3.00**
- CM 42200 - Structural Demolition For Construction Managers **Credits: 3.00**
- CE 49700 - Civil Engineering Projects **Credits: 0.00 to 18.00**
- CEM 49700 - Construction Engineering Projects **Credits: 0.00 to 4.00**
CE/CEM 49700: Ldrshp & Adv Proj Mgmt, taught by Bob Bowen (this CE/CEM 49700 class specifically)

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Department of Computer and Information Technology

Overview

The Department of Computer and Information Technology (CIT) at Purdue provides educational opportunities that apply information technology (IT) to solve societal problems. Degree programs in information systems, network engineering technology, systems analysis and design, and cyber security focus software development, systems integration, data management, and computer networks.

Faculty (website)

Contact Information

Computer Information Technology Department

Knob Hall
Room 255
401 N. Grant St.
West Lafayette, IN 47907
Phone: 765-494-2560
Email: cit@purdue.edu

Contact an advisor

Graduate Information

For Graduate Information please see Computer and Information Technology Graduate Program Information.

Baccalaureate

Computer and Information Technology, BS

About the Program

The Computer and Information Technology major is part of the Computer and Information Technology program. The Computer and Information Technology program is accredited by the Computing Accreditation Commission of ABET, www.abet.org.

As computers find their way into every part of our lives, information technology professionals are needed to keep the systems functioning and the data safe. Your information technology courses and problem-solving skills will prepare you for careers in almost any industry. You'll learn how to increase efficiencies as you work with computer applications, management information systems, databases, and computer networks. Computer and information technology courses provide students with strong technical skills, a thorough understanding of business needs, and the ability to communicate effectively with customers, peers, and industry leaders.

[Computer and Information Technology Website](#)

[Computer and Information Technology Department Major Change \(CODO\) Requirements](#)

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (51 credits)

A C- GPA is required across all CNIT courses

Computer and Information Technology Required Major Courses (30 credits)

- CNIT 15501 - Introduction To Software Development Concepts **Credits:** 3.00
- CNIT 17600 - Information Technology Architectures **Credits:** 3.00 (satisfies Informational Literacy for core)
- CNIT 18000 - Introduction To Systems Development **Credits:** 3.00 (Gateway to CIT)
- CNIT 24200 - System Administration **Credits:** 3.00
- CNIT 25501 - Object-Oriented Programming Introduction **Credits:** 3.00
- CNIT 27000 - Cybersecurity Fundamentals I **Credits:** 3.00
- CNIT 27200 - Database Fundamentals **Credits:** 3.00
- CNIT 28000 - Systems Analysis And Design Methods **Credits:** 3.00
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits:** 3.00
- CNIT 48000 - Managing Information Technology Projects **Credits:** 3.00

Programming Selective (3 credits)

- CNIT 31500 - Systems Programming **Credits:** 3.00 or
- CNIT 32500 - Object-Oriented Application Development **Credits:** 3.00

Database Selective (3 credits)

- CNIT 37200 - Database Programming **Credits:** 3.00 or
- CNIT 39200 - Enterprise Data Management **Credits:** 3.00

Information Technology Selectives (15 credits)

At least nine credits must be CNIT courses.

- Any non-required 30000 level or higher CNIT course or EPICS (EPCS): participation in EPICS requires responsibility for an IT component and CIT faculty approval; CGT courses 30000 level or higher

CIT Common Core (42 credits)

Composition Selective (satisfies Written Communication for core) - Credit Hours: 3.00

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00 or
- ENGL 10600 - First Year Composition With Conferences **Credits:** 4.00 or
- ENGL 10800 - First Year Composition **Credits:** 3.00 or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits:** 3.00

Introductory Oral Communication Selective (satisfies Oral Communication for core) - Credit Hours: 3.00

- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** or
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**

Calculus I (satisfies Quantitative Reasoning for core) - Credit Hours: 3.00

- MA 16010 - Applied Calculus I **Credits: 3.00**

Calculus II (satisfies Quantitative Reasoning for core) - Credit Hours: 3.00

- MA 16020 - Applied Calculus II **Credits: 3.00**

Design Thinking (satisfies Information Literacy and Science, Technology & Society Selective for core) - Credit Hours: 3.00

- TECH 12000 - Design Thinking In Technology **Credits: 3.00**

Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00

Human Cultures: Behavioral/Social Sciences (BSS)

Three credits required from the Human Cultures: Behavioral/Social Sciences (BSS) list.

Humanities Selective (satisfies Human Cultures: Humanities for core) - Credit Hours: 3.00

Human Cultures: Humanities (HUM)

Three credits required from the Human Cultures: Humanities (HUM) list.

Science Selective (satisfies Science for core) - Credit Hours: 3.00

Science(SCI)

Three credits required from the Science(SCI) list.

Lab Science Selective (satisfies Science for core) - Credit Hours: 3.00

Science (SCI) - with Lab Component

Three credits required from the Science(SCI) list.

Verify the course has a lab component when scheduling.

The following courses are typically offered with a lab component:

Accounting Selective - Credit Hours: 3.00

- MGMT 20000 - Introductory Accounting **Credits: 3.00**
- MGMT 21200 - Business Accounting **Credits: 3.00**

Economics Selective - Credit Hours: 3.00

AGEC 21700 or ECON 21000: credit can only be used for one of these courses to fulfill a degree requirement.

- AGEC 21700 - Economics **Credits: 3.00**
- ECON 21000 - Principles Of Economics **Credits: 3.00**
- ECON 25100 - Microeconomics **Credits: 3.00**
- ECON 25200 - Macroeconomics **Credits: 3.00**

Communication Selective - Credit Hours: 3.00

- COM 21000 - Addressing Public Issues **Credits: 3.00** or
- COM 21200 - Approaches To The Study Of Interpersonal Communication **Credits: 3.00** or
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00** or
- COM 25100 - Communication, Information, And Society **Credits: 3.00** or
- COM 30300 - Intercultural Communication **Credits: 3.00** or
- COM 31400 - Advanced Presentational Speaking **Credits: 3.00** or
(COM 31400 or COM 31500: credit can only be used for one of these courses to fulfill a degree requirement.)
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
COM 31400 or COM 31500: credit can only be used for one of these courses to fulfill a degree requirement.
- COM 31800 - Principles Of Persuasion **Credits: 3.00** or
- COM 32400 - Introduction To Organizational Communication **Credits: 3.00**

Professional Speaking Selective - Credit Hours: 3.00

- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 32500 - Interviewing: Principles And Practice **Credits: 3.00** or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00**

Professional Writing Selective - Credit Hours: 3.00

- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00**

Professional IT Experience Requirement

If a student selects the course option, they must enroll in 3 credits total.

- CNIT 39000 - Supervised Practicum **Credits:** 1.00 to 3.00
- TDM 11100 - Corporate Partners I **Credits:** 3.00
- TDM 11200 - Corporate Partners II **Credits:** 3.00
- TDM 21100 - Corporate Partners III **Credits:** 3.00
- TDM 21200 - Corporate Partners IV **Credits:** 3.00
- TDM 31100 - Corporate Partners V **Credits:** 3.00
- TDM 31200 - Corporate Partners VI **Credits:** 3.00
- TDM 41100 - Corporate Partners VII **Credits:** 3.00
- TDM 41200 - Corporate Partners VIII **Credits:** 3.00

Globalization Requirement - Credit Hours: 0.00

All students must complete the Polytechnic Growth Plan for Global Awareness and Intercultural Competency.

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete CNIT 32000 or CNIT 37100

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pretest).

Other Departmental/Program Course Requirements (24 credits)

- TLI 11200 - Foundations Of Organizational Leadership **Credits:** 3.00

Statistics Selective - Credit Hours: 3.00

- STAT 22500 - Introduction To Probability Models **Credits:** 3.00 or
- STAT 30100 - Elementary Statistical Methods **Credits:** 3.00 or
- STAT 50100 - Experimental Statistics I **Credits:** 3.00 or
- STAT 51100 - Statistical Methods **Credits:** 3.00

General Business - Credit Hours: 3.00

- TLI 15200 - Business Principles For Organizational Leadership **Credits:** 3.00

Interdisciplinary Selective - Credit Hours: 15.00

Globalization Requirement - Credit Hours: 0.00

Elective (3 credits)

- Elective (non-remedial course) - Credit Hours: 3.00

Supplemental List

[Click here for Computer and Information Technology Supplemental Information.](#)

Supplemental List

[Click here for Computer and Information Technology Supplemental Information.](#)

Grade Requirements

- Students must earn a C- or better in all CNIT courses that are a prerequisite to another CNIT course
- Any course taken at Purdue can be attempted no more than three times (inclusive of W, WF, WN, I, and IF)

GPA Requirements

- 2.0 Cummulative GPA required for Bachelor of Science degree
- 2.0 Cummulative GPA in all CNIT courses required for Bachelor of Science degree

Course Requirements and Notes

- Courses with the ♦ are essential for the CIT degree critical path to graduation
- Students must select courses from Computer and Information Technology Supplemental Information.
- Credit cannot be earned for both AGECE 21700 and ECON 21000 to fulfill degree requirements
- Credit cannot be earned for both COM 31400 and COM 31500 to fulfill degree requirements
- A single course may not fulfill multiple requirements within the CIT BS degree

Non-course / Non-credit Requirements

- Co-Curricular Requirements include the following:
 - Professional IT Experience
 - Globalization requirement

Pass/No Pass Policy

College, department, major P/NP policy. Any exceptions to the rule should also be included.

Transfer Credit Policy

College, department, major transfer credit (including any/all undistributed credit, TR graded course, AP/IB credit, etc.) should be clearly stated. Can transfer credit be applied to the major? If yes, how and where?

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Additional Information

Any additional information that does not fit into any of the categories above.

Sample 4-Year Plan

Fall 1st Year

- CNIT 18000 - Introduction To Systems Development **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** or

- ENGL 10600 - First Year Composition With Conferences **Credits:** 4.00 or
- ENGL 10800 - First Year Composition **Credits:** 3.00 or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits:** 3.00
- MA 16010 - Applied Calculus I **Credits:** 3.00
- TECH 12000 - Design Thinking In Technology **Credits:** 3.00 ♦

15 Credits

Spring 1st Year

- CNIT 15501 - Introduction To Software Development Concepts **Credits:** 3.00
- CNIT 17600 - Information Technology Architectures **Credits:** 3.00
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits:** 3.00 or
- COM 11400 - Fundamentals Of Speech Communication **Credits:** 3.00
- MA 16020 - Applied Calculus II **Credits:** 3.00
- Behavioral/Social Sciences Foundational Selective - Credit Hours: 3.00

15 Credits

Fall 2nd Year

- CNIT 27200 - Database Fundamentals **Credits:** 3.00
- CNIT 28000 - Systems Analysis And Design Methods **Credits:** 3.00
- CNIT 24200 - System Administration **Credits:** 3.00
- TLI 15200 - Business Principles For Organizational Leadership **Credits:** 3.00
- Science Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- CNIT 25501 - Object-Oriented Programming Introduction **Credits:** 3.00
- CNIT 27000 - Cybersecurity Fundamentals I **Credits:** 3.00
- COM 21000 - Addressing Public Issues **Credits:** 3.00 or
- COM 21200 - Approaches To The Study Of Interpersonal Communication **Credits:** 3.00 or
- COM 22400 - Communicating In The Global Workplace **Credits:** 3.00 or
- COM 25100 - Communication, Information, And Society **Credits:** 3.00 or
- COM 31400 - Advanced Presentational Speaking **Credits:** 3.00 or
- COM 31500 - Speech Communication Of Technical Information **Credits:** 3.00 or
- COM 31800 - Principles Of Persuasion **Credits:** 3.00 or
- COM 32000 - Small Group Communication **Credits:** 3.00 or
- COM 32400 - Introduction To Organizational Communication **Credits:** 3.00

- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** or
- STAT 50100 - Experimental Statistics I **Credits: 3.00** or
- STAT 51100 - Statistical Methods **Credits: 3.00**
- Lab Science Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- CNIT 31500 - Systems Programming **Credits: 3.00** or
- CNIT 32500 - Object-Oriented Application Development **Credits: 3.00**
- MGMT 20000 - Introductory Accounting **Credits: 3.00** or
- MGMT 21200 - Business Accounting **Credits: 3.00**
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 32500 - Interviewing: Principles And Practice **Credits: 3.00** or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00** ♦
- AGECE 21700 - Economics **Credits: 3.00** or
- ECON 21000 - Principles Of Economics **Credits: 3.00** or
- ECON 25100 - Microeconomics **Credits: 3.00** or
- ECON 25200 - Macroeconomics **Credits: 3.00**
- Information Technology Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- CNIT 37200 - Database Programming **Credits: 3.00** or
- CNIT 39200 - Enterprise Data Management **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- Information Technology Selective - Credit Hours: 3.00
- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00** or

15 Credits

Fall 4th Year

- CNIT 48000 - Managing Information Technology Projects **Credits: 3.00**
- Information Technology Selective - Credit Hours: 3.00
- Humanities Foundational Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- Elective - Credit Hours: 3.00
- Information Technology Selective - Credit Hours: 3.00
- Information Technology Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 3.00

15 Credits

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Computing Infrastructure and Network Engineering Technology, BS

About the Program

The Network Engineering Technology major is part of the Computer and Information Technology program. The Computer and Information Technology program is accredited by the Computing Accreditation Commission of ABET.

The world operates on the back of computers - networks of computers. Whether it is wired or wireless, information must be able to travel the network securely, efficiently and accurately. The network engineering technology major provides the necessary background about hardware and software needs to solve networking problems.

[Network Engineering Technology Website](#)

[Computer and Information Technology Department Major Change \(CODO\) Requirements](#)

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (60 credits)

A C- GPA is required across all CNIT courses.

Computer and Information Technology Major Courses (48 credits)

- CNIT 15501 - Introduction To Software Development Concepts **Credits:** 3.00
- CNIT 17600 - Information Technology Architectures **Credits:** 3.00
- CNIT 18000 - Introduction To Systems Development **Credits:** 3.00 or
- CNIT 18200 - System And Organizational Security **Credits:** 3.00
- CNIT 24200 - System Administration **Credits:** 3.00
- CNIT 25501 - Object-Oriented Programming Introduction **Credits:** 3.00
- CNIT 27000 - Cybersecurity Fundamentals I **Credits:** 3.00
- CNIT 27200 - Database Fundamentals **Credits:** 3.00
- CNIT 31500 - Systems Programming **Credits:** 3.00
- CNIT 34400 - Network Engineering Fundamentals **Credits:** 3.00
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits:** 3.00 or
- CNIT 37100 - Cyberlaw And Ethics **Credits:** 3.00
- CNIT 34000 - UNIX Administration **Credits:** 3.00
- CNIT 34220 - Network Administration **Credits:** 2.00 or 3.00 3 credits required
- CNIT 34500 - Internetwork Design And Implementation **Credits:** 3.00 or 4.00 3 credits required
- CNIT 34600 - Wireless Networks **Credits:** 3.00 or 4.00 3 credits required
- CNIT 45500 - Network Security **Credits:** 3.00
- CNIT 48000 - Managing Information Technology Projects **Credits:** 3.00

Computing Infrastructure Selective (6 credits)

- CNIT 41700 - Critical Infrastructure Security **Credits:** 3.00
- CNIT 43500 - Advanced Network Services **Credits:** 3.00
- CNIT 44500 - Advanced Internetwork Routing And Switching **Credits:** 3.00
- CNIT 44600 - Advanced Wireless Networks **Credits:** 3.00
- CNIT 45600 - Wireless Security And Management **Credits:** 3.00

Information Technology Selectives (6 credits)

Any non-required 30000 level or higher CNIT course or EPICS (EPCS): participation in EPICS requires responsibility for an IT component and CIT faculty approval; CGT courses 30000 level or higher

At least three credits must be CNIT courses.

CIT Common Core (42 credits)

Composition Selective (satisfies Written Communication for core) - Credit Hours: 3.00

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00 or
- ENGL 10600 - First Year Composition With Conferences **Credits:** 4.00 or
- ENGL 10800 - First Year Composition **Credits:** 3.00 or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits:** 3.00

Introductory Oral Communication Selective (satisfies Oral Communication for core) - Credit Hours: 3.00

- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits:** 3.00 or
- COM 11400 - Fundamentals Of Speech Communication **Credits:** 3.00

Calculus I (satisfies Quantitative Reasoning for core) - Credit Hours: 3.00

- MA 16010 - Applied Calculus I **Credits:** 3.00

Calculus II (satisfies Quantitative Reasoning for core) - Credit Hours: 3.00

- MA 16020 - Applied Calculus II **Credits:** 3.00

Design Thinking (satisfies Information Literacy and Science, Technology & Society Selective for core) - Credit Hours: 3.00

- TECH 12000 - Design Thinking In Technology **Credits:** 3.00

Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00

Human Cultures: Behavioral/Social Sciences (BSS)

Three credits required from the Human Cultures: Behavioral/Social Sciences (BSS) list.

Humanities Selective (satisfies Human Cultures: Humanities for core) - Credit Hours: 3.00

Human Cultures: Humanities (HUM)

Three credits required from the Human Cultures: Humanities (HUM) list.

Science Selective (satisfies Science for core) - Credit Hours: 3.00

Science(SCI)

Three credits required from the Science(SCI) list.

Lab Science Selective (satisfies Science for core) - Credit Hours: 3.00

Science (SCI) - with Lab Component

Three credits required from the Science(SCI) list.

Verify the course has a lab component when scheduling.

The following courses are typically offered with a lab component:

Accounting Selective - Credit Hours: 3.00

- MGMT 20000 - Introductory Accounting **Credits: 3.00**
- MGMT 21200 - Business Accounting **Credits: 3.00**

Economics Selective - Credit Hours: 3.00

AGEC 21700 or ECON 21000: credit can only be used for one of these courses to fulfill a degree requirement.

- AGEC 21700 - Economics **Credits: 3.00**
- ECON 21000 - Principles Of Economics **Credits: 3.00**
- ECON 25100 - Microeconomics **Credits: 3.00**
- ECON 25200 - Macroeconomics **Credits: 3.00**

Communication Selective - Credit Hours: 3.00

- COM 21000 - Addressing Public Issues **Credits: 3.00** or
- COM 21200 - Approaches To The Study Of Interpersonal Communication **Credits: 3.00** or
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00** or
- COM 25100 - Communication, Information, And Society **Credits: 3.00** or
- COM 30300 - Intercultural Communication **Credits: 3.00** or
- COM 31400 - Advanced Presentational Speaking **Credits: 3.00** or
(COM 31400 or COM 31500: credit can only be used for one of these courses to fulfill a degree requirement.)
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
COM 31400 or COM 31500: credit can only be used for one of these courses to fulfill a degree requirement.
- COM 31800 - Principles Of Persuasion **Credits: 3.00** or
- COM 32400 - Introduction To Organizational Communication **Credits: 3.00**

Professional Speaking Selective - Credit Hours: 3.00

- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 32500 - Interviewing: Principles And Practice **Credits: 3.00** or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00**

Professional Writing Selective - Credit Hours: 3.00

- ENGL 41900 - Multimedia Writing **Credits:** 3.00 or
- ENGL 42000 - Business Writing **Credits:** 3.00 or
- ENGL 42100 - Technical Writing **Credits:** 3.00

Professional IT Experience Requirement

If a student selects the course option, they must enroll in 3 credits total.

- CNIT 39000 - Supervised Practicum **Credits:** 1.00 to 3.00
- TDM 11100 - Corporate Partners I **Credits:** 3.00
- TDM 11200 - Corporate Partners II **Credits:** 3.00
- TDM 21100 - Corporate Partners III **Credits:** 3.00
- TDM 21200 - Corporate Partners IV **Credits:** 3.00
- TDM 31100 - Corporate Partners V **Credits:** 3.00
- TDM 31200 - Corporate Partners VI **Credits:** 3.00
- TDM 41100 - Corporate Partners VII **Credits:** 3.00
- TDM 41200 - Corporate Partners VIII **Credits:** 3.00

Globalization Requirement - Credit Hours: 0.00

All students must complete the Polytechnic Growth Plan for Global Awareness and Intercultural Competency.

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete CNIT 32000 or CNIT 37100

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pretest).

Other Departmental /Program Course Requirements (18 credits)

- TLI 11200 - Foundations Of Organizational Leadership **Credits:** 3.00
Statistics Selective
- STAT 22500 - Introduction To Probability Models **Credits:** 3.00 or
- STAT 30100 - Elementary Statistical Methods **Credits:** 3.00 or
- STAT 50100 - Experimental Statistics I **Credits:** 3.00 or
- STAT 51100 - Statistical Methods **Credits:** 3.00
Interdisciplinary Selective - Credit Hours: 12.00

Supplemental List

[Click here for Computing Infrastructure and Network Engineering Technology Supplemental Information.](#)

Grade Requirements

- Students must earn a C- or better in all CNIT courses that are a prerequisite to another CNIT course

- Any course taken at Purdue can be attempted no more than three times (inclusive of W, WF, WN, I, and IF)

GPA Requirements

- 2.0 Cumulative GPA required for Bachelor of Science degree
- 2.0 Cumulative GPA in all CNIT courses required for Bachelor of Science degree

Course Requirements and Notes

- Courses with the ♦ are essential for the CIT degree critical path to graduation
- Credit cannot be earned for both AGEC 21700 and ECON 21000 to fulfill degree requirements
- Credit cannot be earned for both COM 31400 and COM 31500 to fulfill degree requirements
- A single course may not fulfill multiple requirements within the CIT BS degree

Non-course / Non-credit Requirements

- Co-Curricular Requirements include the following:
 - Professional IT Experience
 - Globalization requirement

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or

- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- CNIT 18000 - Introduction To Systems Development **Credits: 3.00** or
- CNIT 18200 - System And Organizational Security **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00** ♦
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** or
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00** ♦
- MA 16010 - Applied Calculus I **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** ♦

15 Credits

Spring 1st Year

- CNIT 15501 - Introduction To Software Development Concepts **Credits: 3.00**
- CNIT 17600 - Information Technology Architectures **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** or
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** ♦
- MA 16020 - Applied Calculus II **Credits: 3.00**
- Behavioral/Social Sciences Foundational Selective - Credit Hours: 3.00

15 Credits

Fall 2nd Year

- CNIT 25501 - Object-Oriented Programming Introduction **Credits: 3.00**
- CNIT 27000 - Cybersecurity Fundamentals I **Credits: 3.00**
- CNIT 34400 - Network Engineering Fundamentals **Credits: 3.00**
- MGMT 21200 - Business Accounting **Credits: 3.00** or
- MGMT 20000 - Introductory Accounting **Credits: 3.00**

- Science Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- CNIT 24200 - System Administration **Credits:** 3.00
- CNIT 27200 - Database Fundamentals **Credits:** 3.00
- STAT 22500 - Introduction To Probability Models **Credits:** 3.00 or
- STAT 30100 - Elementary Statistical Methods **Credits:** 3.00 or
- STAT 50100 - Experimental Statistics I **Credits:** 3.00 or
- STAT 51100 - Statistical Methods **Credits:** 3.00
- Lab Science Selective - Credit Hours: 3.00
- Humanities Foundational Selective: Credit Hours: 3.00

15 Credits

Fall 3rd Year

- CNIT 34000 - UNIX Administration **Credits:** 3.00
- CNIT 34500 - Internetwork Design And Implementation **Credits:** 3.00 or 4.00 (3 credit hours required)
- COM 31500 - Speech Communication Of Technical Information **Credits:** 3.00 or
- COM 32000 - Small Group Communication **Credits:** 3.00 or
- COM 32500 - Interviewing: Principles And Practice **Credits:** 3.00 or
- COM 41500 - Discussion Of Technical Problems **Credits:** 3.00
- AGECE 21700 - Economics **Credits:** 3.00 or
- ECON 21000 - Principles Of Economics **Credits:** 3.00 or
- ECON 25100 - Microeconomics **Credits:** 3.00 or
- ECON 25200 - Macroeconomics **Credits:** 3.00
- Interdisciplinary Selective: Credit Hours 3:00

15 Credits

Spring 3rd Year

- CNIT 34220 - Network Administration **Credits:** 2.00 or 3.00 (3 credits required)
- CNIT 34600 - Wireless Networks **Credits:** 3.00 or 4.00 (3 credits required)
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits:** 3.00 or
- CNIT 37100 - Cyberlaw And Ethics **Credits:** 3.00
- ENGL 41900 - Multimedia Writing **Credits:** 3.00 or
- ENGL 42000 - Business Writing **Credits:** 3.00 or
- ENGL 42100 - Technical Writing **Credits:** 3.00 or
- ENGL 42400 - Writing For High Technology Industries **Credits:** 3.00
- Interdisciplinary Selective: Credit Hours: 3.00

15 Credits

Fall 4th Year

- CNIT 45500 - Network Security **Credits: 3.00**
- CNIT 48000 - Managing Information Technology Projects **Credits: 3.00**
- Information Technology Selective - Credit Hours: 3.00
- Computing Infrastructure Selective - Credit Hours: 3.00
- COM 21000 - Addressing Public Issues **Credits: 3.00** or
- COM 21200 - Approaches To The Study Of Interpersonal Communication **Credits: 3.00** or
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00** or
- COM 25100 - Communication, Information, And Society **Credits: 3.00** or
- COM 31400 - Advanced Presentational Speaking **Credits: 3.00** or
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
- COM 31800 - Principles Of Persuasion **Credits: 3.00** or
- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 32400 - Introduction To Organizational Communication **Credits: 3.00**

15 Credits

Spring 4th Year

- CNIT 31500 - Systems Programming **Credits: 3.00**
- Information Technology Selective - Credit Hours: 3.00
- Computing Infrastructure Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 3.00

15 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Computing Systems Analysis & Design, BS

About the Program

The Computing Systems Analysis and Design major is part of the Computer and Information Technology program. The Computer and Information Technology program is accredited by the Computing Accreditation Commission of ABET.

Study how organizations use computer systems and procedures and then design information systems solutions to help them operate more efficiently and effectively. You will combine business practices with programming, applications and databases. In the workforce, systems professionals work in a variety of industries and with people from a variety of professions. You will be encouraged to further specialize with a minor in a specific field, such as healthcare, finance, agriculture or manufacturing.

[Computing Systems Analysis and Design Website](#)

[Computer and Information Technology Department Major Change \(CODO\) Requirements](#)

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (51 credits)

A C- GPA is required across all CNIT courses

Computer and Information Technology Required Major Courses (39 credits)

- CNIT 15501 - Introduction To Software Development Concepts **Credits:** 3.00
- CNIT 17600 - Information Technology Architectures **Credits:** 3.00
- CNIT 18000 - Introduction To Systems Development **Credits:** 3.00
- CNIT 24200 - System Administration **Credits:** 3.00
- CNIT 25501 - Object-Oriented Programming Introduction **Credits:** 3.00
- CNIT 27000 - Cybersecurity Fundamentals I **Credits:** 3.00
- CNIT 27200 - Database Fundamentals **Credits:** 3.00
- CNIT 28000 - Systems Analysis And Design Methods **Credits:** 3.00
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits:** 3.00
- CNIT 38000 - Advanced Analysis And Design **Credits:** 3.00
- CNIT 39200 - Enterprise Data Management **Credits:** 3.00
- CNIT 48000 - Managing Information Technology Projects **Credits:** 3.00
- CGT 17208 - User Experience Design Studio I: Fundamentals **Credits:** 3.00

Programming Selective (3 credits)

- CNIT 31500 - Systems Programming **Credits: 3.00** or
- CNIT 32500 - Object-Oriented Application Development **Credits: 3.00**

Information Technology Selective (3 credits)

- Any non-required CNIT 30000 level or higher courses

Selectives (6 credits)

- CNIT 38301 - Packaged Application Software Solutions **Credits: 3.00**
- CNIT 38501 - Advanced Systems Design And Integration **Credits: 3.00**
- CNIT 40500 - Software Development Methodologies **Credits: 3.00**
- CNIT 48200 - Six Sigma Data Quality For Continuous Improvement **Credits: 3.00**
- CNIT 55000 - Organizational Impact Of Information Technology **Credits: 3.00**
- CNIT 55300 - Quality Management In Information Technology **Credits: 3.00**
- CNIT 58000 - Advanced Topics In Information Technology Project Management **Credits: 3.00**
- CNIT 58600 - IT Requirements Management **Credits: 3.00**

CIT Common Core (42 credits)

Composition Selective (satisfies Written Communication for core) - Credit Hours: 3.00

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** or
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00**

Introductory Oral Communication Selective (satisfies Oral Communication for core) - Credit Hours: 3.00

- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** or
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**

Calculus I (satisfies Quantitative Reasoning for core) - Credit Hours: 3.00

- MA 16010 - Applied Calculus I **Credits: 3.00**

Calculus II (satisfies Quantitative Reasoning for core) - Credit Hours: 3.00

- MA 16020 - Applied Calculus II **Credits:** 3.00

Design Thinking (satisfies Information Literacy and Science, Technology & Society Selective for core) - Credit Hours: 3.00

- TECH 12000 - Design Thinking In Technology **Credits:** 3.00

Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00

Human Cultures: Behavioral/Social Sciences (BSS)

Three credits required from the Human Cultures: Behavioral/Social Sciences (BSS) list.

Humanities Selective (satisfies Human Cultures: Humanities for core) - Credit Hours: 3.00

Human Cultures: Humanities (HUM)

Three credits required from the Human Cultures: Humanities (HUM) list.

Science Selective (satisfies Science for core) - Credit Hours: 3.00

Science(SCI)

Three credits required from the Science(SCI) list.

Lab Science Selective (satisfies Science for core) - Credit Hours: 3.00

Science (SCI) - with Lab Component

Three credits required from the Science(SCI) list.

Verify the course has a lab component when scheduling.

The following courses are typically offered with a lab component:

Accounting Selective - Credit Hours: 3.00

- MGMT 20000 - Introductory Accounting **Credits:** 3.00
- MGMT 21200 - Business Accounting **Credits:** 3.00

Economics Selective - Credit Hours: 3.00

AGEC 21700 or ECON 21000: credit can only be used for one of these courses to fulfill a degree requirement.

- AGEC 21700 - Economics **Credits:** 3.00

- ECON 21000 - Principles Of Economics **Credits: 3.00**
- ECON 25100 - Microeconomics **Credits: 3.00**
- ECON 25200 - Macroeconomics **Credits: 3.00**

Communication Selective - Credit Hours: 3.00

- COM 21000 - Addressing Public Issues **Credits: 3.00** or
- COM 21200 - Approaches To The Study Of Interpersonal Communication **Credits: 3.00** or
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00** or
- COM 25100 - Communication, Information, And Society **Credits: 3.00** or
- COM 30300 - Intercultural Communication **Credits: 3.00** or
- COM 31400 - Advanced Presentational Speaking **Credits: 3.00** or
(COM 31400 or COM 31500: credit can only be used for one of these courses to fulfill a degree requirement.)
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
COM 31400 or COM 31500: credit can only be used for one of these courses to fulfill a degree requirement.
- COM 31800 - Principles Of Persuasion **Credits: 3.00** or
- COM 32400 - Introduction To Organizational Communication **Credits: 3.00**

Professional Speaking Selective - Credit Hours: 3.00

- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 32500 - Interviewing: Principles And Practice **Credits: 3.00** or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00**

Professional Writing Selective - Credit Hours: 3.00

- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00**

Professional IT Experience Requirement

If a student selects the course option, they must enroll in 3 credits total.

- CNIT 39000 - Supervised Practicum **Credits: 1.00 to 3.00**
- TDM 11100 - Corporate Partners I **Credits: 3.00**
- TDM 11200 - Corporate Partners II **Credits: 3.00**
- TDM 21100 - Corporate Partners III **Credits: 3.00**
- TDM 21200 - Corporate Partners IV **Credits: 3.00**
- TDM 31100 - Corporate Partners V **Credits: 3.00**
- TDM 31200 - Corporate Partners VI **Credits: 3.00**
- TDM 41100 - Corporate Partners VII **Credits: 3.00**
- TDM 41200 - Corporate Partners VIII **Credits: 3.00**

Globalization Requirement - Credit Hours: 0.00

All students must complete the Polytechnic Growth Plan for Global Awareness and Intercultural Competency.

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete CNIT 32000 or CNIT 37100

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pretest).

Other Departmental /Program Course Requirements (27 credits)

General Business - Credit Hours: 3.00

- TLI 15200 - Business Principles For Organizational Leadership **Credits: 3.00**

Foundations of Organizational Leadership - Credit Hours: 3.00

- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**

Philosophy - Credit Hours: 3:00

- PHIL 15000 - Principles Of Logic **Credits: 3.00**

Statistics Selective - Credit Hours: 3:00

- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** or
- STAT 50100 - Experimental Statistics I **Credits: 3.00** or
- STAT 51100 - Statistical Methods **Credits: 3.00**
- Interdisciplinary Selective - Credit Hours: 15.00
- Globalization Requirement - Credit Hours: 0.00

Supplemental List

[Click here for Computing Systems Analysis & Design Supplemental Information .](#)

Grade Requirements

- Students must earn a C- or better in all CNIT courses that are a prerequisite to another CNIT course
- Any course taken at Purdue can be attempted no more than three times (inclusive of W, WF, WN, I, and IF)

GPA Requirements

- 2.0 Cummulative GPA required for Bachelor of Science degree
- 2.0 Cummulative GPA in all CNIT courses required for Bachelor of Science degree

Course Requirements and Notes

- Credit cannot be earned for both AGEC 21700 and ECON 21000 to fulfill degree requirements
- Credit cannot be earned for both COM 31400 and COM 31500 to fulfill degree requirements
- A single course may not fulfill multiple requirements within the CIT BS degree
- Courses with the ♦ are essential for the CIT degree critical path to graduation

Non-course / Non-credit Requirements

- Co-Curricular Requirements include the following:
 - Professional IT Experience
 - Globalization requirement

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- CNIT 18000 - Introduction To Systems Development **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ or
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** ♦ or
- ENGL 10800 - First Year Composition **Credits: 3.00** ♦ or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00** ♦
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** ♦

15 Credits

Spring 1st Year

- CNIT 15501 - Introduction To Software Development Concepts **Credits: 3.00**
- CNIT 17600 - Information Technology Architectures **Credits: 3.00**
- MA 16020 - Applied Calculus II **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦ or
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** ♦
- Behavioral/Social Sciences Foundational Selective - Credit Hours: 3.00

15 Credits

Fall 2nd Year

- CNIT 24200 - System Administration **Credits: 3.00**
- CNIT 27200 - Database Fundamentals **Credits: 3.00**
- CNIT 28000 - Systems Analysis And Design Methods **Credits: 3.00**
- PHIL 15000 - Principles Of Logic **Credits: 3.00**
- Science Selective - Credit Hours: 3.00 *

15 Credits

Spring 2nd Year

- CNIT 25501 - Object-Oriented Programming Introduction **Credits: 3.00**
- CNIT 27000 - Cybersecurity Fundamentals I **Credits: 3.00**
- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** or
- STAT 50100 - Experimental Statistics I **Credits: 3.00** or
- STAT 51100 - Statistical Methods **Credits: 3.00**

- TLI 15200 - Business Principles For Organizational Leadership **Credits: 3.00**
- Lab Science Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- CNIT 31500 - Systems Programming **Credits: 3.00** or
- CNIT 32500 - Object-Oriented Application Development **Credits: 3.00**
- CNIT 38000 - Advanced Analysis And Design **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- Communication Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- CGT 17208 - User Experience Design Studio I: Fundamentals **Credits: 3.00**
- CNIT 39200 - Enterprise Data Management **Credits: 3.00**
- MGMT 20000 - Introductory Accounting **Credits: 3.00** or
- MGMT 21200 - Business Accounting **Credits: 3.00**
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** ♦ or
- COM 32000 - Small Group Communication **Credits: 3.00** ♦ or
- COM 32500 - Interviewing: Principles And Practice **Credits: 3.00** ♦ or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00** ♦
- Interdisciplinary Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- Professional Writing Selective - Credit Hours: 3.00
- Selective - Credit Hours: 3.00
- Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- CNIT 48000 - Managing Information Technology Projects **Credits: 3.00**
- Information Technology Selective - Credit Hours: 3.00
- Humanities Foundational Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 3.00

15 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

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Cybersecurity, BS

About the Program

The Cybersecurity major is part of the Computer and Information Technology program. The Computer and Information Technology program is accredited by the Computing Accreditation Commission of ABET, www.abet.org.

Keeping data secure is an important goal of any good IT system. Once a system has been breached, personal, financial or classified data becomes vulnerable to exploitation. When you major in cybersecurity at Purdue University, you will learn the skills to create and maintain secure networks as well as ways to track down hackers who aim to breach that security.

The demand for professionals with cybersecurity skills is high, and it will continue to grow as more companies and industries work to safeguard their records and their reputations. The cybersecurity plan of study at Purdue will be able to help meet this need by providing a comprehensive IT education that also emphasizes key security concepts. The major's holistic approach combines skills such as secure coding, cryptography, digital forensics and UNIX fundamentals with analytical thinking and criminology.

You will have plenty of opportunity for hands-on projects. Whether you are testing vulnerabilities or creating a new security protocol, you will put theories into practice daily. Because of industry partnerships, you will have access to internships that will put your cybersecurity knowledge to use quickly.

Cybersecurity Website

Computer and Information Technology Department Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (66 credits)

A C- GPA is required across all CNIT courses

Computer and Information Technology Required Major Courses (57 credits)

Computer and Information Technology Courses

- CNIT 15501 - Introduction To Software Development Concepts **Credits:** 3.00
- CNIT 17600 - Information Technology Architectures **Credits:** 3.00
- CNIT 18200 - System And Organizational Security **Credits:** 3.00
- CNIT 24200 - System Administration **Credits:** 3.00
- CNIT 25501 - Object-Oriented Programming Introduction **Credits:** 3.00
- CNIT 27000 - Cybersecurity Fundamentals I **Credits:** 3.00
- CNIT 27200 - Database Fundamentals **Credits:** 3.00
- CNIT 34000 - UNIX Administration **Credits:** 3.00
- CNIT 34220 - Network Administration **Credits:** 2.00 or 3.00 3 credits required
- CNIT 34400 - Network Engineering Fundamentals **Credits:** 3.00
- CNIT 48000 - Managing Information Technology Projects **Credits:** 3.00

Cybersecurity Courses

- CNIT 27100 - Cybersecurity Fundamentals II **Credits:** 3.00
- CNIT 37000 - Introduction To Cryptography **Credits:** 3.00
- CNIT 37100 - Cyberlaw And Ethics **Credits:** 3.00
- CNIT 32300 - Basic Cyberforensics **Credits:** 3.00
- CNIT 42200 - Cyber Criminology **Credits:** 3.00
- CNIT 45500 - Network Security **Credits:** 3.00

- CNIT 47000 - Incident Response Management **Credits: 3.00**
- CNIT 47100 - Vulnerability Analysis And Testing **Credits: 3.00**

Cybersecurity Selectives (9 credits)

Not all courses will be available every semester.

- CNIT 32200 - Research Methodology And Design **Credits: 3.00**
- CNIT 41500 - Advanced Coding Security **Credits: 3.00**
- CNIT 41700 - Critical Infrastructure Security **Credits: 3.00**
- CNIT 42100 - Mobile Forensics **Credits: 3.00**
- CNIT 44500 - Advanced Internetwork Routing And Switching **Credits: 3.00**
- CNIT 45600 - Wireless Security And Management **Credits: 3.00**
- CNIT 47700 - Blockchain **Credits: 3.00**
- CNIT 48300 - Applied Machine Learning **Credits: 3.00**
- CNIT 51100 - Foundations In Homeland Security Studies **Credits: 3.00**
- CNIT 51200 - Managing Resources And Applications For Homeland Security **Credits: 3.00**
- CNIT 52300 - File System Forensics **Credits: 3.00**
- CNIT 52500 - Mobile And Embedded Device Forensics **Credits: 3.00**
- CNIT 55500 - Advanced Network Security **Credits: 3.00**
- CNIT 55700 - Advanced Research Topics In Cyber Forensics **Credits: 3.00**

CIT Common Core (42 credits)

Composition Selective (satisfies Written Communication for core) - Credit Hours: 3.00

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** or
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00**

Introductory Oral Communication Selective (satisfies Oral Communication for core) - Credit Hours: 3.00

- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** or
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**

Calculus I (satisfies Quantitative Reasoning for core) - Credit Hours: 3.00

- MA 16010 - Applied Calculus I **Credits: 3.00**

Calculus II (satisfies Quantitative Reasoning for core) - Credit Hours: 3.00

- MA 16020 - Applied Calculus II **Credits:** 3.00

Design Thinking (satisfies Information Literacy and Science, Technology & Society Selective for core) - Credit Hours: 3.00

- TECH 12000 - Design Thinking In Technology **Credits:** 3.00

Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00

Human Cultures: Behavioral/Social Sciences (BSS)

Three credits required from the Human Cultures: Behavioral/Social Sciences (BSS) list.

Humanities Selective (satisfies Human Cultures: Humanities for core) - Credit Hours: 3.00

Human Cultures: Humanities (HUM)

Three credits required from the Human Cultures: Humanities (HUM) list.

Science Selective (satisfies Science for core) - Credit Hours: 3.00

Science(SCI)

Three credits required from the Science(SCI) list.

Lab Science Selective (satisfies Science for core) - Credit Hours: 3.00

Science (SCI) - with Lab Component

Three credits required from the Science(SCI) list.

Verify the course has a lab component when scheduling.

The following courses are typically offered with a lab component:

Accounting Selective - Credit Hours: 3.00

- MGMT 20000 - Introductory Accounting **Credits:** 3.00
- MGMT 21200 - Business Accounting **Credits:** 3.00

Economics Selective - Credit Hours: 3.00

AGEC 21700 or ECON 21000: credit can only be used for one of these courses to fulfill a degree requirement.

- AGEC 21700 - Economics **Credits:** 3.00

- ECON 21000 - Principles Of Economics **Credits: 3.00**
- ECON 25100 - Microeconomics **Credits: 3.00**
- ECON 25200 - Macroeconomics **Credits: 3.00**

Communication Selective - Credit Hours: 3.00

- COM 21000 - Addressing Public Issues **Credits: 3.00** or
- COM 21200 - Approaches To The Study Of Interpersonal Communication **Credits: 3.00** or
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00** or
- COM 25100 - Communication, Information, And Society **Credits: 3.00** or
- COM 30300 - Intercultural Communication **Credits: 3.00** or
- COM 31400 - Advanced Presentational Speaking **Credits: 3.00** or
(COM 31400 or COM 31500: credit can only be used for one of these courses to fulfill a degree requirement.)
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
COM 31400 or COM 31500: credit can only be used for one of these courses to fulfill a degree requirement.
- COM 31800 - Principles Of Persuasion **Credits: 3.00** or
- COM 32400 - Introduction To Organizational Communication **Credits: 3.00**

Professional Speaking Selective - Credit Hours: 3.00

- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 32500 - Interviewing: Principles And Practice **Credits: 3.00** or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00**

Professional Writing Selective - Credit Hours: 3.00

- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00**

Professional IT Experience Requirement

If a student selects the course option, they must enroll in 3 credits total.

- CNIT 39000 - Supervised Practicum **Credits: 1.00 to 3.00**
- TDM 11100 - Corporate Partners I **Credits: 3.00**
- TDM 11200 - Corporate Partners II **Credits: 3.00**
- TDM 21100 - Corporate Partners III **Credits: 3.00**
- TDM 21200 - Corporate Partners IV **Credits: 3.00**
- TDM 31100 - Corporate Partners V **Credits: 3.00**
- TDM 31200 - Corporate Partners VI **Credits: 3.00**
- TDM 41100 - Corporate Partners VII **Credits: 3.00**
- TDM 41200 - Corporate Partners VIII **Credits: 3.00**

Globalization Requirement - Credit Hours: 0.00

All students must complete the Polytechnic Growth Plan for Global Awareness and Intercultural Competency.

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete CNIT 32000 or CNIT 37100

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pretest).

Other Departmental /Program Course Requirements (12 credits)

Statistics Selective

- STAT 22500 - Introduction To Probability Models **Credits:** 3.00 or
- STAT 30100 - Elementary Statistical Methods **Credits:** 3.00 or
- STAT 50100 - Experimental Statistics I **Credits:** 3.00 or
- STAT 51100 - Statistical Methods **Credits:** 3.00
- Cybersecurity Interdisciplinary Selective - Credit Hours: 9.00
- IT Professional Experience Requirement - Credit Hours: 0.00
- Globalization Requirement - Credit Hours: 0.00

Supplemental List

[Click here for Cybersecurity Supplemental Information.](#)

Grade Requirements

- Students must earn a C- or better in all CNIT courses that are a prerequisite to another CNIT course
- Any course taken at Purdue can be attempted no more than three times (inclusive of W, WF, WN, I, and IF)

GPA Requirements

- 2.0 Cummulative GPA required for Bachelor of Science degree
- 2.0 Cummulative GPA in all CNIT courses required for Bachelor of Science degree

Course Requirements and Notes

- Students must select courses from Cybersecurity Supplemental Information.
- Courses with the ♦ are essential for the CIT degree critical path to graduation
- Credit cannot be earned for both AGEC 21700 and ECON 21000 to fulfill degree requirements
- Credit cannot be earned for both COM 31400 and COM 31500 to fulfill degree requirements
- A single course may not fulfill multiple requirements within the CIT BS degree

Non-course / Non-credit Requirements

- Co-Curricular Requirements include the following:

- Professional IT Experience
- Globalization requirement

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency Website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- CNIT 17600 - Information Technology Architectures **Credits: 3.00**
- CNIT 18200 - System And Organizational Security **Credits: 3.00** ♦

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00 or
- ENGL 10600 - First Year Composition With Conferences **Credits:** 4.00 or
- ENGL 10800 - First Year Composition **Credits:** 3.00 or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits:** 3.00
- MA 16010 - Applied Calculus I **Credits:** 3.00
- TECH 12000 - Design Thinking In Technology **Credits:** 3.00 ♦

15 Credits

Spring 1st Year

- CNIT 15501 - Introduction To Software Development Concepts **Credits:** 3.00
- CNIT 27000 - Cybersecurity Fundamentals I **Credits:** 3.00
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits:** 3.00 or
- COM 11400 - Fundamentals Of Speech Communication **Credits:** 3.00
- MA 16020 - Applied Calculus II **Credits:** 3.00
- Behavioral/Social Sciences Foundational Selective - Credit Hours: 3.00

15 Credits

Fall 2nd Year

- CNIT 25501 - Object-Oriented Programming Introduction **Credits:** 3.00
- CNIT 27100 - Cybersecurity Fundamentals II **Credits:** 3.00
- AGECE 21700 - Economics **Credits:** 3.00 or
- ECON 21000 - Principles Of Economics **Credits:** 3.00 or
- ECON 25100 - Microeconomics **Credits:** 3.00 or
- ECON 25200 - Macroeconomics **Credits:** 3.00
- Humanities Foundational Selective - Credit Hours: 3.00
- Science Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- CNIT 24200 - System Administration **Credits:** 3.00
- CNIT 27200 - Database Fundamentals **Credits:** 3.00
- COM 21000 - Addressing Public Issues **Credits:** 3.00 or
- COM 21200 - Approaches To The Study Of Interpersonal Communication **Credits:** 3.00 or
- COM 22400 - Communicating In The Global Workplace **Credits:** 3.00 or
- COM 25100 - Communication, Information, And Society **Credits:** 3.00 or
- COM 30300 - Intercultural Communication **Credits:** 3.00 or
- COM 31400 - Advanced Presentational Speaking **Credits:** 3.00 or
- COM 31500 - Speech Communication Of Technical Information **Credits:** 3.00 or
- COM 31800 - Principles Of Persuasion **Credits:** 3.00 or

- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 32400 - Introduction To Organizational Communication **Credits: 3.00** or
- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** or
- STAT 50100 - Experimental Statistics I **Credits: 3.00** or
- STAT 51100 - Statistical Methods **Credits: 3.00**
- Lab Science Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- CNIT 34000 - UNIX Administration **Credits: 3.00**
- CNIT 34400 - Network Engineering Fundamentals **Credits: 3.00**
- CNIT 37000 - Introduction To Cryptography **Credits: 3.00**
- Cybersecurity Interdisciplinary Selective - Credit Hours: 3.00
- Cybersecurity Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- CNIT 37100 - Cyberlaw And Ethics **Credits: 3.00**
- CNIT 32300 - Basic Cyberforensics **Credits: 3.00**
- CNIT 34220 - Network Administration **Credits: 2.00** or 3.00
3.00 credits required
- MGMT 20000 - Introductory Accounting **Credits: 3.00** or
- MGMT 21200 - Business Accounting **Credits: 3.00**
- Cybersecurity Selective- Credit Hours: 3.00

15 Credits

Fall 4th Year

- CNIT 45500 - Network Security **Credits: 3.00**
- CNIT 47000 - Incident Response Management **Credits: 3.00** Cybersecurity Selective - Credit Hours: 3.00
Cybersecurity Interdisciplinary Selective - Credit Hours: 3.00
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 32500 - Interviewing: Principles And Practice **Credits: 3.00** or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00**

15 Credits

Spring 4th Year

- CNIT 42200 - Cyber Criminology **Credits: 3.00**
- CNIT 47100 - Vulnerability Analysis And Testing **Credits: 3.00**
- CNIT 48000 - Managing Information Technology Projects **Credits: 3.00**
- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00**
- Cybersecurity Selective - Credit Hours: 3.00

15 Credits

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Data Analytics, Technologies, and Applications, BS

About the Program

Data and information have infiltrated every facet of our lives. The successful development of solutions to leverage data and information for decision making purposes requires a myriad of skills and abilities including capabilities provided by information technology professionals to enable and support data analytics and applications in their respective organizations. In the Data Analytics, Technologies, and Applications (DATA) major, students will a) develop strong foundations in statistical and machine learning techniques, b) apply analytics approaches, techniques, and tools to solve problems, and c) evaluate such approaches, techniques, and tools for effective use.

Computer and Information Technology Website

Computer and Information Technology Department Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (66 credits)

A C- GPA is required across all CNIT courses

Computer and Information Technology Core Courses (27 credits)

- CNIT 15501 - Introduction To Software Development Concepts **Credits:** 3.00
- CNIT 17600 - Information Technology Architectures **Credits:** 3.00
- CNIT 18000 - Introduction To Systems Development **Credits:** 3.00
- CNIT 24200 - System Administration **Credits:** 3.00
- CNIT 25501 - Object-Oriented Programming Introduction **Credits:** 3.00
- CNIT 27000 - Cybersecurity Fundamentals I **Credits:** 3.00
- CNIT 28000 - Systems Analysis And Design Methods **Credits:** 3.00
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits:** 3.00
- CNIT 48000 - Managing Information Technology Projects **Credits:** 3.00

DATA Core Courses (21 credits)

- CNIT 27200 - Database Fundamentals **Credits:** 3.00
- CNIT 32200 - Research Methodology And Design **Credits:** 3.00
- CNIT 37200 - Database Programming **Credits:** 3.00
- CNIT 39200 - Enterprise Data Management **Credits:** 3.00
- CNIT 48200 - Six Sigma Data Quality For Continuous Improvement **Credits:** 3.00
- CNIT 48300 - Applied Machine Learning **Credits:** 3.00
- CNIT 48400 - Applications In Data Science **Credits:** 3.00

Cognate Application Focus Area (18 credits)

18 credits outside of CNIT satisfying one of the following options:

1. Completion of Statistics Minor and 9 credit hours in Application Focus area of the Applications in Data Science Certificate
2. Completion of 18 credits from the Application Focus area of the Applications in Data Science Certificate

CIT Common Core (42 credits)

Composition Selective (satisfies Written Communication for core) - Credit Hours:
3.00

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00 or

- ENGL 10600 - First Year Composition With Conferences **Credits:** 4.00 or
- ENGL 10800 - First Year Composition **Credits:** 3.00 or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits:** 3.00

Introductory Oral Communication Selective (satisfies Oral Communication for core) - Credit Hours: 3.00

- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits:** 3.00 or
- COM 11400 - Fundamentals Of Speech Communication **Credits:** 3.00

Calculus I (satisfies Quantitative Reasoning for core) - Credit Hours: 3.00

- MA 16010 - Applied Calculus I **Credits:** 3.00

Calculus II (satisfies Quantitative Reasoning for core) - Credit Hours: 3.00

- MA 16020 - Applied Calculus II **Credits:** 3.00

Design Thinking (satisfies Information Literacy and Science, Technology & Society Selective for core) - Credit Hours: 3.00

- TECH 12000 - Design Thinking In Technology **Credits:** 3.00

Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00

Human Cultures: Behavioral/Social Sciences (BSS)

Three credits required from the Human Cultures: Behavioral/Social Sciences (BSS) list.

Humanities Selective (satisfies Human Cultures: Humanities for core) - Credit Hours: 3.00

Human Cultures: Humanities (HUM)

Three credits required from the Human Cultures: Humanities (HUM) list.

Science Selective (satisfies Science for core) - Credit Hours: 3.00

Science(SCI)

Three credits required from the Science(SCI) list.

Lab Science Selective (satisfies Science for core) - Credit Hours: 3.00

Science (SCI) - with Lab Component

Three credits required from the Science(SCI) list.

Verify the course has a lab component when scheduling.

The following courses are typically offered with a lab component:

Accounting Selective - Credit Hours: 3.00

- MGMT 20000 - Introductory Accounting **Credits: 3.00**
- MGMT 21200 - Business Accounting **Credits: 3.00**

Economics Selective - Credit Hours: 3.00

AGEC 21700 or ECON 21000: credit can only be used for one of these courses to fulfill a degree requirement.

- AGEC 21700 - Economics **Credits: 3.00**
- ECON 21000 - Principles Of Economics **Credits: 3.00**
- ECON 25100 - Microeconomics **Credits: 3.00**
- ECON 25200 - Macroeconomics **Credits: 3.00**

Communication Selective - Credit Hours: 3.00

- COM 21000 - Addressing Public Issues **Credits: 3.00** or
- COM 21200 - Approaches To The Study Of Interpersonal Communication **Credits: 3.00** or
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00** or
- COM 25100 - Communication, Information, And Society **Credits: 3.00** or
- COM 30300 - Intercultural Communication **Credits: 3.00** or
- COM 31400 - Advanced Presentational Speaking **Credits: 3.00** or
(COM 31400 or COM 31500: credit can only be used for one of these courses to fulfill a degree requirement.)
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
COM 31400 or COM 31500: credit can only be used for one of these courses to fulfill a degree requirement.
- COM 31800 - Principles Of Persuasion **Credits: 3.00** or
- COM 32400 - Introduction To Organizational Communication **Credits: 3.00**

Professional Speaking Selective - Credit Hours: 3.00

- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 32500 - Interviewing: Principles And Practice **Credits: 3.00** or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00**

Professional Writing Selective - Credit Hours: 3.00

- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00**

Professional IT Experience Requirement

If a student selects the course option, they must enroll in 3 credits total.

- CNIT 39000 - Supervised Practicum **Credits:** 1.00 to 3.00
- TDM 11100 - Corporate Partners I **Credits:** 3.00
- TDM 11200 - Corporate Partners II **Credits:** 3.00
- TDM 21100 - Corporate Partners III **Credits:** 3.00
- TDM 21200 - Corporate Partners IV **Credits:** 3.00
- TDM 31100 - Corporate Partners V **Credits:** 3.00
- TDM 31200 - Corporate Partners VI **Credits:** 3.00
- TDM 41100 - Corporate Partners VII **Credits:** 3.00
- TDM 41200 - Corporate Partners VIII **Credits:** 3.00

Globalization Requirement - Credit Hours: 0.00

All students must complete the Polytechnic Growth Plan for Global Awareness and Intercultural Competency.

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete CNIT 32000 or CNIT 37100

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pretest).

Other Departmental/Program Course Requirements (9 credits)

Ethics Selective:

- PHIL 20700 - Ethics For Technology, Engineering, And Design **Credits:** 3.00 ♦ or
- PHIL 20800 - Ethics Of Data Science **Credits:** 3.00 ♦

Probabilities Selective:

- STAT 22500 - Introduction To Probability Models **Credits:** 3.00 ♦ or
- STAT 31100 - Introductory Probability **Credits:** 3.00 ♦ or
- STAT 41600 - Probability **Credits:** 3.00 ♦

Statistics Selective:

- STAT 30100 - Elementary Statistical Methods **Credits:** 3.00 ♦ or
- STAT 35000 - Introduction To Statistics **Credits:** 3.00 ♦ or
- STAT 50100 - Experimental Statistics I **Credits:** 3.00 ♦ or
- STAT 51100 - Statistical Methods **Credits:** 3.00 ♦
- Globalization - Credit Hours: 0.00

Elective (3 credits)

Supplemental List

Data Analytics, Technologies, and Applications Supplemental Information

Grade Requirements

- A C- GPA is required across all CNIT courses

GPA Requirements

- A C- GPA is required across all CNIT courses

Course Requirements and Notes

- AGECE 21700 or ECON 21000: credit can only be used for one of these courses to fulfill a degree requirement.
- (COM 31400 or COM 31500: credit can only be used for one of these courses to fulfill a degree requirement.)

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- CNIT 18000 - Introduction To Systems Development **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** or
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** ♦
- Human Cultures: Behavioral/Social Sciences Selective - Credit Hours: 3.00

15 Credits

Spring 1st Year

- CNIT 15501 - Introduction To Software Development Concepts **Credits: 3.00**
- CNIT 17600 - Information Technology Architectures **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** or
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- MA 16020 - Applied Calculus II **Credits: 3.00**
- Science Selective Credit Hours: 3.00

15 Credits

Fall 2nd Year

- CNIT 24200 - System Administration **Credits: 3.00**
- CNIT 27200 - Database Fundamentals **Credits: 3.00**
- CNIT 28000 - Systems Analysis And Design Methods **Credits: 3.00**
- Lab Science Selective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- CNIT 25501 - Object-Oriented Programming Introduction **Credits: 3.00**

- CNIT 27000 - Cybersecurity Fundamentals I **Credits: 3.00**
- CNIT 39200 - Enterprise Data Management **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** ♦ or
- STAT 35000 - Introduction To Statistics **Credits: 3.00** ♦ or
- STAT 50100 - Experimental Statistics I **Credits: 3.00** ♦ or
- STAT 51100 - Statistical Methods **Credits: 3.00** ♦
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
- COM 32500 - Interviewing: Principles And Practice **Credits: 3.00** or
- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00**

15 Credits

Fall 3rd Year

- CNIT 32200 - Research Methodology And Design **Credits: 3.00**
- CNIT 37200 - Database Programming **Credits: 3.00**
- STAT 22500 - Introduction To Probability Models **Credits: 3.00** ♦ or
- STAT 31100 - Introductory Probability **Credits: 3.00** ♦ or
- STAT 41600 - Probability **Credits: 3.00** ♦
- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00** or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**
- Cognate Application Concentration - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- CNIT 48200 - Six Sigma Data Quality For Continuous Improvement **Credits: 3.00**
- MGMT 20000 - Introductory Accounting **Credits: 3.00** or
- MGMT 21200 - Business Accounting **Credits: 3.00**
- AGECE 21700 - Economics **Credits: 3.00** or
- ECON 21000 - Principles Of Economics **Credits: 3.00** or
- ECON 25100 - Microeconomics **Credits: 3.00** or
- ECON 25200 - Macroeconomics **Credits: 3.00**
- Cognate Application Concentration - Credit Hours: 3.00

15 Credits

Fall 4th Year

- PHIL 20700 - Ethics For Technology, Engineering, And Design **Credits: 3.00** ♦ or
- PHIL 20800 - Ethics Of Data Science **Credits: 3.00** ♦

- CNIT 48000 - Managing Information Technology Projects **Credits: 3.00**
- CNIT 48300 - Applied Machine Learning **Credits: 3.00**
- Cognate Application Concentration - Credit Hours: 3.00
- Cognate Application Concentration - Credit Hours: 3.00

15 Credits

Spring 4th Year

- CNIT 48400 - Applications In Data Science **Credits: 3.00**
- Cognate Application Concentration - Credit Hours: 3.00
- Cognate Application Concentration - Credit Hours: 3.00
- Humanities Foundational Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

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Minor

Computer and Information Technology Minor

Requirements for the Minor (15 credits)

CNIT Selective

Required Courses (15 credits)

- CNIT 18000 - Introduction To Systems Development **Credits: 3.00** or
- CNIT 18200 - System And Organizational Security **Credits: 3.00**
- CNIT Selective - Credit Hours: 3.00
- CNIT Selective - Credit Hours: 3.00
- CNIT Selective - Credit Hours: 3.00
- CNIT Selective - Credit Hours: 3.00

Notes

- CNIT Selectives are any course that will fulfill a CIT Major requirement
- 2.0 overall GPA in all minor courses
- No course may be taken pass/fail
- Transfer credit, course substitutions, and credit by exam limited to 3.00 credit hours
- The following courses will fulfill the CNIT 15501 requirement as a selective: CNIT 15501, CNIT 10500, CNIT 17500, CNIT 15900, CS 15800, CS 17700, CS 18000, CGT 21500. (Only one of these courses can count toward minor requirements.)
- CNIT 13600, CS 23500 cannot be used to fulfill the minor requirements
- Course pre-requisites must be met
- 30000 level courses require permission from CIT Advisor
- Enrollment in all CNIT Minor courses is subject to space availability. Request courses during the batch process. If space is available courses will be released. If you do not receive confirmation, request courses during open registration periods.
- The CNIT minor can be attached to any Purdue University major that will accommodate or allow it.

Disclaimer

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Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Program Information

Computer and Information Technology Supplemental Information

All Pre-requisites must be met

Interdisciplinary Selectives (15 credits)

The Interdisciplinary Selective requirement can be met in three ways:

Any University recognized non-computing minor or certificate with at least 15 credits. CGT, CNIT, CS and ECE are considered computing minors and are not available as interdisciplinary selectives.

If some courses from the minor fulfill other departmental requirements, additional courses will be required to satisfy the 15 interdisciplinary credit hours. The following are approved options:

- Honors (HONR) courses
- Courses in the same area as their completed minor
- Courses complementary to their completed minor
- Courses that are part of a minor or a university wide certificate of 15 credits or more
- Foreign Language courses that are a pre-requisite to a foreign language minor, other courses that are pre-requisites to minors will be considered.

Fifteen credit hours within one non-computing subject (course prefix) such that:

- At least six credit hours in advanced courses at the 30000-level or higher with a required prerequisite in the same subject
- Up to six credit hours may be introductory-level courses at the 20000-level or higher without a prerequisite from the same subject. No more than three credit hours may be an introductory-level course at the 100000-level without a pre-requisite from the same subject

A department-approved set of non-computing courses in (a) subject area(s) to which Information Technology can be applied. This option allows a student to create a set of complementary courses across subjects that collectively meet an over-arching objective. To choose this option, submit a one-page document detailing your objective and list the courses proposed to meet the fifteen credit-hour requirement and how each will contribute to the over-arching objective.

Information Technology Selectives (15 credits)

- Any non-required 30000 level or higher CNIT course **or**
- EPICS (EPCS): participation in EPICS requires CIT faculty approval and responsibility for the IT component of the project **or**
- CGT courses 30000 level or higher

At least nine credits must be CNIT courses.

Elective

Any non-remedial course: CIT No Credit Course List

Double Majors within CIT

Students cannot double major between the CNIT major and any other CIT major (CSAD, CSEC, DATA, INET).

Computing Infrastructure and Network Engineering Technology Supplemental Information

All Pre-requisites must be met

Interdisciplinary Selective (12 credits)

Courses that are part of a university recognized non-computing minor or certificate

- CGT, CNIT, CS and ECE are considered computing minors and are not acceptable as interdisciplinary selectives.
- Foreign language courses that are a pre-requisite to a foreign language minor; other courses that are pre-requisites to minors will be considered.

Twelve credit hours within one subject such that:

- At least six credit hours in advanced courses at the 30000-level or higher with a required prerequisite in the same subject
- Up to three credit hours may be introductory-level courses at the 20000-level or higher without a prerequisite from the same subject
- No more than three credit hours may be an introductory-level course at the 100000-level without a pre-requisite from the same subject
- Honors courses (HONR)

Information Technology Selective (6 credits)

Any non-required 30000 level or higher CNIT course or EPICS (EPCS): participation in EPICS requires responsibility for an IT component of the project and CIT faculty approval; CGT courses 30000 level or higher

At least three credit hours must be CNIT courses

Computing Systems Analysis & Design Supplemental Information

Interdisciplinary Selectives (15 credits)

The Interdisciplinary Selective requirement can be met in three ways:

1. Any University recognized non-computing minor or certificate with at least 15 credits. CGT, CNIT, CS and ECE are considered computing minors and are not available as interdisciplinary selectives.

If some courses from the minor fulfill other departmental requirements, additional courses will be required to satisfy the 15 interdisciplinary credit hours. The following are approved options:

- - Honors (HONR) courses
 - Courses in the same area as their completed minor
 - Courses complementary to their completed minor
 - Courses that are part of a minor or a university wide certificate of 15 credits or more
 - Foreign Language courses that are a pre-requisite to a foreign language minor, other courses that are pre-requisites to minors will be considered.
- 2. Fifteen credit hours within one non-computing subject (course prefix) such that:
 - At least six credit hours in advanced courses at the 30000-level or higher with a required prerequisite in the same subject
 - Up to six credit hours may be introductory-level courses at the 20000-level or higher without a prerequisite from the same subject

- No more than three credit hours may be an introductory-level course at the 10000-level without a pre-requisite from the same subject
3. A department-approved set of non-computing courses in (a) subject area(s) to which Information Technology can be applied. This option allows a student to create a set of complementary courses across subjects that collectively meet an over-arching objective. To choose this option, submit a one-page document detailing your objective and list the courses proposed to meet the fifteen credit-hour requirement and how each will contribute to the over-arching objective.

Information Technology Selective (3 credits)

Any other CNIT 30000 level or higher CNIT course.

Double Majors within CIT

Students may double major between any CIT major other than CNIT.

Cybersecurity Supplemental Information

All Pre-requisites must be met.

Cybersecurity Interdisciplinary Selective (9 credits)

Courses that are part of a university recognized non-computing minor or certificate

- CGT, CNIT, CS and ECE are considered computing minors and are not acceptable as interdisciplinary selectives.
- Foreign language courses that are a pre-requisite to a foreign language minor; other courses that are pre-requisites to minors will be considered.

Nine credit hours within one subject such that:

- At least three credit hours in advanced courses at the 30000-level or higher with a required prerequisite in the same subject
- Up to three credit hours may be introductory-level courses at the 20000-level or higher without a prerequisite from the same subject
- No more than three credit hours may be an introductory-level course at the 10000-level without a pre-requisite from the same subject.

Choose from the following list of additional approved courses (prerequisites must be met):

- ECET 35901 - Computer Based Data Acquisition Applications **Credits: 3.00**
- ENTM 22810 - Forensic Investigation **Credits: 4.00**
- IET 31300 - Technology Innovation And Integration: Bar Codes To Biometrics **Credits: 3.00**
- MGMT 25400 - Legal Foundations Of Business I **Credits: 3.00** or
- MGMT 45500 - Legal Background For Business I **Credits: 3.00**
- PSY 27200 - Introduction To Industrial-Organizational Psychology **Credits: 3.00**
- PSY 31000 - Sensory And Perceptual Processes **Credits: 3.00**
- PSY 34200 - Introduction To Psychology Of Personality **Credits: 3.00**
- PSY 35000 - Abnormal Psychology **Credits: 3.00**
- SOC 32400 - Criminology **Credits: 3.00**
- SOC 32700 - Crime, Deviance And Mass Media **Credits: 3.00**
- SOC 32800 - Criminal Justice **Credits: 3.00**
- SOC 33800 - Global Social Movements **Credits: 3.00**

- Honors (HONR) course

Double Majors within CIT

Students cannot double major between the CNIT major and any other CIT major (CSAD, CSEC, DATA, INET).

Data Analytics, Technologies, and Applications Supplemental Information

Cognate Application Focus Area (18 credits)

18 credits outside of CNIT satisfying one of the following options:

1. Completion of **Statistics Minor** and 9 credit hours in Application Focus area of the **Applications in Data Science Certificate**
2. Completion of 18 credits from the Application Focus area of the **Applications in Data Science Certificate**

Double Majors within CIT

Students may double major between any CIT major other than CNIT

Globalization Requirement

Globalization Requirements

CIT Students on catalog terms Fall 2016 and forward must fulfill a globalization requirement by completing one of the following options:

- Participate in a Purdue University international capstone or collaborative project*
- Participate in an international internship (international location)*
- Participate in a faculty-led study abroad program*
- Participate in any university-sponsored study abroad program lasting at least 7 days*
- Provide documentation of having lived/traveled outside of home country for at least 15 days after a student's 12th birthday (may be non-consecutive) *
- Earn at least three credits in any one foreign language
- Earn at least three credit hours in a global culture course (Note: these courses may have pre-reqs or other restrictions. Please check if you meet the requirements):
- AAS 27100 - Introduction To African American Studies **Credits: 3.00**
- AAS 37300 - Issues In African American Studies **Credits: 3.00**
- AGECE 34000 - International Economic Development **Credits: 3.00**
- AGR 20100 - Communicating Across Culture **Credits: 3.00**
- ANSC 38100 - Leadership For A Diverse Workplace **Credits: 3.00**
- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21000 - Technology And Culture **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**

- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 34100 - Culture And Personality **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- ARAB 28000 - Arabic Culture **Credits: 3.00**
- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- AT 23300 - Ethics And Aviation **Credits: 3.00**
- CLCS 18100 - Classical World Civilizations **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- COM 42300 - Leadership, Communication And Organizations **Credits: 3.00**
- ECET 29000 - International Experience **Credits: 1.00 to 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 23500 - Learning And Motivation **Credits: 2.00 or 3.00**
- EDPS 30000 - Student Leadership Development **Credits: 1.00 to 3.00**
- EDPS 30100 - Peer Counseling Training **Credits: 1.00 to 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- EDPS 31700 - Collaborative Leadership: Mentoring **Credits: 3.00**
- ENGL 41400 - Studies In Literature And Culture **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HDFS 33200 - Stress And Coping In Contemporary Families **Credits: 3.00**
- HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
- HIST 24300 - South Asian History And Civilizations **Credits: 3.00**
- HIST 25000 - United States Relations With The Middle East And North Africa **Credits: 3.00**
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits: 3.00**
- HIST 33805 - History Of Human Rights **Credits: 3.00**
- HIST 34000 - Modern China **Credits: 3.00**
- HIST 34400 - History Of Modern Japan **Credits: 3.00**
- HIST 35000 - Science And Society In The Twentieth Century World **Credits: 3.00**
- HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
- HIST 37700 - History And Culture Of Native America **Credits: 3.00**
- HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
- HIST 49900 - History Internship **Credits: 1.00 to 3.00**
- HTM 37000 - Sustainable Tourism And Responsible Travel **Credits: 3.00**
- HTM 37200 - Global Tourism Geography **Credits: 3.00**
- MSL 20100 - Leadership And Ethics **Credits: 2.00 to 3.00**
- OLS 35000 - Creativity In Business And Industry **Credits: 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 43500 - Philosophy Of Mind **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23100 - Introduction To United States Foreign Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 23700 - Modern Weapons And International Relations **Credits: 3.00**

- POL 32600 - Black Political Participation In America **Credits: 3.00**
 - POL 32700 - Global Green Politics **Credits: 3.00**
 - POL 34500 - West European Democracies In The Post-Industrial Era **Credits: 3.00**
 - POL 36000 - Women And The Law **Credits: 3.00**
 - POL 41300 - Analysis Of Political Attitudes And Behavior **Credits: 3.00**
 - POL 42300 - International Environmental Policy **Credits: 3.00**
 - POL 42900 - Contemporary Political Problems **Credits: 3.00**
 - POL 43300 - International Organization **Credits: 3.00**
 - PSY 12000 - Elementary Psychology **Credits: 3.00**
 - SOC 10000 - Introductory Sociology **Credits: 3.00**
 - SOC 31000 - Race And Ethnicity **Credits: 3.00**
 - SOC 33800 - Global Social Movements **Credits: 3.00**
 - SOC 33900 - Sociology Of Global Development **Credits: 3.00**
 - TECH 33000 - Technology And The Global Society **Credits: 3.00**
 - TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
 - TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
 - WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
 - WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**
 - WGSS 38300 - Women, Work, And Labor **Credits: 3.00**
- Any foreign language 20000 level or higher (20100, 20200, 30100, 30200, 40100, 40200)

Globalization Requirement CIT

Globalization Requirements

- **Complete one of the following options:**
- Participate in a Purdue University international capstone or collaborative project*
- Participate in an international internship (international location)*
- Participate in a faculty-led study abroad program*
- Participate in a full semester abroad program*

* The above options require a three page reflection paper on what you learned from your experience - submit to CIT-Global@purdue.edu

- Earn three credit hours in a global culture course:
- AAS 27100 - Introduction To African American Studies **Credits: 3.00**
- AAS 37300 - Issues In African American Studies **Credits: 3.00**
- AGR 20100 - Communicating Across Culture **Credits: 3.00**
- ANSC 38100 - Leadership For A Diverse Workplace **Credits: 3.00**
- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21000 - Technology And Culture **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 34100 - Culture And Personality **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- ARAB 28000 - Arabic Culture **Credits: 3.00**

- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
 - COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
 - COM 30300 - Intercultural Communication **Credits: 3.00**
 - COM 41200 - Theories Of Human Interaction **Credits: 3.00**
 - COM 42300 - Leadership, Communication And Organizations **Credits: 3.00**
 - ECET 29000 - International Experience **Credits: 1.00 to 3.00**
 - ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
 - EDPS 23500 - Learning And Motivation **Credits: 2.00 or 3.00**
 - EDPS 30000 - Student Leadership Development **Credits: 1.00 to 3.00**
 - EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
 - ENGL 41400 - Studies In Literature And Culture **Credits: 3.00**
 - HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
 - HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
 - HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits: 3.00**
 - HIST 33805 - History Of Human Rights **Credits: 3.00**
 - HIST 35000 - Science And Society In The Twentieth Century World **Credits: 3.00**
 - HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
 - HIST 37700 - History And Culture Of Native America **Credits: 3.00**
 - HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
 - HTM 37000 - Sustainable Tourism And Responsible Travel **Credits: 3.00**
 - HTM 37200 - Global Tourism Geography **Credits: 3.00**
 - MSL 20100 - Leadership And Ethics **Credits: 2.00 to 3.00**
 - OLS 35000 - Creativity In Business And Industry **Credits: 3.00**
 - PHIL 11400 - Global Moral Issues **Credits: 3.00**
 - PHIL 43500 - Philosophy Of Mind **Credits: 3.00**
 - POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
 - POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
 - POL 32600 - Black Political Participation In America **Credits: 3.00**
 - POL 32700 - Global Green Politics **Credits: 3.00**
 - POL 36000 - Women And The Law **Credits: 3.00**
 - POL 41300 - Analysis Of Political Attitudes And Behavior **Credits: 3.00**
 - POL 42300 - International Environmental Policy **Credits: 3.00**
 - POL 42900 - Contemporary Political Problems **Credits: 3.00**
 - POL 43300 - International Organization **Credits: 3.00**
 - SOC 10000 - Introductory Sociology **Credits: 3.00**
 - SOC 31000 - Race And Ethnicity **Credits: 3.00**
 - SOC 33900 - Sociology Of Global Development **Credits: 3.00**
 - TECH 33000 - Technology And The Global Society **Credits: 3.00**
 - WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
 - WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**
 - WGSS 38300 - Women, Work, And Labor **Credits: 3.00**
- Any foreign language 20000 level or higher (20100, 20200, 30100, 30200, 40100, 40200)
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
 - CNIT 37100 - Cyberlaw And Ethics **Credits: 3.00**

Department of Computer Graphics Technology

The Department of Computer Graphics Technology touches all aspects of computer graphics, from animation to scientific visualization, and from user experience to game studies. Research projects on these topics push the boundaries of how the medium can be used, while the variety of degree options prepare students to be practitioners and managers in an array of computer graphics-related careers. With eight areas of specialization to choose from, undergraduate computer graphics students can align their plan of study with their talents. Real-world projects and research opportunities help students put theories into practice.

The five-year combined BS/MS Degree Program in Computer Graphics Technology enables outstanding students to complete the Bachelor of Science in a Computer Graphics Technology major and the Master of Science in Computer Graphics Technology in a total of five years, rather than six years or more (if pursued separately). Visit the Computer Graphics Technology website for additional information about this option.

Faculty

Department of Computer Graphics Technology Website

Contact Information

Computer Graphics Technology Department

Knoy Hall, Room 363
401 N. Grant St.
West Lafayette, IN 47907
Phone: 765-494-7505
Email: cgtinfo@purdue.edu

Graduate Information

For Graduate Information please see Computer Graphics Technology Graduate Program Information.

Baccalaureate

Animation And Visual Effects, BS

About the Program

Computer animation is everywhere, not only in entertainment but also in education, product and packaging, construction, healthcare and courtrooms as well as new applications yet to be discovered. When you major in animation at Purdue University, you will focus on six areas of animation: 3-D modeling, texturing, lighting, rendering and character rigging (creating a digital skeleton) and motion. Your primary tool will be the powerful animation software, Maya, and you will experiment with other options.

Animation Website

Animation and Visual Effects Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (54 credits)

Required Major Courses (39 credits)

- CGT 11200 - Sketching For Visualization And Communication **Credits: 3.00**
- CGT 11600 - Geometric Modeling For Visualization And Communication **Credits: 3.00**
- CGT 11800 - Fundamentals Of Imaging Technology **Credits: 3.00**
- CGT 12300 - Animation Foundations **Credits: 3.00**
- CGT 14100 - Internet Foundations Technologies And Development **Credits: 3.00**
- CGT 14700 - Visual Effects Introduction **Credits: 3.00**
- CGT 17208 - User Experience Design Studio I: Fundamentals **Credits: 3.00** (*satisfies Science, Technology & Society for core*)
- CGT 20500 - Portfolio Review **Credits: 0.00**
- CGT 24100 - Introduction To Computer Animation **Credits: 3.00**
- CGT 25001 - Computer Graphics Professional Practices I **Credits: 1.00**
- CGT 27000 - Introduction To Data Visualization **Credits: 3.00**
- CGT 30505 - Portfolio II **Credits: 0.00**
- CGT 40500 - Senior Portfolio Review **Credits: 0.00**
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I **Credits: 2.00**
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II **Credits: 2.00**
- CGT 44200 - Production For Computer Animation **Credits: 3.00** (course must be taken twice for total of 6 credits)
- CGT 45001 - Computer Graphics Professional Practices II **Credits: 1.00**
- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

CGT Entertainment Selectives (15 credits)

Other Departmental/Program Course Requirements (52 credits)

- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** (*satisfies Quantitative Reasoning Selective for core*)
- MA 16010 - Applied Calculus I **Credits: 3.00** (*satisfies Quantitative Reasoning Selective for core*)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ (*satisfies Written Communication AND Information Literacy for core & a Cornerstone Area A*)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦ (*satisfies Oral Communication for core & a Cornerstone Area A*)
- PHYS 22000 - General Physics **Credits: 4.00** ♦ (*satisfies Science for core*)
Advanced English Selective - 1 Course (possible Cornerstone Selective)
- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or

- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
 - ENGL 42000 - Business Writing **Credits: 3.00** or
 - ENGL 42100 - Technical Writing **Credits: 3.00**
- Statistics Selective - 1 Course**
- IET 31600 - Statistical Quality Control **Credits: 3.00** or
 - PSY 20100 - Introduction To Statistics In Psychology **Credits: 3.00** or
 - STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
 - STAT 30100 - Elementary Statistical Methods **Credits: 3.00** or
 - STAT 35000 - Introduction To Statistics **Credits: 3.00**
 - Human Cultures: Humanities Selective (HUM) Core - Credit Hours: 3.00 (satisfies Human Cultures: Humanities for core & possible Cornerstone Selective)
 - Human Cultures: Behavioral/Social Science (BSS) Core - Credit Hours: 3.00 (satisfies Human Culture Behavior/Social Science for core)
 - Humanities Elective - Credit Hours: 6.00 (possible Cornerstone Selective)
 - Science (SCI) Core - Credit Hours: 3.00 (satisfies Science for core)
 - CGT Global Selective - Credit Hours: 3.00 (possible Cornerstone Selective)
 - Technical Electives - Credit Hours: 12.00

Electives (14 Credits)

Electives (any course, any subject) - Credit Hours: 14.00

Cornerstone Certificate

- Cornerstone Certificate is required with this major.

Supplemental Lists

[Click here for Animation And Visual Effects & Themed Entertainment Design Supplemental Information.](#)

Grade Requirements

- Students must earn a "C-" or better in all CGT courses.
- Students must earn an "S" in CGT 20500, 30505, 40500.
- Purdue policy states that a student may attempt a course no more than three (3) times. An attempt is defined as all courses displayed on a student's transcript including, but not limited to A,B,C,D,E,F,W,WF,I and IF.

GPA Requirements

- 2.00 Graduation GPA required for Bachelor of Science degree.

Course Requirements and Notes

A course can only satisfy one degree requirement in the plan of study.

Non-course / Non-credit Requirements

- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

See Supplemental Information for details.

Pass/No Pass Policy

- Pass/No Pass may be allowed for Electives or Technical Electives only.

Transfer Credit Policy

CGT adheres to the admissions office Transfer Credit Course Equivalency Guide.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- CGT 11200 - Sketching For Visualization And Communication **Credits: 3.00**
- CGT 11800 - Fundamentals Of Imaging Technology **Credits: 3.00**
- CGT 12300 - Animation Foundations **Credits: 3.00**
- CGT 14100 - Internet Foundations Technologies And Development **Credits: 3.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**

15 Credits

Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication **Credits: 3.00**
- CGT 17208 - User Experience Design Studio I: Fundamentals **Credits: 3.00**
- CGT 24100 - Introduction To Computer Animation **Credits: 3.00**
- CGT 27000 - Introduction To Data Visualization **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00**

15 Credits

Fall 2nd Year

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦
- CGT 14700 - Visual Effects Introduction **Credits: 3.00**
- CGT Entertainment Selective - Credit Hours: 3.00
- Human Cultures: Humanities (HUM) Core - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- CGT 20500 - Portfolio Review **Credits: 0.00**
- CGT 25001 - Computer Graphics Professional Practices I **Credits: 1.00**
- PHYS 22000 - General Physics **Credits: 4.00**

- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦
or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦
- CGT Entertainment Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

14 Credits

Fall 3rd Year

- CGT 44200 - Production For Computer Animation **Credits: 3.00**
Statistics Selective - 1 Course
- IET 31600 - Statistical Quality Control **Credits: 3.00** or
- PSY 20100 - Introduction To Statistics In Psychology **Credits: 3.00** or
- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** or
- STAT 35000 - Introduction To Statistics **Credits: 3.00**
- CGT Entertainment Selective - Credit Hours: 3.00
- Science (SCI) Core - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- CGT 30505 - Portfolio II **Credits: 0.00**
- CGT 44200 - Production For Computer Animation **Credits: 3.00**
- CGT Entertainment Selective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Human Cultures: Behavioral/Social Science (BSS) Core - Credit Hours: 3.00
- CGT Global Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- CGT 41101 - Contemporary Problems In Applied Computer Graphics I **Credits: 2.00**
- CGT Entertainment Selective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00
- Technical Elective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Spring 4th Year

- CGT 40500 - Senior Portfolio Review **Credits: 0.00**
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II **Credits: 2.00**
- CGT 45001 - Computer Graphics Professional Practices II **Credits: 1.00**
Advanced English Selective - 1 Course (possible Cornerstone Selective)
- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00**

- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Data Visualization, BS

About the Program

The ability to understand and communicate data is an essential skill in this big data era. Data visualization specialists present complex information in an easy-to-understand format. Their efforts can help identify trends, provide important insights, illustrate impact, and enable data driven decision making. They can help highlight tumors in MRI images to track disease progression or visualize air flow over a car to assist designers in making more fuel efficient vehicles. The data visualization major at Purdue University focuses on the computer and graphics tools necessary to create accurate and meaningful visualizations for researchers, leaders, decision-makers and the general public.

To help you understand how to use data, you will learn about visualization techniques and work on design, programming, and user research skills. You will also experience firsthand the design and development process of a complex data visualization system. Data management and basic analysis skills are also important in this field. When you graduate from the program, you will be able to design effective visual representations of data based on the data's characteristics, business needs, and the requirements of prospective users.

The coursework for this major will lead you through the spectrum of visualization topics. From learning about the basic types of data and their popular visualization forms to applying design techniques to scientific data, you will gain experience and problem solving skills that will be the foundation for your data visualization career. You will be able to combine all of your new skills in the Visualization Studio course and create a comprehensive, interactive visualization system for data analysis.

Special Features

- Prepare for a career in a field with an ongoing need for professionals who know how to present raw data in a way that does not overwhelm.
- Work with professors who are leading researchers in the area of data and scientific visualization
- Learn in small, close-knit classes that feature individualized attention
- Work with industry-standard software to gain the best hands-on experience
- Experience projects that highlight the visualization of data-rich information (InfoVis), scientific data (SciVis), biological data (BioVis), and more.
- Utilize the Polytechnic learning environment to become a career-ready graduate

The Data Visualization major is part of the Computer Graphics Technology program. The Computer Graphics Technology program is accredited by the Engineering Technology Accreditation Commission of ABET.

DTVS Website

Data Visualization Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (43 credits)

Required Major Courses (37 credits)

- CGT 11600 - Geometric Modeling For Visualization And Communication **Credits:** 3.00
- CGT 11800 - Fundamentals Of Imaging Technology **Credits:** 3.00
- CGT 14100 - Internet Foundations Technologies And Development **Credits:** 3.00
- CGT 17208 - User Experience Design Studio I: Fundamentals **Credits:** 3.00
(satisfies Science, Technology & Society for core)
- CGT 21500 - Computer Graphics Programming I **Credits:** 3.00
- CGT 25001 - Computer Graphics Professional Practices I **Credits:** 1.00

- CGT 27000 - Introduction To Data Visualization **Credits: 3.00**
- CGT 27001 - Topics In Data Visualization **Credits: 1.00**
- CGT 27500 - Data Visualization II **Credits: 3.00**
- CGT 37000 - Interactive Data Visualization **Credits: 3.00**
- CGT 37700 - Scientific Visualization **Credits: 3.00**
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I **Credits: 2.00**
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II **Credits: 2.00**
- CGT 45001 - Computer Graphics Professional Practices II **Credits: 1.00**
- CGT 47000 - Data Visualization Studio **Credits: 3.00**
- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

Major Selectives* -Choose two courses (6 credits)

- CGT Selective - Credit Hours: 3.00
- CGT Selective 30000 - 40000 level - Credit Hours: 3.00

Other Departmental/Program Course Requirements (61 credits)

- AD 10500 - Design I **Credits: 3.00** ♦
- ECON 21000 - Principles Of Economics **Credits: 3.00** ♦ (*satisfies Human Culture Behavior/Social Science for core*)
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** (*satisfies Quantitative Reasoning Selective for core*)
- MA 16010 - Applied Calculus I **Credits: 3.00** (*satisfies Quantitative Reasoning Selective for core*)
- MGMT 45500 - Legal Background For Business I **Credits: 3.00** ♦
- PHYS 22000 - General Physics **Credits: 4.00** ♦ (*satisfies Science for core*)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ (*satisfies Written Communication for core & a Cornerstone Area A*)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦ (*satisfies Oral Communication for core & a Cornerstone Area A*)
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
Advanced English Selective - 1 Course (possible Cornerstone Selective)
- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00**
- Human Cultures: Humanities (HUM) Core (*satisfies Humanities for Core & possible Cornerstone Selective*) - Credit Hours: 3.00
- Human Cultures: Behavioral/Social Sciences (BSS) Core - Credit Hours: 3.00
- Humanities Elective (*possible Cornerstone Selective*) - Credit Hours: 3.00
- Science (SCI) Core - Credit Hours: 3.00
- CGT Global Selective (*possible Cornerstone Selective*) - Credit Hours: 3.00
- Communication Selective (*possible Cornerstone Selective*) - Credit Hours: 3.00
- Management Elective - Credit Hours: 3.00

- Technical Electives - Credit Hours: 9.00

Electives (16 credits)

Any course, any subject. Credit Hours: 16.00

Cornerstone Certificate

Cornerstone Certificate required for this major.

Supplemental List

[Click here for Data Visualization Supplemental Information .](#)

Grade Requirements

- Students must earn C- or better in CGT Courses.
- Purdue policy states that a student may attempt a course no more than three (3) times. An attempt is defined as all courses displayed on a student's transcript including, but not limited to A,B,C,D,E,F,W,WF,I AND IF.

GPA Requirements

- 2.00 Graduation GPA required for Bachelor of Science degree.

Course Requirements and Notes

A course can only satisfy one degree requirement in the plan of study.

Non-course / Non-credit Requirements

- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

See Supplemental Information for details.

Pass/No Pass Policy

- Pass/No Pass may be allowed for Electives or Technical Electives only.

Transfer Credit Policy

CGT adheres to the admissions office Transfer Credit Course Equivalency Guide.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Additional Information

Sample 4-Year Plan

Fall 1st Year

- CGT 11800 - Fundamentals Of Imaging Technology **Credits: 3.00**
- CGT 14100 - Internet Foundations Technologies And Development **Credits: 3.00**
- CGT 27000 - Introduction To Data Visualization **Credits: 3.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ or

- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦

15 Credits

Spring 1st Year

- CGT 17208 - User Experience Design Studio I: Fundamentals **Credits: 3.00**
- CGT 27500 - Data Visualization II **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦
- Human Cultures: Behavioral/Social Sciences (BSS) Core - Credit Hours: 3.00
- MA 16010 - Applied Calculus I **Credits: 3.00**

15 Credits

Fall 2nd Year

- CGT 27001 - Topics In Data Visualization **Credits: 1.00**
- CGT 11600 - Geometric Modeling For Visualization And Communication **Credits: 3.00**
- CGT 21500 - Computer Graphics Programming I **Credits: 3.00**
- PHYS 22000 - General Physics **Credits: 4.00**
- Human Cultures: Humanities (HUM) Core - Credit Hours: 3.00

14 Credits

Spring 2nd Year

- CGT 25001 - Computer Graphics Professional Practices I **Credits: 1.00**
- AD 10500 - Design I **Credits: 3.00**
- ECON 21000 - Principles Of Economics **Credits: 3.00**
- CGT Selective: Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- CGT 37700 - Scientific Visualization **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
Advanced English Selective - 1 Course (possible Cornerstone Selective)
- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or

- ENGL 42100 - Technical Writing **Credits: 3.00**
- Science (SCI) Core - Credit Hours: 3.00
- Elective-Credit Hours: 3.00

15 Credits

Spring 3rd Year

- CGT 37000 - Interactive Data Visualization **Credits: 3.00**
- CGT Selective: 30000 or 40000 Level - Credit Hours: 3.00
- CGT Globalization Selective - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- CGT 47000 - Data Visualization Studio **Credits: 3.00**
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I **Credits: 2.00**
- MGMT 45500 - Legal Background For Business I **Credits: 3.00 ♦**
- Humanities Elective - Credit Hours: 3.00
- Elective - Credit Hours: 4.00

15 Credits

Spring 4th Year

- CGT 41201 - Contemporary Problems In Applied Computer Graphics II **Credits: 2.00**
- CGT 45001 - Computer Graphics Professional Practices II **Credits: 1.00**
- Communication Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Game Development, BS

About the Program

Whether you want to contribute to blockbuster AAA titles, study virtual reality, or use gaming to help with medical therapies, Purdue University's game development major has a place for you. Purdue has been a leader in preparing students for careers in the games and animation industries. Because our professors are interested in new ideas and uses for computer games, they will help you stretch your imagination throughout the program. You will take classes in game development and design, animation, visualization, rendering and programming.

Research projects open to undergraduate students have focused on the use of games for sustainable energy, therapy and medicine, entertainment, information visualization and more.

The Game Development and Design major is part of the Computer Graphics Technology program. The Computer Graphics Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org.

[Game Development Website](#)

[Game Development Major Change \(CODO\) Requirements](#)

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (54 credits)

Required Major Courses (39 credits)

- CGT 10501 - Introduction To Games **Credits:** 3.00
- CGT 11600 - Geometric Modeling For Visualization And Communication **Credits:** 3.00
- CGT 11800 - Fundamentals Of Imaging Technology **Credits:** 3.00
- CGT 14100 - Internet Foundations Technologies And Development **Credits:** 3.00

- CGT 17208 - User Experience Design Studio I: Fundamentals **Credits: 3.00**
(satisfies Science, Technology & Society for core)
- CGT 20500 - Portfolio Review **Credits: 0.00**
- CGT 21500 - Computer Graphics Programming I **Credits: 3.00**
- CGT 24500 - Game Development I: Core Skills And Technologies **Credits: 3.00**
- CGT 25001 - Computer Graphics Professional Practices I **Credits: 1.00**
- CGT 25500 - Game Development II: Design And Psychology **Credits: 3.00**
- CGT 27000 - Introduction To Data Visualization **Credits: 3.00**
- CGT 30505 - Portfolio II **Credits: 0.00**
- CGT 36500 - Game Development Practicum **Credits: 3.00** (must be taken twice for a total of 6 credits)
- CGT 40500 - Senior Portfolio Review **Credits: 0.00**
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I **Credits: 2.00**
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II **Credits: 2.00**
- CGT 45001 - Computer Graphics Professional Practices II **Credits: 1.00**
- Intercultural Requirements - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

CGT Entertainment Selectives (15 credits)

Other Departmental/Program Course Requirements (52 credits)

- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** (*satisfies Quantitative Reasoning Selective for core*)
- MA 16010 - Applied Calculus I **Credits: 3.00** (*satisfies Quantitative Reasoning Selective for core*)
- PHYS 22000 - General Physics **Credits: 4.00** ♦ (*satisfies Science for core*)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ (*satisfies Written Communication for core & a Cornerstone Area A*)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦ (*satisfies Oral Communication for core & a Cornerstone Area A*)
- **Advanced English Selective - 1 Course (possible Cornerstone Selective)**
- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00**
- **Statistics Selective - 1 Course**
- IET 31600 - Statistical Quality Control **Credits: 3.00** or
- PSY 20100 - Introduction To Statistics In Psychology **Credits: 3.00** or
- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** or
- STAT 35000 - Introduction To Statistics **Credits: 3.00**
- Human Cultures: Humanities (HUM) Core (*satisfies Humanities for Core & possible Cornerstone Selective*) - Credit Hours: 3.00
- Human Cultures: Behavioral/Social Sciences (BSS) Core (*satisfies Behavioral/Social Sciences for core*) - Credit Hours: 3.00
- Humanities Elective (possible Cornerstone Selective) - Credit Hours: 6.00
- Science (SCI) Core (*satisfies Science Selective for core*) - Credit Hours: 3.00

- CGT Global Selective (possible Cornerstone Selective) - Credit Hours: 3.00
- Technical Electives - Credit Hours: 12.00

Electives (14 credits)

Any course, any subject - Credit Hours: 14.00

Cornerstone Certificate

Cornerstone Certificate required for this major.

Supplemental List

[Click here for Game Development Supplemental Information.](#)

Grade Requirements

- Students must earn a "C-" or better in all CGT courses.
- Students must earn an "S" in CGT 20500, 30505, 40500.
- Purdue policy states that a student may attempt a course no more than three (3) times. An attempt is defined as all courses displayed on a student's transcript including, but not limited to A,B,C,D,E,F,W,WF,I and IF.

GPA Requirements

- 2.00 Graduation GPA required for Bachelor of Science degree.

Course Requirements and Notes

A course can only satisfy one degree requirement in the plan of study.

Non-course / Non-credit Requirements

- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

See Supplemental Information for details.

Pass/No Pass Policy

- Pass/No Pass may be allowed for Electives or Technical Electives only.

Transfer Credit Policy

CGT Adheres to the admissions office Transfer Credit Course Evaluation Guide.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Additional Information

Sample 4-Year Plan

Fall 1st Year

- CGT 10501 - Introduction To Games **Credits: 3.00**
- CGT 11800 - Fundamentals Of Imaging Technology **Credits: 3.00**
- CGT 14100 - Internet Foundations Technologies And Development **Credits: 3.00**

- CGT 24500 - Game Development I: Core Skills And Technologies **Credits: 3.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**

15 Credits

Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication **Credits: 3.00**
- CGT 17208 - User Experience Design Studio I: Fundamentals **Credits: 3.00**
- CGT 25500 - Game Development II: Design And Psychology **Credits: 3.00**
- CGT 27000 - Introduction To Data Visualization **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00**

15 Credits

Fall 2nd Year

- CGT 21500 - Computer Graphics Programming I **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦
- Human Cultures: Humanities (HUM) Core - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- CGT Entertainment Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- CGT 20500 - Portfolio Review **Credits: 0.00**
- CGT 25001 - Computer Graphics Professional Practices I **Credits: 1.00**
- PHYS 22000 - General Physics **Credits: 4.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦ or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦
- CGT Entertainment Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

14 Credits

Fall 3rd Year

- CGT 36500 - Game Development Practicum **Credits: 3.00**
Statistics Selective - 1 Course
- IET 31600 - Statistical Quality Control **Credits: 3.00** or

- PSY 20100 - Introduction To Statistics In Psychology **Credits: 3.00** or
- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** or
- STAT 35000 - Introduction To Statistics **Credits: 3.00**
- Science (SCI) Core - Credit Hours: 3.00
- CGT Entertainment Selective: Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- CGT 30505 - Portfolio II **Credits: 0.00**
- CGT 36500 - Game Development Practicum **Credits: 3.00**
- CGT Entertainment Selective - Credit Hours: 3.00
- CGT Globalization Selective - Credit Hours: 3.00
- Human Cultures: Behavioral/Social Science (BSS) Core - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- CGT 41101 - Contemporary Problems In Applied Computer Graphics I **Credits: 2.00**
- CGT Entertainment Selective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

16 Credits

Spring 4th Year

- CGT 40500 - Senior Portfolio Review **Credits: 0.00**
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II **Credits: 2.00**
- CGT 45001 - Computer Graphics Professional Practices II **Credits: 1.00**
Advanced English Selective - 1 Course (possible Cornerstone Selective)
- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00**
- Technical Elective - Credit Hours: 3.00

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Themed Entertainment Design, BS

About the Program

Computer animation is everywhere, not only in entertainment but also in education, product and packaging, construction, healthcare and courtrooms as well as new applications yet to be discovered. When you major in animation at Purdue University, you will focus on six areas of animation: 3-D modeling, texturing, lighting, rendering and character rigging (creating a digital skeleton) and motion. Your primary tool will be the powerful animation software, Maya, and you will experiment with other options.

Themed Entertainment Design at Purdue University in Indianapolis

Themed Entertainment Design Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (76 credits)

Required Major Courses (49 credits)

- CGT 11200 - Sketching For Visualization And Communication **Credits: 3.00**
- CGT 11600 - Geometric Modeling For Visualization And Communication **Credits: 3.00**
- CGT 11700 - Illustrating For Visualization And Communication **Credits: 3.00**
- CGT 11800 - Fundamentals Of Imaging Technology **Credits: 3.00**
- CGT 12300 - Animation Foundations **Credits: 3.00**
- CGT 14700 - Visual Effects Introduction **Credits: 3.00**
- CGT 20400 - Introduction To Themed Attraction Design **Credits: 3.00**
- CGT 20500 - Portfolio Review **Credits: 0.00**
- CGT 25001 - Computer Graphics Professional Practices I **Credits: 1.00**
- CGT 25100 - Principles Of Creative Design **Credits: 3.00**
- CGT 30505 - Portfolio II **Credits: 0.00**
- CGT 31300 - Digital Painting I For Computer Graphics **Credits: 3.00**
- CGT 31700 - Planning And Communicating Themed Attraction Design **Credits: 3.00**
- CGT 32800 - Business Of Themed Entertainment **Credits: 3.00**
- CGT 36700 - Previsualization In Themed Entertainment **Credits: 3.00**
- CGT 40500 - Senior Portfolio Review **Credits: 0.00**
- CGT 40700 - Current And Future Trends In Themed Attraction Design **Credits: 3.00**
- CGT 44200 - Production For Computer Animation **Credits: 3.00**
- CGT 45001 - Computer Graphics Professional Practices II **Credits: 1.00**
- CGT Globalization Selective - Credit Hours: 3.00

CGT Entertainment Selectives (15 credits)

- CGT Entertainment Selectives - Credit Hours: 15.00

Technical Selectives (12 credits)

- Technical Selectives - Credit Hours: 12.00

Other Departmental/Program Course Requirements (41 credits)

- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** (satisfies Quantitative Reasoning for core)
- MA 16010 - Applied Calculus I **Credits: 3.00** (satisfies Quantitative Reasoning for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** (satisfies Written Communication and Information Literacy for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** (satisfies Oral Communication for core)
- PHYS 22000 - General Physics **Credits: 4.00** (satisfies Science #1 for core)
- Advanced English Selective - Credit Hours: 3.00
- Human Cultures: Humanities Selective for core - Credit Hours: 3.00
- Human Cultures: Behavioral/Social Science Selective for core - Credit Hours: 3.00
- Humanities Selective - Credit Hours: 3.00
- Humanities Selective - Credit Hours: 3.00
- Science, Tech, & Society Selective for core - Credit Hours: 3.00
- Science #2 Selective for core - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00

Elective (4 credits)

- Elective - Credit Hours: 4.00

Supplemental Information

Click here for Animation And Visual Effects & Themed Entertainment Design Supplemental Information

GPA Requirements

- 2.00 Graduation GPA required for Bachelor of Science degree.

Non-course / Non-credit Requirements

- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

Transfer Credit Policy

- CGT adheres to the admissions office Transfer Credit Course Equivalency Guide.

Pass/No Pass Policy

- Pass/No Pass may be allowed for Electives or Technical Selectives only.

Grade Requirements

- Students must earn a "C-" or better in all CGT courses.
- Purdue policy states that a student may attempt a course no more than three (3) times. An attempt is defined as all courses displayed on a student's transcript including, but not limited to A,B,C,D,E,F,W,WF,I and IF.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)

- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- CGT 11200 - Sketching For Visualization And Communication **Credits: 3.00**
- CGT 11700 - Illustrating For Visualization And Communication **Credits: 3.00**
- CGT 11800 - Fundamentals Of Imaging Technology **Credits: 3.00**
- CGT 12300 - Animation Foundations **Credits: 3.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**

15 Credits

Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication **Credits: 3.00**
- CGT 20400 - Introduction To Themed Attraction Design **Credits: 3.00**
- CGT 25100 - Principles Of Creative Design **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00**
- CGT Globalization Selective - Credit Hours: 3.00

15 Credits

Fall 2nd Year

- CGT 14700 - Visual Effects Introduction **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**
- CGT Entertainment Selective - Credit Hours: 3.00
- Human Cultures: Humanities Selective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- CGT 20500 - Portfolio Review **Credits: 0.00**
- CGT 31700 - Planning And Communicating Themed Attraction Design **Credits: 3.00**
- CGT 32800 - Business Of Themed Entertainment **Credits: 3.00**
- CGT 25001 - Computer Graphics Professional Practices I **Credits: 1.00**
- PHYS 22000 - General Physics **Credits: 4.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**
- Advanced English Selective - Credit Hours: 3.00

17 Credits

Fall 3rd Year

- CGT 44200 - Production For Computer Animation **Credits: 3.00**
- CGT 36700 - Previsualization In Themed Entertainment **Credits: 3.00**
- CGT Entertainment Selective - Credit Hours: 3.00
- Science #2 Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- CGT 30505 - Portfolio II **Credits: 0.00**
- CGT 31300 - Digital Painting I For Computer Graphics **Credits: 3.00**
- CGT Entertainment Selective - Credit Hours: 3.00
- CGT Entertainment Selective - Credit Hours: 3.00
- Human Cultures: Behavior/Social Sciences (BSS) Selective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- CGT 40700 - Current And Future Trends In Themed Attraction Design **Credits: 3.00**
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I **Credits: 2.00**
- CGT Entertainment Selective - Credit Hours: 3.00
- Science, Technology & Society (STS) Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

14 Credits

Spring 4th Year

- CGT 45001 - Computer Graphics Professional Practices II **Credits: 1.00**
- CGT 40500 - Senior Portfolio Review **Credits: 0.00**
- Humanities Selective - Credit Hours: 3.00
- Humanities Selective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00
- Elective - Credit Hours: 4.00

14 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

UX Design, BS

About the Program

User Experience (UX) design is an approach to creating products, systems, and services that are effective and enjoyable to use. By placing the user at the center of the design process, we ensure that technologies are easy to learn and use, are fun and enjoyable, and help users to achieve their goals.

The UX Design major is part of the Computer Graphics Technology program. The Computer Graphics Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org.

[UX Design Website](#)

[UX Design Major Change \(CODO\) Requirements](#)

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (45 credits)

- CGT 11800 - Fundamentals Of Imaging Technology **Credits: 3.00**
- CGT 14100 - Internet Foundations Technologies And Development **Credits: 3.00**
- CGT 17207 - User Experience Design Experience Studio I **Credits: 3.00**
(satisfies Science, Technology & Society for core)
- CGT 17208 - User Experience Design Studio I: Fundamentals **Credits: 3.00**
- CGT 25001 - Computer Graphics Professional Practices I **Credits: 1.00**
- CGT 27000 - Introduction To Data Visualization **Credits: 3.00**
- CGT 27108 - User Experience Design Studio II: Screen **Credits: 3.00**
- CGT 27207 - User Experience Design Experience Studio II **Credits: 3.00** (must be taken twice)
- CGT 27208 - User Experience Design Studio III: Cross-Channel **Credits: 3.00**
- CGT 37108 - User Experience Design Studio IV: Strategy **Credits: 3.00**
- CGT 37207 - User Experience Design Experience Studio III **Credits: 3.00** (must be taken twice)
- CGT 37208 - User Experience Design Studio V: Specialization **Credits: 3.00**
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I **Credits: 2.00**
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II **Credits: 2.00**
- CGT 45001 - Computer Graphics Professional Practices II **Credits: 1.00**
- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

Other Departmental/Program Course Requirements (66 credits)

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ (satisfies *Written Communication* for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦ (satisfies *Oral Communication* for core)
- PSY 12000 - Elementary Psychology **Credits: 3.00** (satisfies *Human Cultures: Behavioral/Social Sciences* for core)

- MA 16010 - Applied Calculus I **Credits: 3.00** - satisfies Quantitative Reasoning (QR) for core
- Science (SCI) Core Selectives (*satisfies Science for core*) - Credit Hours: 6.00
- CGT Global Selectives - Credit Hours: 9.00
- CGT Leadership - Credit Hours: 9.00
- Psychology & Human Behavior Selectives - Credit Hours: 9.00
- Human Cultures: Humanities Selective (HUM) (*satisfies Human Cultures: Humanities for core*) - Credit Hours: 3.00
- Written/Oral Communication Selectives - Credit Hours: 9.00
- Technical Electives - Credit Hours: 9.00

Electives (9 credits)

Any course, any subject. Credit Hours: 9.00

Supplemental List

[Click here for UX Design Supplemental Course Information.](#)

Grade Requirements

- Students must earn a "C-" or better in all CGT courses.
- Purdue policy states that a student may attempt a course no more than three (3) times. An attempt is defined as all courses displayed on a student's transcript including, but not limited to A,B,C,D,E,F,W,WF,I and IF.

GPA Requirements

- 2.00 Graduation GPA required for Bachelor of Science degree.

Course Requirements and Notes

A course can only satisfy one degree requirement in the plan of study.

Non-course / Non-credit Requirements

- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

See Supplemental Information for details.

Pass/No Pass Policy

- Pass/No Pass may be allowed for Electives or Technical Electives only.

Transfer Credit Policy

CGT adheres to the admissions office Transfer Credit Course Equivalency Guide.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
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- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- CGT 11800 - Fundamentals Of Imaging Technology **Credits: 3.00**
- CGT 14100 - Internet Foundations Technologies And Development **Credits: 3.00**
- CGT 27000 - Introduction To Data Visualization **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦

- MA 16010 - Applied Calculus I **Credits: 3.00** - satisfies Quantitative Reasoning (QR) for core

15 Credits

Spring 1st Year

- CGT 17207 - User Experience Design Experience Studio I **Credits: 3.00**
- CGT 17208 - User Experience Design Studio I: Fundamentals **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦
- PSY 12000 - Elementary Psychology **Credits: 3.00** - satisfies Human Cultures: Behavioral/Social Sciences (BSS) for core
- Technical Elective - Credit Hours: 3.00

15 Credits

Fall 2nd Year

- CGT 27207 - User Experience Design Experience Studio II **Credits: 3.00**
- CGT 27108 - User Experience Design Studio II: Screen **Credits: 3.00**
- CGT Globalization Selective - Credit Hours: 3.00
- Written or Oral Communication - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- CGT 27207 - User Experience Design Experience Studio II **Credits: 3.00**
- CGT 27208 - User Experience Design Studio III: Cross-Channel **Credits: 3.00**
- CGT 25001 - Computer Graphics Professional Practices I **Credits: 1.00**
- Science (SCI) Core - Credit Hours: 3.00
- Human Cultures: Humanities (HUM) Core - Credit Hours: 3.00
- Psychology & Human Behavior Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- CGT 37108 - User Experience Design Studio IV: Strategy **Credits: 3.00**
- CGT 37207 - User Experience Design Experience Studio III **Credits: 3.00**
- CGT Leadership Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Psychology & Human Behavior Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- CGT 37207 - User Experience Design Experience Studio III **Credits: 3.00**
- CGT 37208 - User Experience Design Studio V: Specialization **Credits: 3.00**
- CGT Leadership Selective - Credit Hours: 3.00
- Psychology & Human Behavior Selective - Credit Hours: 3.00
- Written or Oral Communication - Credit Hours: 3.00

15 Credits

Fall 4th Year

- CGT 41101 - Contemporary Problems In Applied Computer Graphics I **Credits: 2.00**
- Written or Oral Communication - Credit Hours: 3.00
- CGT Globalization Selective - Credit Hours: 3.00
- Science (SCI) Core - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

14 Credits

Spring 4th Year

- CGT 41201 - Contemporary Problems In Applied Computer Graphics II **Credits: 2.00**
- CGT 45001 - Computer Graphics Professional Practices II **Credits: 1.00**
- CGT Globalization Selective - Credit Hours: 3.00
- CGT Leadership Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

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Web Programming & Design, BS

About the Program

Before most web sites and mobile applications are launched, there is a vast amount of planning, programming and testing that takes place. When you study web programming and design at Purdue University, you will gain expertise in all aspects of this development process.

Each web and mobile project has its own set of requirements. Will it need to allow financial transactions? Does it need to store and retrieve customer information? How will it operate on different platforms? The courses in the web programming and design major will help you answer those questions and design a final product that is functional, secure, and user-friendly.

From front-end design using HTML5, JavaScript and CSS to back-end Programming using PHP and MySQL or .Net and SQL Server environments, you will gain a broad spectrum of programming capabilities and concepts that will allow you to prosper and adapt in this constantly changing industry.

The Web Programming & Design major is part of the Computer Graphics Technology program. The Computer Graphics Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org.

[Web Programming and Design Website](#)

[Web Programming & Design Major Change \(CODO\) Requirements](#)

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (45 credits)

Required Major Courses (33 credits)

- CGT 11600 - Geometric Modeling For Visualization And Communication **Credits: 3.00**
- CGT 11800 - Fundamentals Of Imaging Technology **Credits: 3.00**
- CGT 14100 - Internet Foundations Technologies And Development **Credits: 3.00**
- CGT 17208 - User Experience Design Studio I: Fundamentals **Credits: 3.00**
(satisfies Science, Technology & Society for core)
- CGT 21500 - Computer Graphics Programming I **Credits: 3.00**
- CGT 25001 - Computer Graphics Professional Practices I **Credits: 1.00**
- CGT 27000 - Introduction To Data Visualization **Credits: 3.00**
- CGT 35300 - Principles Of Interactive And Dynamic Media **Credits: 3.00**

- CGT 35600 - Web Programming, Development And Data Integration **Credits: 3.00**
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I **Credits: 2.00**
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II **Credits: 2.00**
- CGT 45001 - Computer Graphics Professional Practices II **Credits: 1.00**
- CGT 45600 - Advanced Web Programming, Development And Data Integration **Credits: 3.00**
- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

Major Selectives* - Choose three courses (12 credits)

- CGT Selective - Credit Hours: 3.00
- CGT Selective - Credit Hours: 3.00
- CGT Selective - Credit Hours: 3.00
- CGT Selective (200 Level or Higher) - Credit Hours: 3.00

Other Departmental/Program Course Requirements (61 credits)

- ECON 21000 - Principles Of Economics **Credits: 3.00** ♦ (*satisfies Human Culture Behavior/Social Science for core*)
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** (*satisfies Quantitative Reasoning Selective for core*)
- MA 16010 - Applied Calculus I **Credits: 3.00** (*satisfies Quantitative Reasoning Selective for core*)
- MGMT 45500 - Legal Background For Business I **Credits: 3.00** ♦
- PHYS 22000 - General Physics **Credits: 4.00** ♦ (*satisfies Science for core*)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ (*satisfies Written Communication for core & Cornerstone Area A*)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦ (*satisfies Oral Communication for core & a Cornerstone Area A*)
- **Advanced English Selective - 1 Course (possible Cornerstone Selective)**
- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00**
- **Statistics Selective - 1 Course**
- IET 31600 - Statistical Quality Control **Credits: 3.00** or
- PSY 20100 - Introduction To Statistics In Psychology **Credits: 3.00** or
- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** or
- STAT 35000 - Introduction To Statistics **Credits: 3.00**
- Human Cultures: Humanities (HUM) Core (*satisfies Humanities for core & possible Cornerstone Selective*)- Credit Hours: 3.00
- Human Cultures: Behavioral/Social Sciences Selective (BSS) Core (*satisfies Human Cultures: Behavioral/Social Sciences for core*)- Credit Hours: 3.00
- Humanities Elective (possible Cornerstone Selective) - Credit Hours: 6.00
- Science (SCI) Core (*satisfies Science Selective for core*) - Credit Hours: 3.00
- Communication Selective (possible Cornerstone Selective) - Credit Hours: 3.00

- Management Selective - Credit Hours: 3.00
- CGT Global Selective (possible Cornerstone Selective) - Credit Hours: 3.00
- Technical Electives - Credit Hours: 9.00

Electives (14 credits)

Any course, any subject. Credit Hours: 14.00

Cornerstone Certificate

Cornerstone Certificate is required for this major.

Supplemental List

[Click here for Web Programming & Design Supplemental Information.](#)

Grade Requirements

- Students must earn a "C-" or better in all CGT courses.
- Purdue policy states that a student may attempt a course no more than three (3) times. An attempt is defined as all courses displayed on a student's transcript including, but not limited to A,B,C,D,E,F,W,WF,I and IF.

GPA Requirements

- 2.00 Graduation GPA required for Bachelor of Science degree.

Course Requirements and Notes

A course can only satisfy one degree requirement in the plan of study.

Non-course / Non-credit Requirements

- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

See Supplemental Information for details.

Pass/No Pass Policy

- Pass/No Pass may be allowed for Electives or Technical Electives only.

Transfer Credit Policy

CGT adheres to the admissions office Transfer Credit Course Equivalency Guide.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

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- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

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- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Additional Information

Sample 4-Year Plan

Fall 1st Year

- CGT 11800 - Fundamentals Of Imaging Technology **Credits: 3.00**
- CGT 14100 - Internet Foundations Technologies And Development **Credits: 3.00**
- CGT 27000 - Introduction To Data Visualization **Credits: 3.00**

- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** ♦
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦ or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦

15 Credits

Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication **Credits: 3.00**
- CGT 17208 - User Experience Design Studio I: Fundamentals **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00** ♦
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** ♦
or
Human Cultures: Behavioral/Social Science (BSS) Core
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** ♦

15 Credits

Fall 2nd Year

- CGT 21500 - Computer Graphics Programming I **Credits: 3.00**
- PHYS 22000 - General Physics **Credits: 4.00**
- Human Cultures: Humanities (HUM) Core - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- CGT 25001 - Computer Graphics Professional Practices I **Credits: 1.00**
- ECON 21000 - Principles Of Economics **Credits: 3.00**
- CGT Selective - Credit Hours: 3.00
- CGT Selective (200 Level or Higher) - Credit Hours: 3.00
- Science (SCI) Core - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- CGT 35600 - Web Programming, Development And Data Integration **Credits: 3.00**
Advanced English Selective - 1 Course (possible Cornerstone Selective)

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 41900 - Multimedia Writing **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00**
- CGT Selective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- CGT 45600 - Advanced Web Programming, Development And Data Integration **Credits: 3.00**
Statistics Selective - 1 Course
- IET 31600 - Statistical Quality Control **Credits: 3.00** or
- PSY 20100 - Introduction To Statistics In Psychology **Credits: 3.00** or
- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** or
- STAT 35000 - Introduction To Statistics **Credits: 3.00**
- CGT Selective - Credit Hours: 3.00
- CGT Globalization Selective (possible Cornerstone Selective)- Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- CGT 35300 - Principles Of Interactive And Dynamic Media **Credits: 3.00**
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I **Credits: 2.00**
- MGMT 45500 - Legal Background For Business I **Credits: 3.00** ♦
- Humanities Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

16 Credits

Spring 4th Year

- CGT 41201 - Contemporary Problems In Applied Computer Graphics II **Credits: 2.00**
- CGT 45001 - Computer Graphics Professional Practices II **Credits: 1.00**
- Elective - Credit Hours: 3.00
- Communication Selective (possible Cornerstone Selective)- Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

12 Credits

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Pre-Requisite Information

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Disclaimer

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Program Information

Animation And Visual Effects & Themed Entertainment Design Supplemental Information

This supplemental Information can be used for both Animation and Visual Effects, BS and Themed and Entertainment Design, BS.

CGT Entertainment Selectives

- CGT 10501 - Introduction To Games **Credits: 3.00**
- CGT 21500 - Computer Graphics Programming I **Credits: 3.00**
- CGT 24500 - Game Development I: Core Skills And Technologies **Credits: 3.00**
- CGT 24600 - Compositing I **Credits: 3.00**
- CGT 24700 - Visual Effects - Particles And Procedural Effects **Credits: 3.00**
- CGT 25500 - Game Development II: Design And Psychology **Credits: 3.00**
- CGT 27001 - Topics In Data Visualization **Credits: 1.00**
- CGT 27500 - Data Visualization II **Credits: 3.00**
- CGT 29000 - Computer Graphics **Credits: 1.00 to 3.00**
- CGT 31000 - Drawing, Acting And Scripts For Animation **Credits: 3.00**

- CGT 31500 - Computer Graphics Programming II **Credits: 3.00**
- CGT 32101 - Digital Illustration **Credits: 3.00**
- CGT 32500 - Animation For Games **Credits: 3.00**
- CGT 33300 - Modeling For Entertainment Graphics **Credits: 3.00**
- CGT 33500 - Game Scripting **Credits: 3.00**
- CGT 34000 - Digital Lighting And Rendering For Computer Animation **Credits: 3.00**
- CGT 34100 - Motion For Computer Animation **Credits: 3.00**
- CGT 34500 - Game Development III: Environment Modeling For Games **Credits: 3.00**
- CGT 34600 - Digital Video And Audio **Credits: 3.00**
- CGT 34800 - Photorealistic Shaders **Credits: 3.00**
- CGT 35300 - Principles Of Interactive And Dynamic Media **Credits: 3.00**
- CGT 35600 - Web Programming, Development And Data Integration **Credits: 3.00**
- CGT 36500 - Game Development Practicum **Credits: 3.00**
- CGT 37000 - Interactive Data Visualization **Credits: 3.00**
- CGT 37500 - Game Audio **Credits: 3.00**
- CGT 37700 - Scientific Visualization **Credits: 3.00**
- CGT 38500 - Game Production **Credits: 3.00**
- CGT 39000 - Computer Graphics **Credits: 1.00 to 3.00**
- CGT 44500 - Game Development IV: Procedural Asset Creation For Games **Credits: 3.00**
- CGT 45600 - Advanced Web Programming, Development And Data Integration **Credits: 3.00**
- CGT 47000 - Data Visualization Studio **Credits: 3.00**
- CGT 49000 - Computer Graphics **Credits: 1.00 to 3.00**
- CGT 49100 - Special Topics In Computer Graphics **Credits: 1.00 to 6.00**

Advanced English Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00**
- ENGL 30400 - Advanced Composition **Credits: 3.00**
- ENGL 41900 - Multimedia Writing **Credits: 3.00**
- ENGL 42000 - Business Writing **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**

Statistics Selective

- IET 31600 - Statistical Quality Control **Credits: 3.00**
- PSY 20100 - Introduction To Statistics In Psychology **Credits: 3.00**
- STAT 22500 - Introduction To Probability Models **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- STAT 35000 - Introduction To Statistics **Credits: 3.00**

Technical Elective

Any Course within the Purdue Polytechnic Institute, Engineering, Management, or Science. Subjects include: AAE, ABE, AFT, ASTR, AT, BCHM, BCM, BIOL, BME, BMS, CE, CGT, CHE, CHM, CLPH, CM, CNIT, CPB, CS, EAPS, ECE, ECET, ECON, EEE, ENE, ENFY, ENGR, ENGT, ENTM, ENTR, EPCS, GEP, IDE, IE, IET, EPPH, IT, MA, MCMP, ME, MET, MFET, MGMT, MSE, MSL, NS, NUCL, NUPH, NUR, OBHR, OLS, PHPR, PHRM, PHYS, PTEC, SCI, STAT, TECH, & TLI.

Humanities Elective

Possible Cornerstone Selective. See Cornerstone Certificate.

Any Course within the Purdue College of Liberal Arts. Subjects include: AAS, AD, AMST, ANTH, ARAB, ASAM, ASL, CHNS, CLCS, CMPL, COM, DANC, ENGL, FR, FVS, GER, GREK, GS, GSLA, HEBR, HIST, IDIS, ITAL, JPNS, JWST, KOR, LALS, LATN, LC, LING, MARS, MUS, PHIL, POL, PTGS, REL, RUSS, SCLA, SOC, SPAN, THTR, & WGSS.

Human Cultures: Humanities (HUM) Core

Possible Cornerstone Selective. See Cornerstone Certificate.

Any Human Cultures: Humanities (HUM) allowed. Crossing with Cornerstone Certificate strongly recommended.

- Approved Human Cultures: Humanities Core Courses

Human Cultures: Behavioral/Social Science (BSS) Core

Possible Cornerstone Selective. See Cornerstone Certificate.

Any Human Cultures: Behavioral/Social Science (BSS) allowed. Crossing with Cornerstone Certificate strongly recommended.

- Approved Human Cultures: Behavioral/Social Science Core Courses

CGT Globalization Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- AAS 27100 - Introduction To African American Studies **Credits:** 3.00
- AAS 37300 - Issues In African American Studies **Credits:** 3.00
- AGR 20100 - Communicating Across Culture **Credits:** 3.00
- ANSC 38100 - Leadership For A Diverse Workplace **Credits:** 3.00
- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits:** 3.00
- ANTH 20500 - Human Cultural Diversity **Credits:** 3.00
- ANTH 21000 - Technology And Culture **Credits:** 3.00
- ANTH 21200 - Culture, Food And Health **Credits:** 3.00
- ANTH 23000 - Gender Across Cultures **Credits:** 3.00
- ANTH 34000 - Global Perspectives On Health **Credits:** 3.00
- ANTH 34100 - Culture And Personality **Credits:** 3.00
- ANTH 37900 - Native American Cultures **Credits:** 3.00
- ARAB 28000 - Arabic Culture **Credits:** 3.00

- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- AT 23300 - Ethics And Aviation **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- COM 42300 - Leadership, Communication And Organizations **Credits: 3.00**
- ECET 29000 - International Experience **Credits: 1.00 to 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 23500 - Learning And Motivation **Credits: 2.00 or 3.00**
- EDPS 30000 - Student Leadership Development **Credits: 1.00 to 3.00**
- EDPS 30100 - Peer Counseling Training **Credits: 1.00 to 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- EDPS 31700 - Collaborative Leadership: Mentoring **Credits: 3.00**
- ENGL 41400 - Studies In Literature And Culture **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HDFS 33200 - Stress And Coping In Contemporary Families **Credits: 3.00**
- HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits: 3.00**
- HIST 33805 - History Of Human Rights **Credits: 3.00**
- HIST 35000 - Science And Society In The Twentieth Century World **Credits: 3.00**
- HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
- HIST 37700 - History And Culture Of Native America **Credits: 3.00**
- HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
- HTM 37000 - Sustainable Tourism And Responsible Travel **Credits: 3.00**
- HTM 37200 - Global Tourism Geography **Credits: 3.00**
- MSL 20100 - Leadership And Ethics **Credits: 2.00 to 3.00**
- OLS 35000 - Creativity In Business And Industry **Credits: 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 43500 - Philosophy Of Mind **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 32600 - Black Political Participation In America **Credits: 3.00**
- POL 32700 - Global Green Politics **Credits: 3.00**
- POL 36000 - Women And The Law **Credits: 3.00**
- POL 41300 - Analysis Of Political Attitudes And Behavior **Credits: 3.00**
- POL 42300 - International Environmental Policy **Credits: 3.00**
- POL 42900 - Contemporary Political Problems **Credits: 3.00**
- POL 43300 - International Organization **Credits: 3.00**
- PSY 12000 - Elementary Psychology **Credits: 3.00**
- PUBH 23500 - Stress And Human Health **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- SOC 31000 - Race And Ethnicity **Credits: 3.00**
- SOC 33900 - Sociology Of Global Development **Credits: 3.00**
- SYS 30000 - It's A Complex World - Addressing Global Challenges **Credits: 3.00**

- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
- WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**
- WGSS 38300 - Women, Work, And Labor **Credits: 3.00**
- Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

Other Requirements:

Intercultural Requirement:

1. Complete Intercultural Development Inventory (IDI) Pre-test and Post-Test
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre-test and Post Test
3. Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

Humanities Requirement (1 required):

1. Participation in Computational Arts Circle
2. Complete courses within major that have Humanities Integrated into their assignments
3. Complete course within major that have partnered with Humanities Professor
4. Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

Professional Requirement (1 required):

1. Complete an Internship
2. Complete a Co-op
3. Employment during the academic year related to Major Field of Study
4. Complete an in-class internship-like experience created by Major
5. Student Proposed Alternative: must be commensurate with the expectations of Professional Requirements related to Major Field of Study

Change of Major Approved Course Substitutions

CGT 21500

- CS 15900 - C Programming **Credits: 3.00**
CS 15800 - C Programming
- CS 18000 - Problem Solving And Object-Oriented Programming **Credits: 4.00**

ECON 21000

- AGECE 21700 - Economics **Credits: 3.00**

- ECON 25100 - Microeconomics **Credits: 3.00**
- ECON 25200 - Macroeconomics **Credits: 3.00**

MA 16010

- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00**
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00**
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**

MGMT 45500

- MGMT 25400 - Legal Foundations Of Business I **Credits: 3.00**

PHYS 22000

- PHYS 17200 - Modern Mechanics **Credits: 4.00**
- PHYS 21400 - The Nature Of Physics **Credits: 3.00**
- PHYS 24100 - Electricity And Optics **Credits: 3.00**

SCLA 10100

ENGL 10100 - English Composition I

ENGL 10400 - English Composition I

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00**

SCLA 10200

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- COM 21700 - Science Writing And Presentation **Credits: 3.00**

TECH 12000

- ENGR 13100 - Transforming Ideas To Innovation I **Credits: 2.00** and
- ENGR 13200 - Transforming Ideas To Innovation II **Credits: 2.00**

Technical Electives

- AD 10500 - Design I **Credits: 3.00**
- AD 11300 - Basic Drawing **Credits: 3.00**
- AD 12500 - Introduction To Interior Design **Credits: 3.00**
- AD 21300 - Life Drawing I **Credits: 3.00**
- AD 22700 - History Of Art Since 1400 **Credits: 3.00**
- AD 25500 - Art Appreciation **Credits: 3.00**

- AD 26200 - Jewelry And Metalwork I **Credits:** 3.00
- AD 38300 - Modern Art **Credits:** 3.00

UX 37207

- CGT 49800 - Undergraduate Research In Computer Graphics Technology **Credits:** 1.00 to 3.00
- CGT 51200 - Foundational Readings Of User Experience Design **Credits:** 3.00
- CGT 56200 - Cognition And Human-Computer Interaction **Credits:** 3.00
- CGT 58100 - Workshop In Computer Graphics Technology **Credits:** 0.00 to 8.00
- TECH 39699 - Professional Practice Internship **Credits:** 0.00 to 3.00

Building Information Modeling Supplemental Information

CGT Selectives:

Entertainment - Animation & Visual Effects, Games

- CGT 10501 - Introduction To Games **Credits:** 3.00
- CGT 11200 - Sketching For Visualization And Communication **Credits:** 3.00
- CGT 11600 - Geometric Modeling For Visualization And Communication **Credits:** 3.00
- CGT 12300 - Animation Foundations **Credits:** 3.00
- CGT 14700 - Visual Effects Introduction **Credits:** 3.00
- CGT 24100 - Introduction To Computer Animation **Credits:** 3.00
- CGT 24500 - Game Development I: Core Skills And Technologies **Credits:** 3.00
- CGT 24600 - Compositing I **Credits:** 3.00
- CGT 24700 - Visual Effects - Particles And Procedural Effects **Credits:** 3.00
- CGT 25500 - Game Development II: Design And Psychology **Credits:** 3.00
- CGT 29000 - Computer Graphics **Credits:** 1.00 to 3.00
- CGT 31000 - Drawing, Acting And Scripts For Animation **Credits:** 3.00
- CGT 32101 - Digital Illustration **Credits:** 3.00
- CGT 32500 - Animation For Games **Credits:** 3.00
- CGT 33300 - Modeling For Entertainment Graphics **Credits:** 3.00
- CGT 33500 - Game Scripting **Credits:** 3.00
- CGT 34000 - Digital Lighting And Rendering For Computer Animation **Credits:** 3.00
- CGT 34100 - Motion For Computer Animation **Credits:** 3.00
- CGT 34500 - Game Development III: Environment Modeling For Games **Credits:** 3.00
- CGT 34600 - Digital Video And Audio **Credits:** 3.00
- CGT 34800 - Photorealistic Shaders **Credits:** 3.00
- CGT 37500 - Game Audio **Credits:** 3.00
- CGT 38500 - Game Production **Credits:** 3.00
- CGT 39000 - Computer Graphics **Credits:** 1.00 to 3.00
- CGT 44200 - Production For Computer Animation **Credits:** 3.00
- CGT 44500 - Game Development IV: Procedural Asset Creation For Games **Credits:** 3.00
- CGT 49000 - Computer Graphics **Credits:** 1.00 to 3.00
- CGT 49100 - Special Topics In Computer Graphics **Credits:** 1.00 to 6.00

Data Visualization

- CGT 27000 - Introduction To Data Visualization **Credits: 3.00**
- CGT 27001 - Topics In Data Visualization **Credits: 1.00**
- CGT 27500 - Data Visualization II **Credits: 3.00**
- CGT 37000 - Interactive Data Visualization **Credits: 3.00**
- CGT 37700 - Scientific Visualization **Credits: 3.00**
- CGT 47000 - Data Visualization Studio **Credits: 3.00**

Digital Enterprise Systems

Web Programming & Design

- CGT 31500 - Computer Graphics Programming II **Credits: 3.00**
- CGT 35300 - Principles Of Interactive And Dynamic Media **Credits: 3.00**
- CGT 35600 - Web Programming, Development And Data Integration **Credits: 3.00**
- CGT 45600 - Advanced Web Programming, Development And Data Integration **Credits: 3.00**

Advanced English Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00**
- ENGL 30400 - Advanced Composition **Credits: 3.00**
- ENGL 41900 - Multimedia Writing **Credits: 3.00**
- ENGL 42000 - Business Writing **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**

Communication Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- COM 30000 or 40000 Level

Management Selective

Any course in Economics (ECON), Entrepreneurship (ENTR), Management (MGMT), Organizational Behavior & Human Resources (OBHR), Organizational Leadership & Supervision (OLS), or Technology, Leadership & Innovation (TLI). CSR 10300 & CSR 34200 also allowed.

Statistics Selective

- IET 31600 - Statistical Quality Control **Credits: 3.00**
- PSY 20100 - Introduction To Statistics In Psychology **Credits: 3.00**
- STAT 22500 - Introduction To Probability Models **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**

- STAT 35000 - Introduction To Statistics **Credits: 3.00**

Technical Elective

Any Course within the Purdue Polytechnic Institute, Engineering, Management, or Science. Subjects include: AAE, ABE, AFT, ASTR, AT, BCHM, BCM, BIOL, BME, BMS, CE, CGT, CHE, CHM, CLPH, CM, CNIT, CPB, CS, EAPS, ECE, ECET, ECON, EEE, ENE, ENFY, ENGR, ENGT, ENTM, ENTR, EPCS, GEP, IDE, IE, IET, EPPH, IT, MA, MCMP, ME, MET, MFET, MGMT, MSE, MSL, NS, NUCL, NUPH, NUR, OBHR, OLS, PHPR, PHRM, PHYS, PTEC, SCI, STAT, TECH, & TLI.

Humanities Elective

Possible Cornerstone Selective. See Cornerstone Certificate.

Any Course within the Purdue College of Liberal Arts. Subjects include: AAS, AD, AMST, ANTH, ARAB, ASAM, ASL, CHNS, CLCS, CMPL, COM, DANC, ENGL, FR, FVS, GER, GREK, GS, GSLA, HEBR, HIST, IDIS, ITAL, JPNS, JWST, KOR, LALS, LATN, LC, LING, MARS, MUS, PHIL, POL, PTGS, REL, RUSS, SCLA, SOC, SPAN, THTR, & WGSS.

Human Cultures: Behavioral/Social Science (BSS) Core

Possible Cornerstone Selective. See Cornerstone Certificate.

Any Human Cultures: Behavioral/Social Science allowed. Crossing with Cornerstone Certificate strongly recommended.

Approved Human Cultures: Behavioral/Social Science Core Courses

Human Cultures: Humanities (HUM) Core

Possible Cornerstone Selective. See Cornerstone Certificate.

Any Human Cultures: Humanities allowed. Crossing with Cornerstone Certificate strongly recommended.

Approved Human Cultures: Humanities Core Courses

Science (SCI) Core

Approved Science Core Courses

Science, Technology & Society (STS) Core

CGT 17208 UX Design Studio I Fundamentals - Required

CGT Globalization Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- AAS 27100 - Introduction To African American Studies **Credits: 3.00**
- AAS 37300 - Issues In African American Studies **Credits: 3.00**
- AGR 20100 - Communicating Across Culture **Credits: 3.00**

- ANSC 38100 - Leadership For A Diverse Workplace **Credits: 3.00**
- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21000 - Technology And Culture **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 34100 - Culture And Personality **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- ARAB 28000 - Arabic Culture **Credits: 3.00**
- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- AT 23300 - Ethics And Aviation **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- COM 42300 - Leadership, Communication And Organizations **Credits: 3.00**
- ECET 29000 - International Experience **Credits: 1.00 to 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 23500 - Learning And Motivation **Credits: 2.00 or 3.00**
- EDPS 30000 - Student Leadership Development **Credits: 1.00 to 3.00**
- EDPS 30100 - Peer Counseling Training **Credits: 1.00 to 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- EDPS 31700 - Collaborative Leadership: Mentoring **Credits: 3.00**
- ENGL 41400 - Studies In Literature And Culture **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HDFS 33200 - Stress And Coping In Contemporary Families **Credits: 3.00**
- HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits: 3.00**
- HIST 33805 - History Of Human Rights **Credits: 3.00**
- HIST 35000 - Science And Society In The Twentieth Century World **Credits: 3.00**
- HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
- HIST 37700 - History And Culture Of Native America **Credits: 3.00**
- HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
- HTM 37200 - Global Tourism Geography **Credits: 3.00**
- MSL 20100 - Leadership And Ethics **Credits: 2.00 to 3.00**
- OLS 35000 - Creativity In Business And Industry **Credits: 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 43500 - Philosophy Of Mind **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 32600 - Black Political Participation In America **Credits: 3.00**
- POL 32700 - Global Green Politics **Credits: 3.00**
- POL 36000 - Women And The Law **Credits: 3.00**
- POL 41300 - Analysis Of Political Attitudes And Behavior **Credits: 3.00**

- POL 42300 - International Environmental Policy **Credits: 3.00**
- POL 42900 - Contemporary Political Problems **Credits: 3.00**
- POL 43300 - International Organization **Credits: 3.00**
- PSY 12000 - Elementary Psychology **Credits: 3.00**
- PUBH 23500 - Stress And Human Health **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- SOC 31000 - Race And Ethnicity **Credits: 3.00**
- SOC 33900 - Sociology Of Global Development **Credits: 3.00**
- SYS 30000 - It's A Complex World - Addressing Global Challenges **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
- WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**
- WGSS 38300 - Women, Work, And Labor **Credits: 3.00**
- Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

Other Requirements:

Intercultural Requirement:

1. Complete Intercultural Development Inventory (IDI) Pre-test and Post Test
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre-test and Post Test
3. Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

Humanities Requirement (1 required):

1. Participation in Computational Arts Circle
2. Complete courses within major that have Humanities Integrated into their assignments
3. Complete course within major that have partnered with Humanities Professor
4. Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

Professional Requirement (1 required):

1. Complete an Internship
2. Complete a Co-op
3. Employment during the academic year related to Major Field of Study
4. Complete an in-class internship-like experience created by Major
5. Student Proposed Alternative: must be commensurate with the expectations of Professional Requirements related to Major Field of Study

CGT Globalization Selective

Choose from:

- AAS 27100 - Introduction To African American Studies **Credits: 3.00**
- AAS 37300 - Issues In African American Studies **Credits: 3.00**
- AGR 20100 - Communicating Across Culture **Credits: 3.00**
- ANSC 38100 - Leadership For A Diverse Workplace **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- ARAB 28000 - Arabic Culture **Credits: 3.00**
- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- AT 23300 - Ethics And Aviation **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- ECET 29000 - International Experience **Credits: 1.00 to 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 30100 - Peer Counseling Training **Credits: 1.00 to 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31700 - Collaborative Leadership: Mentoring **Credits: 3.00**
- ENGL 41400 - Studies In Literature And Culture **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HDFS 33200 - Stress And Coping In Contemporary Families **Credits: 3.00**
- HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
- HIST 33805 - History Of Human Rights **Credits: 3.00**
- HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
- HIST 37700 - History And Culture Of Native America **Credits: 3.00**
- HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
- HIST 49900 - History Internship **Credits: 1.00 to 3.00**
- HTM 37000 - Sustainable Tourism And Responsible Travel **Credits: 3.00**
- HTM 37200 - Global Tourism Geography **Credits: 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 43500 - Philosophy Of Mind **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 32600 - Black Political Participation In America **Credits: 3.00**
- POL 36000 - Women And The Law **Credits: 3.00**
- POL 42900 - Contemporary Political Problems **Credits: 3.00**
- PSY 12000 - Elementary Psychology **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- SOC 31000 - Race And Ethnicity **Credits: 3.00**
- SOC 33900 - Sociology Of Global Development **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**

- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
- WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**
- WGSS 38300 - Women, Work, And Labor **Credits: 3.00**
- Any Foreign Language course 20100,20200,30100,30200,40100,4020

CGT Supplemental Selectives

CGT Selectives:

Animation

- CGT 24100 - Introduction To Computer Animation **Credits: 3.00**
- CGT 34100 - Motion For Computer Animation **Credits: 3.00**

Building Information Modeling

- CM 26200 - Introduction To Construction Graphics **Credits: 3.00**
- CM 36000 - Applications Of Construction Documentation I **Credits: 3.00**
- CM 46000 - Building Information Modeling For Commercial Construction **Credits: 3.00**
- CM 46200 - Applications Of Construction Documentation II **Credits: 3.00**

Effects Technical Direction

- CGT 14700 - Visual Effects Introduction **Credits: 3.00**
- CGT 24600 - Compositing I **Credits: 3.00**
- CGT 24700 - Visual Effects - Particles And Procedural Effects **Credits: 3.00**
- CGT 24800 - Visual Effects - Pyrotechnics And Destruction Effects **Credits: 3.00**
- CGT 34800 - Photorealistic Shaders **Credits: 3.00**

Game Development & Design

- CGT 24500 - Game Development I: Core Skills And Technologies **Credits: 3.00**
- CGT 25500 - Game Development II: Design And Psychology **Credits: 3.00**
- CGT 34500 - Game Development III: Environment Modeling For Games **Credits: 3.00**
- CGT 44500 - Game Development IV: Procedural Asset Creation For Games **Credits: 3.00**

Visual Effects Compositing

- CGT 24600 - Compositing I **Credits: 3.00**
- CGT 34600 - Digital Video And Audio **Credits: 3.00**

Virtual Product Integration

- MFET 10301 - Geometric Modeling Applications **Credits: 3.00**
- MFET 11301 - Product Data Management **Credits: 3.00**
- MFET 20301 - Model-Based Definition **Credits: 3.00**
- MFET 21301 - Simulation And Visualization Applications **Credits: 3.00**
- MFET 30301 - Digital Manufacturing **Credits: 3.00**
- COURSE MISSING>>>

Web Programming & Design

- CGT 25600 - Principles Of User Experience Design **Credits: 3.00**
- CGT 35300 - Principles Of Interactive And Dynamic Media **Credits: 3.00**
- CGT 45600 - Advanced Web Programming, Development And Data Integration **Credits: 3.00**

Advanced English Selective

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00**
- ENGL 30400 - Advanced Composition **Credits: 3.00**
- ENGL 41900 - Multimedia Writing **Credits: 3.00**
- ENGL 42000 - Business Writing **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**

Communication Selective

- COM 30000 or 40000 Level

Management Selective

- Any course in Economics (ECON), Entrepreneurship (ENTR), Management (MGMT), Organizational Behavior & Human Resources (OBHR), Organizational Leadership & Supervision (OLS), or Technology, Leadership & Innovation (TLI).

Technical Elective

- Any course within the Purdue Polytechnic Institute, Engineering, Management, or Science.

Human Cultures: Humanities Core

Approved Humanities Core Courses

Science Foundational Selective Core

Approved Science Core Courses

CGT Globalization Selective

- AAS 27100 - Introduction To African American Studies **Credits: 3.00**
- AAS 37300 - Issues In African American Studies **Credits: 3.00**
- AGR 20100 - Communicating Across Culture **Credits: 3.00**
- ANSC 38100 - Leadership For A Diverse Workplace **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- ARAB 28000 - Arabic Culture **Credits: 3.00**
- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- AT 23300 - Ethics And Aviation **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- ECET 29000 - International Experience **Credits: 1.00 to 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 30100 - Peer Counseling Training **Credits: 1.00 to 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31700 - Collaborative Leadership: Mentoring **Credits: 3.00**
- ENGL 41400 - Studies In Literature And Culture **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HDFS 33200 - Stress And Coping In Contemporary Families **Credits: 3.00**
- HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
- HIST 33805 - History Of Human Rights **Credits: 3.00**
- HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
- HIST 37700 - History And Culture Of Native America **Credits: 3.00**
- HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
- HTM 37000 - Sustainable Tourism And Responsible Travel **Credits: 3.00**
- HTM 37200 - Global Tourism Geography **Credits: 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 43500 - Philosophy Of Mind **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 32600 - Black Political Participation In America **Credits: 3.00**
- POL 36000 - Women And The Law **Credits: 3.00**
- POL 42900 - Contemporary Political Problems **Credits: 3.00**
- PSY 12000 - Elementary Psychology **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- SOC 31000 - Race And Ethnicity **Credits: 3.00**
- SOC 33900 - Sociology Of Global Development **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
- WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**

- WGSS 38300 - Women, Work, And Labor **Credits: 3.00**
- Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

Other Requirements:

Intercultural Requirement:

1. Complete Intercultural Development Inventory (IDI) Pre and Post Tests
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre and Post Tests
3. Complete Intercultural Knowledge and effectiveness (IKE)
4. Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

Humanities Requirement (1 required):

1. Participation in Computational Arts Circle
2. Complete courses within major that have Humanities Integrated into their assignments
3. Complete course within major that have partnered with Humanities Professor
4. Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

Professional Requirement (1 required):

1. Complete an Internship
2. Complete a Co-op
3. Employment during the academic year related to Major Field of Study
4. Complete an in-class internship-like experience created by Major
5. Student Proposed Alternative: must be commensurate with the expectations of Professional Requirements related to Major Field of Study

Computer Graphics Technology Supplemental Information

CGT Selectives

- 10000 Selective
- CGT 11100 - Designing For Visualization And Communication **Credits: 3.00**
- CGT 11600 - Geometric Modeling For Visualization And Communication **Credits: 3.00**

Product Lifecycle Management

- CGT 22600 - Introduction To Constraint-Based Modeling **Credits: 3.00**
- CGT 32600 - Graphics Standards For Product Definition **Credits: 3.00**
- CGT 42300 - Product Data Management **Credits: 3.00**
- CGT 42600 - Industry Applications Of Simulation And Visualization **Credits: 3.00**

Computer Animation

- CGT 24100 - Introduction To Computer Animation **Credits: 3.00**
- CGT 34000 - Digital Lighting And Rendering For Computer Animation **Credits: 3.00**
- CGT 34100 - Motion For Computer Animation **Credits: 3.00**
- CGT 34600 - Digital Video And Audio **Credits: 3.00**
- CGT 44200 - Production For Computer Animation **Credits: 3.00**
- CGT 44600 - Post-Production And Special Effects For Computer Animation **Credits: 3.00**

Construction Graphics

- CM 26200 - Introduction To Construction Graphics **Credits: 3.00**
- CM 36000 - Applications Of Construction Documentation I **Credits: 3.00**
- CM 46000 - Building Information Modeling For Commercial Construction **Credits: 3.00**
- CM 46200 - Applications Of Construction Documentation II **Credits: 3.00**

Web Programming, Gaming & Design

- CGT 25600 - Principles Of User Experience Design **Credits: 3.00**
- CGT 31500 - Computer Graphics Programming II **Credits: 3.00**
- CGT 34500 - Game Development III: Environment Modeling For Games **Credits: 3.00**
- CGT 35300 - Principles Of Interactive And Dynamic Media **Credits: 3.00**
- CGT 35600 - Web Programming, Development And Data Integration **Credits: 3.00**
- CGT 44500 - Game Development IV: Procedural Asset Creation For Games **Credits: 3.00**
- CGT 45600 - Advanced Web Programming, Development And Data Integration **Credits: 3.00**

Technical Elective

Any course within the Purdue Polytechnic, Engineering, Management, or Science.

Human Cultures: Humanities Core

See the Humanities Core Courses approved list [here](#).

Communication Selective

COM 30000 or 40000 level

Advanced English Selective

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00**
- ENGL 30400 - Advanced Composition **Credits: 3.00**
- ENGL 41900 - Multimedia Writing **Credits: 3.00**
- ENGL 42000 - Business Writing **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**

Science Foundational Selective Core

See <http://www.purdue.edu/provost/initiatives/curriculum/course.html> for approved Science Core Courses.

Statistics Selective

- STAT 22500 - Introduction To Probability Models **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- STAT 35000 - Introduction To Statistics **Credits: 3.00**
- PSY 20100 - Introduction To Statistics In Psychology **Credits: 3.00**
- IET 31600 - Statistical Quality Control **Credits: 3.00**

Management Selective

Any course in Organizational Leadership & Supervision (OLS), Management (MGMT), Economics (ECON), Entrepreneurship (ENTR), or Organizational Behavior & Human Resources (OBHR)

CGT Globalization Selective

- AD 25500 - Art Appreciation **Credits: 3.00**
- AD 45400 - Modern Architecture **Credits: 3.00**
- AGECE 25000 - Economic Geography Of World Food And Resources **Credits: 3.00**
- ANTH 10000 - Being Human: Introduction To Anthropology **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 31200 - The Archaeology Of Ancient Egypt And The Near East **Credits: 3.00**
- ANTH 32700 - Environment And Culture **Credits: 3.00**
- ANTH 33600 - Human Variation **Credits: 3.00**
- ANTH 38000 - Using Anthropology In The World **Credits: 3.00**
- ARAB 23000 - Arabic Literature In Translation **Credits: 3.00**
- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- ASAM 34000 - Contemporary Issues In Asian American Studies **Credits: 3.00**
- CHNS 28000 - Topics In Chinese Civilization And Culture **Credits: 3.00**
- CLCS 18100 - Classical World Civilizations **Credits: 3.00**
- CLCS 23100 - Survey Of Latin Literature **Credits: 3.00**
- CLCS 28000 - Topics In Classical Civilization **Credits: 3.00**
- CLCS 38500 - Science, Medicine And Magic In The Ancient West **Credits: 3.00**
- CMPL 23000 - Crossing Borders: Introduction To Comparative Literature **Credits: 3.00**
- CMPL 26600 - World Literature: From The Beginnings To 1700 A D **Credits: 3.00**
- CMPL 26700 - World Literature: From 1700 A D To The Present **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- EAPS 37500 - Great Issues - Fossil Fuels, Energy And Society **Credits: 3.00**

- EEE 35500 - Engineering Environmental Sustainability **Credits: 3.00**
- ENGL 23000 - Great Narrative Works **Credits: 3.00**
- ENGL 24000 - British Literature Before 1789 **Credits: 3.00**
- ENGL 24100 - British Literature After 1789 **Credits: 3.00**
- ENGL 26600 - World Literature: From The Beginnings To 1700 A.D. **Credits: 3.00**
- ENGL 26700 - World Literature: From 1700 A.D. To The Present **Credits: 3.00**
- ENGL 34100 - Topics In Science, Literature, And Culture **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HEBR 28400 - Ancient Near Eastern History And Culture **Credits: 3.00**
- HIST 10300 - Introduction To The Medieval World **Credits: 3.00**
- HIST 10400 - Introduction To The Modern World **Credits: 3.00**
- HIST 10500 - Survey Of Global History **Credits: 3.00**
- HIST 24100 - East Asia In The Modern World **Credits: 3.00**
- HIST 24300 - South Asian History And Civilizations **Credits: 3.00**
- HIST 25000 - United States Relations With The Middle East And North Africa **Credits: 3.00**
- HIST 27200 - Introduction To Modern Latin American History (1810 To The Present) **Credits: 3.00**
- HIST 31700 - A History Of The Christian Church And The Expansion Of Christianity I **Credits: 3.00**
- HIST 32900 - History Of Women In Modern Europe **Credits: 3.00**
- HIST 33400 - Science And Society In Western Civilization II **Credits: 3.00**
- HIST 35100 - The Second World War **Credits: 3.00**
- HIST 37500 - Women In America Since 1870 **Credits: 3.00**
- JPNS 28000 - Introduction To Modern Japanese Civilization **Credits: 3.00**
- JWST 33000 - Introduction To Jewish Studies **Credits: 3.00**
- LC 23500 - East Asian Literature In Translation **Credits: 3.00**
- LC 23900 - Women Writers In Translation **Credits: 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 20600 - Introduction To Philosophy Of Religion **Credits: 3.00**
- PHIL 21900 - Philosophy And The Meaning Of Life **Credits: 3.00**
- PHIL 24000 - Social And Political Philosophy **Credits: 3.00**
- PHIL 24200 - Philosophy, Culture, And The African American Experience **Credits: 3.00**
- PHIL 27000 - Biomedical Ethics **Credits: 3.00**
- PHIL 29000 - Environmental Ethics **Credits: 3.00**
- POL 13000 - Introduction To International Relations **Credits: 3.00**
- POL 14100 - Governments Of The World **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 32700 - Global Green Politics **Credits: 3.00**
- POL 23000 - Introduction To Peace Science **Credits: 3.00**
- POL 23100 - Introduction To United States Foreign Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 23700 - Modern Weapons And International Relations **Credits: 3.00**
- POL 34500 - West European Democracies In The Post-Industrial Era **Credits: 3.00**
- POL 34800 - East Asian Politics **Credits: 3.00**
- SOC 33800 - Global Social Movements **Credits: 3.00**
- SOC 33900 - Sociology Of Global Development **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**

Any foreign language course of 201, 202, 301, 302, 401, 402, or 235

Any Study Abroad experience on your Purdue Transcript

Data Visualization Supplemental Information

CGT Selectives:

Entertainment: Animation & Visual Effects, Games

- CGT 10501 - Introduction To Games **Credits: 3.00**
- CGT 11200 - Sketching For Visualization And Communication **Credits: 3.00**
- CGT 12300 - Animation Foundations **Credits: 3.00**
- CGT 14700 - Visual Effects Introduction **Credits: 3.00**
- CGT 24100 - Introduction To Computer Animation **Credits: 3.00**
- CGT 24500 - Game Development I: Core Skills And Technologies **Credits: 3.00**
- CGT 24600 - Compositing I **Credits: 3.00**
- CGT 24700 - Visual Effects - Particles And Procedural Effects **Credits: 3.00**
- CGT 25500 - Game Development II: Design And Psychology **Credits: 3.00**
- CGT 29000 - Computer Graphics **Credits: 1.00 to 3.00**
- CGT 31000 - Drawing, Acting And Scripts For Animation **Credits: 3.00**
- CGT 32101 - Digital Illustration **Credits: 3.00**
- CGT 32500 - Animation For Games **Credits: 3.00**
- CGT 33300 - Modeling For Entertainment Graphics **Credits: 3.00**
- CGT 33500 - Game Scripting **Credits: 3.00**
- CGT 34000 - Digital Lighting And Rendering For Computer Animation **Credits: 3.00**
- CGT 34100 - Motion For Computer Animation **Credits: 3.00**
- CGT 34500 - Game Development III: Environment Modeling For Games **Credits: 3.00**
- CGT 34600 - Digital Video And Audio **Credits: 3.00**
- CGT 34800 - Photorealistic Shaders **Credits: 3.00**
- CGT 36500 - Game Development Practicum **Credits: 3.00**
- CGT 37500 - Game Audio **Credits: 3.00**
- CGT 37700 - Scientific Visualization **Credits: 3.00**
- CGT 38500 - Game Production **Credits: 3.00**
- CGT 39000 - Computer Graphics **Credits: 1.00 to 3.00**
- CGT 44200 - Production For Computer Animation **Credits: 3.00**
- CGT 44500 - Game Development IV: Procedural Asset Creation For Games **Credits: 3.00**
- CGT 49000 - Computer Graphics **Credits: 1.00 to 3.00**
- CGT 49100 - Special Topics In Computer Graphics **Credits: 1.00 to 6.00**

Building Information Modeling

- CM 26000 - Introduction To Modeling For BIM **Credits: 3.00**
- CM 26200 - Introduction To Construction Graphics **Credits: 3.00**
- CM 36000 - Applications Of Construction Documentation I **Credits: 3.00**
- CM 46000 - Building Information Modeling For Commercial Construction **Credits: 3.00**
- CM 46200 - Applications Of Construction Documentation II **Credits: 3.00**

Digital Enterprise Systems

- MFET 10301 - Geometric Modeling Applications **Credits: 3.00**
- MFET 11301 - Product Data Management **Credits: 3.00**
- MFET 20301 - Model-Based Definition **Credits: 3.00**
- MFET 21301 - Simulation And Visualization Applications **Credits: 3.00**
- MFET 30301 - Digital Manufacturing **Credits: 3.00**
- MFET 31301 - The Business Of Managing Digital Product Data **Credits: 3.00**

Web Programming & Design

- CGT 31500 - Computer Graphics Programming II **Credits: 3.00**
- CGT 35300 - Principles Of Interactive And Dynamic Media **Credits: 3.00**
- CGT 35600 - Web Programming, Development And Data Integration **Credits: 3.00**
- CGT 45600 - Advanced Web Programming, Development And Data Integration **Credits: 3.00**

Advanced English Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00**
- ENGL 30400 - Advanced Composition **Credits: 3.00**
- ENGL 41900 - Multimedia Writing **Credits: 3.00**
- ENGL 42000 - Business Writing **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**

Communication Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- COM 30000 or 40000 Level

Management Selective

Any course in Economics (ECON), Entrepreneurship (ENTR), Management (MGMT), Organizational Behavior & Human Resources (OBHR), Organizational Leadership & Supervision (OLS), or Technology, Leadership & Innovation (TLI). CSR 10300 & CSR 34200 also allowed.

Technical Elective

Any Course within the Purdue Polytechnic Institute, Engineering, Management, or Science. Subjects include: AAE, ABE, AFT, ASTR, AT, BCHM, BCM, BIOL, BME, BMS, CE, CGT, CHE, CHM, CLPH, CM, CNIT, CPB, CS, EAPS, ECE, ECET, ECON, EEE, ENE, ENFY, ENGR, ENGT, ENTM, ENTR, EPCS, GEP, IDE, IE, IET, EPPH, IT, MA, MCMP, ME, MET, MFET, MGMT, MSE, MSL, NS, NUCL, NUPH, NUR, OBHR, OLS, PHPR, PHRM, PHYS, PTEC, SCI, STAT, TECH, & TLI.

Humanities Elective

Possible Cornerstone Selective. See Cornerstone Certificate.

Any Course within the Purdue College of Liberal Arts. Subjects include: AAS, AD, AMST, ANTH, ARAB, ASAM, ASL,

CHNS, CLCS, CMPL, COM, DANC, ENGL, FR, FVS, GER, GREK, GS, GSLA, HEBR, HIST, IDIS, ITAL, JPNS, JWST, KOR, LALS, LATN, LC, LING, MARS, MUS, PHIL, POL, PTGS, REL, RUSS, SCLA, SOC, SPAN, THTR, & WGSS.

Human Cultures: Humanities (HUM) Core

Possible Cornerstone Selective - See Cornerstone Certificate

Any Human Cultures: Humanities (HUM) allowed. Crossing with Cornerstone Certificate strongly recommended.

Approved Human Cultures: Humanities (HUM) Core Courses

Human Cultures: Behavioral/Social Science (BSS) Core

Possible Cornerstone Selective - See Cornerstone Certificate

Any Human Cultures: Behavioral/Social Science (BSS) allowed. Crossing with Cornerstone Certificate strongly recommended.

Approved Human Cultures: Behavioral/Social Science (BSS) Core Courses

Science (SCI) Core

Approved Science (SCI) Core Courses

Science, Technology & Society (STS) Core

CGT 17208 UX Design Studio I Fundamentals - Required

CGT Globalization Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- AAS 27100 - Introduction To African American Studies **Credits: 3.00**
- AAS 37300 - Issues In African American Studies **Credits: 3.00**
- AGR 20100 - Communicating Across Culture **Credits: 3.00**
- ANSC 38100 - Leadership For A Diverse Workplace **Credits: 3.00**
- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21000 - Technology And Culture **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 34100 - Culture And Personality **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- ARAB 28000 - Arabic Culture **Credits: 3.00**
- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- AT 23300 - Ethics And Aviation **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**

- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- COM 42300 - Leadership, Communication And Organizations **Credits: 3.00**
- ECET 29000 - International Experience **Credits: 1.00 to 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 23500 - Learning And Motivation **Credits: 2.00 or 3.00**
- EDPS 30000 - Student Leadership Development **Credits: 1.00 to 3.00**
- EDPS 30100 - Peer Counseling Training **Credits: 1.00 to 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- EDPS 31700 - Collaborative Leadership: Mentoring **Credits: 3.00**
- ENGL 41400 - Studies In Literature And Culture **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HDFS 33200 - Stress And Coping In Contemporary Families **Credits: 3.00**
- HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits: 3.00**
- HIST 33805 - History Of Human Rights **Credits: 3.00**
- HIST 35000 - Science And Society In The Twentieth Century World **Credits: 3.00**
- HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
- HIST 37700 - History And Culture Of Native America **Credits: 3.00**
- HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
- HTM 37000 - Sustainable Tourism And Responsible Travel **Credits: 3.00**
- HTM 37200 - Global Tourism Geography **Credits: 3.00**
- MSL 20100 - Leadership And Ethics **Credits: 2.00 to 3.00**
- OLS 35000 - Creativity In Business And Industry **Credits: 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 43500 - Philosophy Of Mind **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 32600 - Black Political Participation In America **Credits: 3.00**
- POL 32700 - Global Green Politics **Credits: 3.00**
- POL 36000 - Women And The Law **Credits: 3.00**
- POL 41300 - Analysis Of Political Attitudes And Behavior **Credits: 3.00**
- POL 42300 - International Environmental Policy **Credits: 3.00**
- POL 42900 - Contemporary Political Problems **Credits: 3.00**
- POL 43300 - International Organization **Credits: 3.00**
- PSY 12000 - Elementary Psychology **Credits: 3.00**
- PUBH 23500 - Stress And Human Health **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- SOC 31000 - Race And Ethnicity **Credits: 3.00**
- SOC 33900 - Sociology Of Global Development **Credits: 3.00**
- SYS 30000 - It's A Complex World - Addressing Global Challenges **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
- WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**

- WGSS 38300 - Women, Work, And Labor **Credits: 3.00**
- Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

Other Requirements:

Intercultural Requirement:

1. Complete Intercultural Development Inventory (IDI) Pre-test and Post-Test
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre-test and Post Test
3. Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

Humanities Requirement (1 required):

1. Participation in Computational Arts Circle
2. Complete courses within major that have Humanities Integrated into their assignments
3. Complete course within major that have partnered with Humanities Professor
4. Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

Professional Requirement (1 required):

1. Complete an Internship
2. Complete a Co-op
3. Employment during the academic year related to Major Field of Study
4. Complete an in-class internship-like experience created by Major
5. Student Proposed Alternative: must be commensurate with the expectations of Professional Requirements related to Major Field of Study

Change of Major Approved Course Substitutions

CGT 21500

- CS 15900 - C Programming **Credits: 3.00**
CS 15800 - C Programming
- CS 18000 - Problem Solving And Object-Oriented Programming **Credits: 4.00**

ECON 21000

- AGECE 21700 - Economics **Credits: 3.00**
- ECON 25100 - Microeconomics **Credits: 3.00**
- ECON 25200 - Macroeconomics **Credits: 3.00**

MA 16010

- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00**
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00**
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**

MGMT 45500

- MGMT 25400 - Legal Foundations Of Business I **Credits: 3.00**

PHYS 22000

- PHYS 17200 - Modern Mechanics **Credits: 4.00**
- PHYS 21400 - The Nature Of Physics **Credits: 3.00**
- PHYS 24100 - Electricity And Optics **Credits: 3.00**

SCLA 10100

ENGL 10100 - English Composition I

ENGL 10400 - English Composition I

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00**

SCLA 10200

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- COM 21700 - Science Writing And Presentation **Credits: 3.00**

TECH 12000

- ENGR 13100 - Transforming Ideas To Innovation I **Credits: 2.00** and
- ENGR 13200 - Transforming Ideas To Innovation II **Credits: 2.00**

Technical Electives

- AD 10500 - Design I **Credits: 3.00**
- AD 11300 - Basic Drawing **Credits: 3.00**
- AD 12500 - Introduction To Interior Design **Credits: 3.00**
- AD 21300 - Life Drawing I **Credits: 3.00**
- AD 22700 - History Of Art Since 1400 **Credits: 3.00**
- AD 25500 - Art Appreciation **Credits: 3.00**
- AD 26200 - Jewelry And Metalwork I **Credits: 3.00**
- AD 38300 - Modern Art **Credits: 3.00**

UX 37207

- CGT 49800 - Undergraduate Research In Computer Graphics Technology **Credits:** 1.00 to 3.00
- CGT 51200 - Foundational Readings Of User Experience Design **Credits:** 3.00
- CGT 56200 - Cognition And Human-Computer Interaction **Credits:** 3.00
- CGT 58100 - Workshop In Computer Graphics Technology **Credits:** 0.00 to 8.00
- TECH 39699 - Professional Practice Internship **Credits:** 0.00 to 3.00

Game Development Supplemental Information

CGT Entertainment Selective

- CGT 11200 - Sketching For Visualization And Communication **Credits:** 3.00
- CGT 12300 - Animation Foundations **Credits:** 3.00
- CGT 14700 - Visual Effects Introduction **Credits:** 3.00
- CGT 24100 - Introduction To Computer Animation **Credits:** 3.00
- CGT 24600 - Compositing I **Credits:** 3.00
- CGT 24700 - Visual Effects - Particles And Procedural Effects **Credits:** 3.00
- CGT 27000 - Introduction To Data Visualization **Credits:** 3.00
- CGT 27500 - Data Visualization II **Credits:** 3.00
- CGT 29000 - Computer Graphics **Credits:** 1.00 to 3.00
- CGT 31000 - Drawing, Acting And Scripts For Animation **Credits:** 3.00
- CGT 31500 - Computer Graphics Programming II **Credits:** 3.00
- CGT 32101 - Digital Illustration **Credits:** 3.00
- CGT 32500 - Animation For Games **Credits:** 3.00
- CGT 33300 - Modeling For Entertainment Graphics **Credits:** 3.00
- CGT 33500 - Game Scripting **Credits:** 3.00
- CGT 34000 - Digital Lighting And Rendering For Computer Animation **Credits:** 3.00
- CGT 34100 - Motion For Computer Animation **Credits:** 3.00
- CGT 34500 - Game Development III: Environment Modeling For Games **Credits:** 3.00
- CGT 34600 - Digital Video And Audio **Credits:** 3.00
- CGT 34800 - Photorealistic Shaders **Credits:** 3.00
- CGT 35300 - Principles Of Interactive And Dynamic Media **Credits:** 3.00
- CGT 35600 - Web Programming, Development And Data Integration **Credits:** 3.00
- CGT 37000 - Interactive Data Visualization **Credits:** 3.00
- CGT 37500 - Game Audio **Credits:** 3.00
- CGT 37700 - Scientific Visualization **Credits:** 3.00
- CGT 38500 - Game Production **Credits:** 3.00
- CGT 39000 - Computer Graphics **Credits:** 1.00 to 3.00
- CGT 44500 - Game Development IV: Procedural Asset Creation For Games **Credits:** 3.00
- CGT 45600 - Advanced Web Programming, Development And Data Integration **Credits:** 3.00
- CGT 47000 - Data Visualization Studio **Credits:** 3.00
- CGT 49000 - Computer Graphics **Credits:** 1.00 to 3.00
- CGT 49100 - Special Topics In Computer Graphics **Credits:** 1.00 to 6.00

Advanced English Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00**
- ENGL 30400 - Advanced Composition **Credits: 3.00**
- ENGL 41900 - Multimedia Writing **Credits: 3.00**
- ENGL 42000 - Business Writing **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**

Statistics Selective

- IET 31600 - Statistical Quality Control **Credits: 3.00**
- PSY 20100 - Introduction To Statistics In Psychology **Credits: 3.00**
- STAT 22500 - Introduction To Probability Models **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- STAT 35000 - Introduction To Statistics **Credits: 3.00**

Technical Elective

Any Course within the Purdue Polytechnic Institute, Engineering, Management, or Science. Subjects include: AAE, ABE, AFT, ASTR, AT, BCHM, BCM, BIOL, BME, BMS, CE, CGT, CHE, CHM, CLPH, CM, CNIT, CPB, CS, EAPS, ECE, ECET, ECON, EEE, ENE, ENFY, ENGR, ENGT, ENTM, ENTR, EPCS, GEP, IDE, IE, IET, EPPH, IT, MA, MCMP, ME, MET, MFET, MGMT, MSE, MSL, NS, NUCL, NUPH, NUR, OBHR, OLS, PHPR, PHRM, PHYS, PTEC, SCI, STAT, TECH, & TLI.

Humanities Elective

Possible Cornerstone Selective. See Cornerstone Certificate.

Any Course within the Purdue College of Liberal Arts. Subjects include: AAS, AD, AMST, ANTH, ARAB, ASAM, ASL, CHNS, CLCS, CMPL, COM, DANC, ENGL, FR, FVS, GER, GREK, GS, GSLA, HEBR, HIST, IDIS, ITAL, JPNS, JWST, KOR, LALS, LATN, LC, LING, MARS, MUS, PHIL, POL, PTGS, REL, RUSS, SCLA, SOC, SPAN, THTR, & WGSS.

Human Cultures: Humanities (HUM) Core

Possible Cornerstone Selective. See Cornerstone Certificate.

Any Human Cultures: Humanities (HUM) allowed. Crossing with Cornerstone Certificate strongly recommended.

Approved Human Cultures: Humanities Core Courses

Human Cultures: Behavioral/Social Science (BSS) Core

Approved Human Cultures: Behavioral/Social Science Core Courses

Science (SCI) Core

Approved Science Core Courses

Science, Technology & Society (STS) Core

CGT 17208 UX Design Studio I Fundamentals - Required

CGT Globalization Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- AAS 27100 - Introduction To African American Studies **Credits: 3.00**
- AAS 37300 - Issues In African American Studies **Credits: 3.00**
- AGR 20100 - Communicating Across Culture **Credits: 3.00**
- ANSC 38100 - Leadership For A Diverse Workplace **Credits: 3.00**
- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21000 - Technology And Culture **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 34100 - Culture And Personality **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- ARAB 28000 - Arabic Culture **Credits: 3.00**
- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- AT 23300 - Ethics And Aviation **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- COM 42300 - Leadership, Communication And Organizations **Credits: 3.00**
- ECET 29000 - International Experience **Credits: 1.00 to 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 23500 - Learning And Motivation **Credits: 2.00 or 3.00**
- EDPS 30000 - Student Leadership Development **Credits: 1.00 to 3.00**
- EDPS 30100 - Peer Counseling Training **Credits: 1.00 to 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- EDPS 31700 - Collaborative Leadership: Mentoring **Credits: 3.00**
- ENGL 41400 - Studies In Literature And Culture **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HDFS 33200 - Stress And Coping In Contemporary Families **Credits: 3.00**
- HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits: 3.00**
- HIST 33805 - History Of Human Rights **Credits: 3.00**
- HIST 35000 - Science And Society In The Twentieth Century World **Credits: 3.00**
- HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
- HIST 37700 - History And Culture Of Native America **Credits: 3.00**
- HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
- HTM 37000 - Sustainable Tourism And Responsible Travel **Credits: 3.00**
- HTM 37200 - Global Tourism Geography **Credits: 3.00**
- MSL 20100 - Leadership And Ethics **Credits: 2.00 to 3.00**

- OLS 35000 - Creativity In Business And Industry **Credits: 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 43500 - Philosophy Of Mind **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 32600 - Black Political Participation In America **Credits: 3.00**
- POL 32700 - Global Green Politics **Credits: 3.00**
- POL 36000 - Women And The Law **Credits: 3.00**
- POL 41300 - Analysis Of Political Attitudes And Behavior **Credits: 3.00**
- POL 42300 - International Environmental Policy **Credits: 3.00**
- POL 42900 - Contemporary Political Problems **Credits: 3.00**
- POL 43300 - International Organization **Credits: 3.00**
- PSY 12000 - Elementary Psychology **Credits: 3.00**
- PUBH 23500 - Stress And Human Health **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- SOC 31000 - Race And Ethnicity **Credits: 3.00**
- SOC 33900 - Sociology Of Global Development **Credits: 3.00**
- SYS 30000 - It's A Complex World - Addressing Global Challenges **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
- WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**
- WGSS 38300 - Women, Work, And Labor **Credits: 3.00**
- Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

Other Requirements:

Intercultural Requirement:

1. Complete Intercultural Development Inventory (IDI) Pre-test and Post Test
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre-test and Post Test
3. Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

Humanities Requirement (1 required):

1. Participation in Computational Arts Circle
2. Complete courses within major that have Humanities Integrated into their assignments
3. Complete course within major that have partnered with Humanities Professor
4. Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

Professional Requirement (1 required):

1. Complete an Internship
2. Complete a Co-op
3. Employment during the academic year related to Major Field of Study
4. Complete an in-class internship-like experience created by Major
5. Student Proposed Alternative: must be commensurate with the expectations of Professional Requirements related to Major Field of Study

Change of Major Approved Course Substitutions

CGT 21500

- CS 15900 - C Programming **Credits: 3.00**
CS 15800 - C Programming
- CS 18000 - Problem Solving And Object-Oriented Programming **Credits: 4.00**

ECON 21000

- AGE 21700 - Economics **Credits: 3.00**
- ECON 25100 - Microeconomics **Credits: 3.00**
- ECON 25200 - Macroeconomics **Credits: 3.00**

MA 16010

- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00**
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00**
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**

MGMT 45500

- MGMT 25400 - Legal Foundations Of Business I **Credits: 3.00**

PHYS 22000

- PHYS 17200 - Modern Mechanics **Credits: 4.00**
- PHYS 21400 - The Nature Of Physics **Credits: 3.00**
- PHYS 24100 - Electricity And Optics **Credits: 3.00**

SCLA 10100

- ENGL 10100 - English Composition I
- ENGL 10400 - English Composition I
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00**

SCLA 10200

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- COM 21700 - Science Writing And Presentation **Credits: 3.00**

TECH 12000

- ENGR 13100 - Transforming Ideas To Innovation I **Credits: 2.00** and
- ENGR 13200 - Transforming Ideas To Innovation II **Credits: 2.00**

Technical Electives

- AD 10500 - Design I **Credits: 3.00**
- AD 11300 - Basic Drawing **Credits: 3.00**
- AD 12500 - Introduction To Interior Design **Credits: 3.00**
- AD 21300 - Life Drawing I **Credits: 3.00**
- AD 22700 - History Of Art Since 1400 **Credits: 3.00**
- AD 25500 - Art Appreciation **Credits: 3.00**
- AD 26200 - Jewelry And Metalwork I **Credits: 3.00**
- AD 38300 - Modern Art **Credits: 3.00**

UX 37207

- CGT 49800 - Undergraduate Research In Computer Graphics Technology **Credits: 1.00 to 3.00**
- CGT 51200 - Foundational Readings Of User Experience Design **Credits: 3.00**
- CGT 56200 - Cognition And Human-Computer Interaction **Credits: 3.00**
- CGT 58100 - Workshop In Computer Graphics Technology **Credits: 0.00 to 8.00**
- TECH 39699 - Professional Practice Internship **Credits: 0.00 to 3.00**

UX Design Supplemental Course Information

Written or Oral Communication

- COM 10200 - Introduction To Communication Theory **Credits: 3.00**
- COM 20400 - Critical Perspectives On Communication **Credits: 3.00**
- COM 21000 - Addressing Public Issues **Credits: 3.00**
- COM 21700 - Science Writing And Presentation **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 25000 - Mass Communication And Society **Credits: 3.00**
- COM 25100 - Communication, Information, And Society **Credits: 3.00**
- COM 25200 - Writing For Mass Media **Credits: 3.00**
- COM 25300 - Introduction To Public Relations **Credits: 3.00**
- COM 25600 - Introduction To Advertising **Credits: 3.00**
- COM 25700 - Public Relations Techniques **Credits: 3.00**
- COM 26100 - Introduction To Digital Video Production **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 31200 - Rhetoric In The Western World **Credits: 3.00**
- COM 31400 - Advanced Presentational Speaking **Credits: 3.00**
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00**
- COM 31800 - Principles Of Persuasion **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 32400 - Introduction To Organizational Communication **Credits: 3.00**
- COM 32500 - Interviewing: Principles And Practice **Credits: 3.00**
- COM 32800 - Diversity At Work: A Rhetorical Approach **Credits: 3.00**
- COM 33000 - Theories Of Mass Communication **Credits: 3.00**
- COM 33600 - Advertising Media Strategy **Credits: 3.00**

- COM 35100 - Mass Communication Ethics **Credits: 3.00**
- COM 37200 - Communication In Relationships **Credits: 3.00**
- COM 37500 - Conflict And Negotiation **Credits: 3.00**
- COM 37600 - Communication And Gender **Credits: 3.00**
- COM 38100 - Gender And Feminist Studies In Communication **Credits: 3.00**
- COM 40700 - Introduction To New Media/Social Media Production **Credits: 3.00**
- COM 41100 - Communication And Social Networks **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00**
- COM 41600 - United States Politics And The Media **Credits: 3.00**
- COM 41900 - Judgment And Decision Making **Credits: 3.00**
- COM 42700 - Careers, Communication Issues And Strategies **Credits: 3.00**
- COM 43500 - Communication And Emerging Technologies **Credits: 3.00**
- COM 50700 - Introduction To Semiotics **Credits: 3.00**
- EDCI 27000 - Introduction To Educational Technology And Computing **Credits: 1.00 to 3.00**
- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00**
- ENGL 23100 - Introduction To Literature **Credits: 3.00**
- ENGL 30600 - Introduction To Professional Writing **Credits: 3.00**
- ENGL 41900 - Multimedia Writing **Credits: 3.00**
- ENGL 42000 - Business Writing **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**

Psychology & Human Behavior Selective

- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits: 3.00**
- ANTH 20400 - Human Origins **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21000 - Technology And Culture **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- ANTH 33600 - Human Variation **Credits: 3.00**
- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 38400 - Designing For People: Anthropological Approaches **Credits: 3.00**
- ANTH 38500 - Community Engagement In Anthropology **Credits: 3.00**
- ANTH 40500 - Ethnographic Methods **Credits: 3.00**
- EDPS 23500 - Learning And Motivation **Credits: 2.00 or 3.00**
- HDFS 20100 - Introduction To Relationship And Family Science **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- PSY 20000 - Introduction To Cognitive Psychology **Credits: 3.00**
- PSY 23500 - Child Psychology **Credits: 3.00**
- PSY 24000 - Introduction To Social Psychology **Credits: 3.00**
- PSY 24400 - Introduction To Human Sexuality **Credits: 3.00**
- PSY 27200 - Introduction To Industrial-Organizational Psychology **Credits: 3.00**
- PSY 31000 - Sensory And Perceptual Processes **Credits: 3.00**
- PSY 31100 - Human Memory **Credits: 3.00**

- PSY 31400 - Introduction To Learning **Credits: 3.00**
- PSY 32400 - Introduction Cognitive Neuroscience **Credits: 3.00**
- PSY 33500 - Stereotyping And Prejudice **Credits: 3.00**
- PSY 33700 - Social Cognition **Credits: 3.00**
- PSY 34200 - Introduction To Psychology Of Personality **Credits: 3.00**
- PSY 35000 - Abnormal Psychology **Credits: 3.00**
- PSY 38000 - Behavior Change Methods **Credits: 3.00**
- PSY 47500 - Work Motivation And Job Satisfaction **Credits: 3.00**

CGT Leadership Selective

- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 32400 - Introduction To Organizational Communication **Credits: 3.00**
- COM 32800 - Diversity At Work: A Rhetorical Approach **Credits: 3.00**
- COM 37500 - Conflict And Negotiation **Credits: 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- EDPS 31700 - Collaborative Leadership: Mentoring **Credits: 3.00**
- ENTR 20000 - Introduction To Entrepreneurship And Innovation **Credits: 3.00**
- ENTR 31000 - Marketing And Management For New Ventures **Credits: 3.00**
- ENTR 31500 - Business Planning For Social Entrepreneurship **Credits: 3.00**
- ENTR 48000 - Entrepreneurial Leadership And Careers **Credits: 3.00**
- ENTR 48200 - Venture Planning Studio **Credits: 3.00**
MGMT - any course
- OLS 35000 - Creativity In Business And Industry **Credits: 3.00**
- TLI 21300 - Project Management **Credits: 3.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**

Math Selective

- MA 16010 or higher

Technical Elective

Any Course within the Purdue Polytechnic Institute, Engineering, Management, or Science. Subjects include: AAE, ABE, AFT, ASTR, AT, BCHM, BCM, BIOL, BME, BMS, CE, CGT, CHE, CHM, CLPH, CM, CNIT, CPB, CS, EAPS, ECE, ECET, ECON, EEE, ENE, ENFY, ENGR, ENGT, ENTM, ENTR, EPCS, GEP, IDE, IE, IET, EPPH, IT, MA, MCMP, ME, MET, MFET, MGMT, MSE, MSL, NS, NUCL, NUPH, NUR, OBHR, OLS, PHPR, PHRM, PHYS, PTEC, SCI, STAT, TECH, & TLI. PHIL 20700 Ethics for Technology, Engineering & Design also allowed.

Any course from Computer Graphics Technology (CGT), Computer Information Technology (CNIT) or Computer Science (CS) are highly recommended.

Human Cultures: Humanities (HUM) Core

Approved Human Cultures: Humanities Core Courses

Human Cultures: Behavioral/Social Science (BSS) Core

Required:

- PSY 12000 - Elementary Psychology **Credits: 3.00**

Science, Technology & Society (STS) Core

CGT 17208 UX Design Studio I Fundamentals - Required

Science (SCI) Core

Approved Science Core Courses

CGT Globalization Selective

- AAS 27100 - Introduction To African American Studies **Credits: 3.00**
- AAS 37300 - Issues In African American Studies **Credits: 3.00**
- AGR 20100 - Communicating Across Culture **Credits: 3.00**
- ANSC 38100 - Leadership For A Diverse Workplace **Credits: 3.00**
- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21000 - Technology And Culture **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 34100 - Culture And Personality **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- ARAB 28000 - Arabic Culture **Credits: 3.00**
- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- AT 23300 - Ethics And Aviation **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- COM 42300 - Leadership, Communication And Organizations **Credits: 3.00**
- ECET 29000 - International Experience **Credits: 1.00 to 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 23500 - Learning And Motivation **Credits: 2.00 or 3.00**
- EDPS 30000 - Student Leadership Development **Credits: 1.00 to 3.00**
- EDPS 30100 - Peer Counseling Training **Credits: 1.00 to 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- EDPS 31700 - Collaborative Leadership: Mentoring **Credits: 3.00**
- ENGL 41400 - Studies In Literature And Culture **Credits: 3.00**

- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HDFS 33200 - Stress And Coping In Contemporary Families **Credits: 3.00**
- HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits: 3.00**
- HIST 33805 - History Of Human Rights **Credits: 3.00**
- HIST 35000 - Science And Society In The Twentieth Century World **Credits: 3.00**
- HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
- HIST 37700 - History And Culture Of Native America **Credits: 3.00**
- HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
- HTM 37000 - Sustainable Tourism And Responsible Travel **Credits: 3.00**
- HTM 37200 - Global Tourism Geography **Credits: 3.00**
- MSL 20100 - Leadership And Ethics **Credits: 2.00 to 3.00**
- OLS 35000 - Creativity In Business And Industry **Credits: 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 43500 - Philosophy Of Mind **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 32600 - Black Political Participation In America **Credits: 3.00**
- POL 32700 - Global Green Politics **Credits: 3.00**
- POL 36000 - Women And The Law **Credits: 3.00**
- POL 41300 - Analysis Of Political Attitudes And Behavior **Credits: 3.00**
- POL 42300 - International Environmental Policy **Credits: 3.00**
- POL 42900 - Contemporary Political Problems **Credits: 3.00**
- POL 43300 - International Organization **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- SOC 31000 - Race And Ethnicity **Credits: 3.00**
- SOC 33900 - Sociology Of Global Development **Credits: 3.00**
- SYS 30000 - It's A Complex World - Addressing Global Challenges **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
- WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**
- WGSS 38300 - Women, Work, And Labor **Credits: 3.00**
- Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

Other Requirements:

Intercultural Requirement:

1. Complete Intercultural Development Inventory (IDI) Pre-test and Post Test.
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre-test and Post Test.
3. Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

Humanities Requirement (1 required):

1. Participation in Computational Arts Circle
2. Complete courses within major that have Humanities Integrated into their assignments
3. Complete course within major that have partnered with Humanities Professor
4. Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

Professional Requirement (1 required):

1. Complete an Internship
2. Complete a Co-op
3. Employment during the academic year related to Major Field of Study
4. Complete an in-class internship-like experience created by Major
5. Student Proposed Alternative: must be commensurate with the expectations of Professional Requirements related to Major Field of Study

Change of Major Approved Course Substitutions

CGT 21500

- CS 15900 - C Programming **Credits: 3.00**
CS 15800 - C Programming
- CS 18000 - Problem Solving And Object-Oriented Programming **Credits: 4.00**

ECON 21000

- AGE 21700 - Economics **Credits: 3.00**
- ECON 25100 - Microeconomics **Credits: 3.00**
- ECON 25200 - Macroeconomics **Credits: 3.00**

MA 16010

- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00**
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00**
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**

MGMT 45500

- MGMT 25400 - Legal Foundations Of Business I **Credits: 3.00**

PHYS 22000

- PHYS 17200 - Modern Mechanics **Credits: 4.00**
- PHYS 21400 - The Nature Of Physics **Credits: 3.00**

- PHYS 24100 - Electricity And Optics **Credits:** 3.00

SCLA 10100

ENGL 10100 - English Composition I

ENGL 10400 - English Composition I

- ENGL 10600 - First Year Composition With Conferences **Credits:** 4.00
- ENGL 10800 - First Year Composition **Credits:** 3.00
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits:** 3.00

SCLA 10200

- COM 11400 - Fundamentals Of Speech Communication **Credits:** 3.00
- COM 21700 - Science Writing And Presentation **Credits:** 3.00

TECH 12000

- ENGR 13100 - Transforming Ideas To Innovation I **Credits:** 2.00 and
- ENGR 13200 - Transforming Ideas To Innovation II **Credits:** 2.00

Technical Electives

- AD 10500 - Design I **Credits:** 3.00
- AD 11300 - Basic Drawing **Credits:** 3.00
- AD 12500 - Introduction To Interior Design **Credits:** 3.00
- AD 21300 - Life Drawing I **Credits:** 3.00
- AD 22700 - History Of Art Since 1400 **Credits:** 3.00
- AD 25500 - Art Appreciation **Credits:** 3.00
- AD 26200 - Jewelry And Metalwork I **Credits:** 3.00
- AD 38300 - Modern Art **Credits:** 3.00

UX 37207

- CGT 49800 - Undergraduate Research In Computer Graphics Technology **Credits:** 1.00 to 3.00
- CGT 51200 - Foundational Readings Of User Experience Design **Credits:** 3.00
- CGT 56200 - Cognition And Human-Computer Interaction **Credits:** 3.00
- CGT 58100 - Workshop In Computer Graphics Technology **Credits:** 0.00 to 8.00
- TECH 39699 - Professional Practice Internship **Credits:** 0.00 to 3.00

Visual Effects Compositing Supplemental Information

CGT Entertainment Selectives:

- CGT 10501 - Introduction To Games **Credits:** 3.00
- CGT 24500 - Game Development I: Core Skills And Technologies **Credits:** 3.00

- CGT 24600 - Compositing I **Credits: 3.00**
- CGT 24700 - Visual Effects - Particles And Procedural Effects **Credits: 3.00**
- CGT 25500 - Game Development II: Design And Psychology **Credits: 3.00**
- CGT 29000 - Computer Graphics **Credits: 1.00 to 3.00**
- CGT 31000 - Drawing, Acting And Scripts For Animation **Credits: 3.00**
- CGT 32101 - Digital Illustration **Credits: 3.00**
- CGT 32500 - Animation For Games **Credits: 3.00**
- CGT 33300 - Modeling For Entertainment Graphics **Credits: 3.00**
- CGT 33500 - Game Scripting **Credits: 3.00**
- CGT 34000 - Digital Lighting And Rendering For Computer Animation **Credits: 3.00**
- CGT 34100 - Motion For Computer Animation **Credits: 3.00**
- CGT 34500 - Game Development III: Environment Modeling For Games **Credits: 3.00**
- CGT 34600 - Digital Video And Audio **Credits: 3.00**
- CGT 34800 - Photorealistic Shaders **Credits: 3.00**
- CGT 37000 - Interactive Data Visualization **Credits: 3.00**
- CGT 37500 - Game Audio **Credits: 3.00**
- CGT 37700 - Scientific Visualization **Credits: 3.00**
- CGT 38500 - Game Production **Credits: 3.00**
- CGT 39000 - Computer Graphics **Credits: 1.00 to 3.00**
- CGT 44500 - Game Development IV: Procedural Asset Creation For Games **Credits: 3.00**
- CGT 47000 - Data Visualization Studio **Credits: 3.00**
- CGT 49000 - Computer Graphics **Credits: 1.00 to 3.00**
- CGT 49100 - Special Topics In Computer Graphics **Credits: 1.00 to 6.00**

Advanced English Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00**
- ENGL 30400 - Advanced Composition **Credits: 3.00**
- ENGL 41900 - Multimedia Writing **Credits: 3.00**
- ENGL 42000 - Business Writing **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**

Statistics Selective

- IET 31600 - Statistical Quality Control **Credits: 3.00**
- PSY 20100 - Introduction To Statistics In Psychology **Credits: 3.00**
- STAT 22500 - Introduction To Probability Models **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- STAT 35000 - Introduction To Statistics **Credits: 3.00**

Technical Elective

Any Course within the Purdue Polytechnic Institute, Engineering, Management, or Science. Subjects include: AAE, ABE, AFT, ASTR, AT, BCHM, BCM, BIOL, BME, BMS, CE, CGT, CHE, CHM, CLPH, CM, CNIT, CPB, CS, EAPS, ECE, ECET, ECON, EEE, ENE, ENFY, ENGR, ENGT, ENTM, ENTR, EPCS, GEP, IDE, IE, IET, EPPH, IT, MA, MCMP, ME, MET,

MFET, MGMT, MSE, MSL, NS, NUCL, NUPH, NUR, OBHR, OLS, PHPR, PHRM, PHYS, PTEC, SCI, STAT, TECH, & TLI.

Humanities Elective

Possible Cornerstone Selective. See Cornerstone Certificate.

Any Course within the Purdue College of Liberal Arts. Subjects include: AAS, AD, AMST, ANTH, ARAB, ASAM, ASL, CHNS, CLCS, CMPL, COM, DANC, ENGL, FR, FVS, GER, GREK, GS, GSLA, HEBR, HIST, IDIS, ITAL, JPNS, JWST, KOR, LALS, LATN, LC, LING, MARS, MUS, PHIL, POL, PTGS, REL, RUSS, SCLA, SOC, SPAN, THTR, & WGSS.

Human Cultures: Humanities (HUM) Core

Possible Cornerstone Selective. See Cornerstone Certificate.

Any Human Cultures: Humanities (HUM) allowed. Crossing with Cornerstone Certificate strongly recommended.

Approved Human Cultures: Humanities Core Courses

Human Cultures: Behavioral/Social Science (BSS) Core

Approved Human Cultures: Behavioral/Social Science Core Courses

Science (SCI) Core

Approved Science Core Courses

Science, Technology & Society (STS)

Possible Cornerstone Selective. See Cornerstone Certificate.

Any Human Science, Technology & Society (STS) allowed. Crossing with Cornerstone Certificate strongly recommended.

Approved Science, Technology & Society Core Courses

CGT Globalization Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- AAS 27100 - Introduction To African American Studies **Credits: 3.00**
- AAS 37300 - Issues In African American Studies **Credits: 3.00**
- AGR 20100 - Communicating Across Culture **Credits: 3.00**
- ANSC 38100 - Leadership For A Diverse Workplace **Credits: 3.00**
- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21000 - Technology And Culture **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**

- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 34100 - Culture And Personality **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- ARAB 28000 - Arabic Culture **Credits: 3.00**
- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- AT 23300 - Ethics And Aviation **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- COM 42300 - Leadership, Communication And Organizations **Credits: 3.00**
- ECET 29000 - International Experience **Credits: 1.00 to 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 23500 - Learning And Motivation **Credits: 2.00 or 3.00**
- EDPS 30000 - Student Leadership Development **Credits: 1.00 to 3.00**
- EDPS 30100 - Peer Counseling Training **Credits: 1.00 to 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- EDPS 31700 - Collaborative Leadership: Mentoring **Credits: 3.00**
- ENGL 41400 - Studies In Literature And Culture **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HDFS 33200 - Stress And Coping In Contemporary Families **Credits: 3.00**
- HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits: 3.00**
- HIST 33805 - History Of Human Rights **Credits: 3.00**
- HIST 35000 - Science And Society In The Twentieth Century World **Credits: 3.00**
- HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
- HIST 37700 - History And Culture Of Native America **Credits: 3.00**
- HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
- HTM 37000 - Sustainable Tourism And Responsible Travel **Credits: 3.00**
- HTM 37200 - Global Tourism Geography **Credits: 3.00**
- MSL 20100 - Leadership And Ethics **Credits: 2.00 to 3.00**
- OLS 35000 - Creativity In Business And Industry **Credits: 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 43500 - Philosophy Of Mind **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 32600 - Black Political Participation In America **Credits: 3.00**
- POL 32700 - Global Green Politics **Credits: 3.00**
- POL 36000 - Women And The Law **Credits: 3.00**
- POL 41300 - Analysis Of Political Attitudes And Behavior **Credits: 3.00**
- POL 42300 - International Environmental Policy **Credits: 3.00**
- POL 42900 - Contemporary Political Problems **Credits: 3.00**
- POL 43300 - International Organization **Credits: 3.00**
- PUBH 23500 - Stress And Human Health **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**

- SOC 31000 - Race And Ethnicity **Credits:** 3.00
- SOC 33900 - Sociology Of Global Development **Credits:** 3.00
- SYS 30000 - It's A Complex World - Addressing Global Challenges **Credits:** 3.00
- TECH 33000 - Technology And The Global Society **Credits:** 3.00
- TLI 11200 - Foundations Of Organizational Leadership **Credits:** 3.00
- TLI 31400 - Leading Innovation In Organizations **Credits:** 3.00
- WGSS 28200 - Introduction To LGBTQ Studies **Credits:** 3.00
- WGSS 38000 - Comparative Studies In Gender And Culture **Credits:** 3.00
- WGSS 38300 - Women, Work, And Labor **Credits:** 3.00
- Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

Other Requirements:

Intercultural Requirement:

1. Complete Intercultural Development Inventory (IDI) Pre-test and Post-Test
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre-test and Post Test
3. Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

Humanities Requirement (1 required):

1. Participation in Computational Arts Circle
2. Complete courses within major that have Humanities Integrated into their assignments
3. Complete course within major that have partnered with Humanities Professor
4. Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

Professional Requirement (1 required):

1. Complete an Internship
2. Complete a Co-op
3. Employment during the academic year related to Major Field of Study
4. Complete an in-class internship-like experience created by Major
5. Student Proposed Alternative: must be commensurate with the expectations of Professional Requirements related to Major Field of Study

Web Programming & Design Supplemental Information

CGT Selectives:

Entertainment: Animation Visual Effects, Games

- CGT 10501 - Introduction To Games **Credits:** 3.00
- CGT 11200 - Sketching For Visualization And Communication **Credits:** 3.00
- CGT 11600 - Geometric Modeling For Visualization And Communication **Credits:** 3.00
- CGT 12300 - Animation Foundations **Credits:** 3.00
- CGT 14700 - Visual Effects Introduction **Credits:** 3.00
- CGT 24100 - Introduction To Computer Animation **Credits:** 3.00
- CGT 24500 - Game Development I: Core Skills And Technologies **Credits:** 3.00
- CGT 24600 - Compositing I **Credits:** 3.00

- CGT 24700 - Visual Effects - Particles And Procedural Effects **Credits: 3.00**
- CGT 25500 - Game Development II: Design And Psychology **Credits: 3.00**
- CGT 29000 - Computer Graphics **Credits: 1.00 to 3.00**
- CGT 31000 - Drawing, Acting And Scripts For Animation **Credits: 3.00**
- CGT 32101 - Digital Illustration **Credits: 3.00**
- CGT 32500 - Animation For Games **Credits: 3.00**
- CGT 33300 - Modeling For Entertainment Graphics **Credits: 3.00**
- CGT 33500 - Game Scripting **Credits: 3.00**
- CGT 34000 - Digital Lighting And Rendering For Computer Animation **Credits: 3.00**
- CGT 34100 - Motion For Computer Animation **Credits: 3.00**
- CGT 34500 - Game Development III: Environment Modeling For Games **Credits: 3.00**
- CGT 34600 - Digital Video And Audio **Credits: 3.00**
- CGT 34800 - Photorealistic Shaders **Credits: 3.00**
- CGT 36500 - Game Development Practicum **Credits: 3.00**
- CGT 37500 - Game Audio **Credits: 3.00**
- CGT 38500 - Game Production **Credits: 3.00**
- CGT 39000 - Computer Graphics **Credits: 1.00 to 3.00**
- CGT 44200 - Production For Computer Animation **Credits: 3.00**
- CGT 44500 - Game Development IV: Procedural Asset Creation For Games **Credits: 3.00**
- CGT 49000 - Computer Graphics **Credits: 1.00 to 3.00**
- CGT 49100 - Special Topics In Computer Graphics **Credits: 1.00 to 6.00**

Building Information Modeling

Data Visualization

- CGT 27000 - Introduction To Data Visualization **Credits: 3.00**
- CGT 27500 - Data Visualization II **Credits: 3.00**
- CGT 37000 - Interactive Data Visualization **Credits: 3.00**
- CGT 37700 - Scientific Visualization **Credits: 3.00**
- CGT 47000 - Data Visualization Studio **Credits: 3.00**

Digital Enterprise Systems

Advanced English Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00**
- ENGL 30400 - Advanced Composition **Credits: 3.00**
- ENGL 41900 - Multimedia Writing **Credits: 3.00**
- ENGL 42000 - Business Writing **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**

Communication Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- COM 30000 or 40000 Level

Management Selective

Any course in Economics (ECON), Entrepreneurship (ENTR), Management (MGMT), Organizational Behavior & Human Resources (OBHR), Organizational Leadership & Supervision (OLS), or Technology, Leadership & Innovation (TLI). CSR 10300, CSR 34200 also allowed.

Statistics Selective

- IET 31600 - Statistical Quality Control **Credits: 3.00**
- PSY 20100 - Introduction To Statistics In Psychology **Credits: 3.00**
- STAT 25000 - Problems Solving In Probability **Credits: 2.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- STAT 35000 - Introduction To Statistics **Credits: 3.00**

Technical Elective

Any Course within the Purdue Polytechnic Institute, Engineering, Management, or Science. Subjects include: AAE, ABE, AFT, ASTR, AT, BCHM, BCM, BIOL, BME, BMS, CE, CGT, CHE, CHM, CLPH, CM, CNIT, CPB, CS, EAPS, ECE, ECET, ECON, EEE, ENE, ENFY, ENGR, ENGT, ENTM, ENTR, EPCS, GEP, IDE, IE, IET, EPPH, IT, MA, MCMP, ME, MET, MFET, MGMT, MSE, MSL, NS, NUCL, NUPH, NUR, OBHR, OLS, PHPR, PHRM, PHYS, PTEC, SCI, STAT, TECH, & TLI.

Humanities Elective

Possible Cornerstone Selective. See Cornerstone Certificate

Any Course within the Purdue College of Liberal Arts. Subjects include: AAS, AD, AMST, ANTH, ARAB, ASAM, ASL, CHNS, CLCS, CMPL, COM, DANC, ENGL, FR, FVS, GER, GREK, GS, GSLA, HEBR, HIST, IDIS, ITAL, JPNS, JWST, KOR, LALS, LATN, LC, LING, MARS, MUS, PHIL, POL, PTGS, REL, RUSS, SCLA, SOC, SPAN, THTR, & WGSS.

Human Cultures: Humanities (HUM) Core

Possible Cornerstone Selective. See Cornerstone Certificate.

Any Human Cultures: Humanities (HUM) allowed. Crossing with Cornerstone Certificate strongly recommended.

Approved Human Cultures: Humanities Core Courses

Human Cultures: Behavioral/Social Science (BSS) Core

Possible Cornerstone Selective. See Cornerstone Certificate.

Any Human Cultures: Behavioral/Social Science (BSS) allowed. Crossing with Cornerstone Certificate strongly recommended.

Approved Human Cultures: Behavioral/Social Science Core Courses

Science (SCI) Core

Approved Science Core Courses

Science, Technology & Society (STS) Core

CGT 17208 UX Design Studio I Fundamentals - Required

CGT Globalization Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- AAS 27100 - Introduction To African American Studies **Credits: 3.00**
- AAS 37300 - Issues In African American Studies **Credits: 3.00**
- AGR 20100 - Communicating Across Culture **Credits: 3.00**
- ANSC 38100 - Leadership For A Diverse Workplace **Credits: 3.00**
- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21000 - Technology And Culture **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 34100 - Culture And Personality **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- ARAB 28000 - Arabic Culture **Credits: 3.00**
- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- AT 23300 - Ethics And Aviation **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- COM 42300 - Leadership, Communication And Organizations **Credits: 3.00**
- ECET 29000 - International Experience **Credits: 1.00 to 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 23500 - Learning And Motivation **Credits: 2.00 or 3.00**
- EDPS 30000 - Student Leadership Development **Credits: 1.00 to 3.00**
- EDPS 30100 - Peer Counseling Training **Credits: 1.00 to 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- EDPS 31700 - Collaborative Leadership: Mentoring **Credits: 3.00**
- ENGL 41400 - Studies In Literature And Culture **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HDFS 33200 - Stress And Coping In Contemporary Families **Credits: 3.00**
- HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits: 3.00**
- HIST 33805 - History Of Human Rights **Credits: 3.00**

- HIST 35000 - Science And Society In The Twentieth Century World **Credits: 3.00**
- HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
- HIST 37700 - History And Culture Of Native America **Credits: 3.00**
- HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
- HTM 37200 - Global Tourism Geography **Credits: 3.00**
- MSL 20100 - Leadership And Ethics **Credits: 2.00 to 3.00**
- OLS 35000 - Creativity In Business And Industry **Credits: 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 43500 - Philosophy Of Mind **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 32600 - Black Political Participation In America **Credits: 3.00**
- POL 32700 - Global Green Politics **Credits: 3.00**
- POL 36000 - Women And The Law **Credits: 3.00**
- POL 41300 - Analysis Of Political Attitudes And Behavior **Credits: 3.00**
- POL 42300 - International Environmental Policy **Credits: 3.00**
- POL 42900 - Contemporary Political Problems **Credits: 3.00**
- POL 43300 - International Organization **Credits: 3.00**
- PSY 12000 - Elementary Psychology **Credits: 3.00**
- PUBH 23500 - Stress And Human Health **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- SOC 31000 - Race And Ethnicity **Credits: 3.00**
- SOC 33900 - Sociology Of Global Development **Credits: 3.00**
- SYS 30000 - It's A Complex World - Addressing Global Challenges **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
- WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**
- WGSS 38300 - Women, Work, And Labor **Credits: 3.00**
- Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

Other Requirements:

Intercultural Requirement:

1. Complete Intercultural Development Inventory (IDI) Pre-test and Post Test
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre-test and Post Test
3. Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

Humanities Requirement (1 required):

1. Participation in Computational Arts Circle
2. Complete courses within major that have Humanities Integrated into their assignments
3. Complete course within major that have partnered with Humanities Professor

4. Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

Professional Requirement (1 required):

1. Complete an Internship
2. Complete a Co-op
3. Employment during the academic year related to Major Field of Study
4. Complete an in-class internship-like experience created by Major
5. Student Proposed Alternative: must be commensurate with the expectations of Professional Requirements related to Major Field of Study

Change of Major Approved Course Substitutions

CGT 21500

- CS 15900 - C Programming **Credits: 3.00**
CS 15800 - C Programming
- CS 18000 - Problem Solving And Object-Oriented Programming **Credits: 4.00**

ECON 21000

- AGE 21700 - Economics **Credits: 3.00**
- ECON 25100 - Microeconomics **Credits: 3.00**
- ECON 25200 - Macroeconomics **Credits: 3.00**

MA 16010

- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00**
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00**
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**

MGMT 45500

- MGMT 25400 - Legal Foundations Of Business I **Credits: 3.00**

PHYS 22000

- PHYS 17200 - Modern Mechanics **Credits: 4.00**
- PHYS 21400 - The Nature Of Physics **Credits: 3.00**
- PHYS 24100 - Electricity And Optics **Credits: 3.00**

SCLA 10100

ENGL 10100 - English Composition I

ENGL 10400 - English Composition I

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00**

SCLA 10200

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- COM 21700 - Science Writing And Presentation **Credits: 3.00**

TECH 12000

- ENGR 13100 - Transforming Ideas To Innovation I **Credits: 2.00** and
- ENGR 13200 - Transforming Ideas To Innovation II **Credits: 2.00**

Technical Electives

- AD 10500 - Design I **Credits: 3.00**
- AD 11300 - Basic Drawing **Credits: 3.00**
- AD 12500 - Introduction To Interior Design **Credits: 3.00**
- AD 21300 - Life Drawing I **Credits: 3.00**
- AD 22700 - History Of Art Since 1400 **Credits: 3.00**
- AD 25500 - Art Appreciation **Credits: 3.00**
- AD 26200 - Jewelry And Metalwork I **Credits: 3.00**
- AD 38300 - Modern Art **Credits: 3.00**

UX 37207

- CGT 49800 - Undergraduate Research In Computer Graphics Technology **Credits: 1.00 to 3.00**
- CGT 51200 - Foundational Readings Of User Experience Design **Credits: 3.00**
- CGT 56200 - Cognition And Human-Computer Interaction **Credits: 3.00**
- CGT 58100 - Workshop In Computer Graphics Technology **Credits: 0.00 to 8.00**
- TECH 39699 - Professional Practice Internship **Credits: 0.00 to 3.00**

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School of Engineering Technology

Overview

In Purdue's engineering technology degree programs, students learn about - and more important, practice - designing, building, testing, and refining in several engineering technology fields. From electrical to manufacturing to mechanical to industrial, engineering technology classes, labs, and projects help you develop processes and products to make a better world.

Faculty

School of Engineering Technology Website

Contact Information

School of Engineering Technology

Knoy Hall, Room 145

401 N. Grant St.

West Lafayette, IN 47907

Phone: 765.494.9099

Email: soet@purdue.edu

Contact an advisor

Graduate Information

For Graduate Information please see Engineering Technology Graduate Program Information.

Associate

Mechanical Engineering Technology, AS (Statewide Only)

Degree Requirements

60 Credits Required

Departmental/Program Major Courses (27 credits)

Required Major Courses (27 credits)

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- MET 10200 - Production Design And Specifications **Credits: 3.00 ♦**
- MET 11100 - Applied Statics **Credits: 3.00 ♦**
- MET 14300 - Materials And Processes I **Credits: 3.00** or
- Capstone Selective - Credit Hours: 2.00
- MET 14400 - Materials And Processes II **Credits: 3.00 ♦**
- MET Elective - Credit Hours: 12.00

Other Departmental/Program Course Requirements (30 Credits)

- ECET 22400 - Electronic Systems **Credits: 3.00**
- CHM 11100 - General Chemistry **Credits: 3.00**
- PHYS 22000 - General Physics **Credits: 4.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
- Freshman Speech Selective - Credit Hours: 3.00 (*satisfies Oral Communication for core*)
- Freshman Composition Selective - Credit Hours: 3.00 (*satisfies Written Communication for core*)
- Math Selective - Credit Hours:3.00 (*satisfies Quantitative Reasoning for core*)
- General Education Human Cultures: Behavior/Social Sciences - Credit Hours: 3.00 (*satisfies Human Cultures: Behavioral Sciences for core*)
- General Education Human Cultures: Humanities Selective - Credit Hours: 3.00 (*satisfies Human Cultures Humanities for core*)
- CAD Selective - Credit Hours: 2.00

Tech Electives (3 credits)

Additional Requirements

Click here for Mechanical Engineering Technology, AS Supplemental Information

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or

- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the Civics Literacy Proficiency website.

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Resident Study Requirement

Required resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree.

Notes

1. 60 semester credits and a 2.0 Graduation GPA are required for the Associate of Science degree.
2. Students must earn a "D-" or better in all courses unless otherwise noted.
3. Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.

Program Requirements

Fall 1st Year

- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
- CAD Selective - Credit Hours: 2.00
- Freshman Composition Selective - Credit Hours: 3.00
- Math Selective - Credit Hours: 3.00
- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**

15 Credits

Spring 1st Year

- MET 10200 - Production Design And Specifications **Credits: 3.00** ♦
- MET 11100 - Applied Statics **Credits: 3.00** ♦
- Freshman Speech Selectives - Credit Hours: 3.00
- Behavioral Social Sciences Foundational Selective - Credit Hours: 3.00
- MET 14300 - Materials And Processes I **Credits: 3.00**
Or
- MET 14400 - Materials And Processes II **Credits: 3.00** ♦

15 Credits

Fall 2nd Year

- ECET 22400 - Electronic Systems **Credits: 3.00**
- CHM 11100 - General Chemistry **Credits: 3.00**
- PHYS 22000 - General Physics **Credits: 4.00**
- MET Elective - Credit Hours: 6.00

16 Credits

Spring 2nd Year

- General Education Human Cultures: Humanities Selective - Credit Hours: 3.00
- MET Elective - Credit Hours: 6.00
- Tech Elective - Credit Hours: 3.00
- Capstone Selective - Credit Hours: 2.00

14 Credits

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Baccalaureate

Audio Engineering Technology, BS

About the Program

The Audio Engineering Technology major is part of the Electrical Engineering Technology program. The electrical engineering technology program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the commission's general criteria and program criteria for Electrical/Electronic(s) Engineering Technology and similarly named programs.

When you major in audio engineering technology at Purdue University, you'll learn to create sound by building a guitar or a pick-up. You will focus on designing, building, and testing a variety of technologies, such as microphone amplifiers, mixers and other signal processors, Bluetooth and other radio frequency channels, power amplifiers, and loud speakers. Then you will combine these audio elements to properly record, play, and reinforce sound in a public performance space.

Audio Engineering Technology Website

School of Engineering Technology Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (52 credits)

Required Major Courses (52 credits)

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- ECET 17700 - Data Acquisition And Systems Control **Credits: 3.00**
- ECET 17900 - Introduction To Digital Systems **Credits: 3.00**
- ECET 22700 - DC And Pulse Electronics **Credits: 3.00**
- ECET 22900 - Concurrent Digital Systems **Credits: 3.00**
- ECET 27000 - Electronics Prototype Development And Construction **Credits: 3.00**
- ECET 27400 - Wireless Communications **Credits: 3.00**
- ECET 27700 - AC And Power Electronics **Credits: 3.00**
- ECET 27900 - Embedded Digital Systems **Credits: 3.00**
- ECET 31800 - Foundations Of Audio Electronics **Credits: 3.00**
- ECET 33700 - Continuous Systems Analysis And Design **Credits: 3.00**

- ECET 33900 - Digital Signal Processing **Credits: 3.00**
- ECET 37600 - Electrical Energy Systems **Credits: 3.00**
- ECET 38800 - Analog IC Applications **Credits: 3.00**
- ECET 42801 - Advanced Acoustics And Audio Engineering Technologies **Credits: 3.00**
- Senior Capstone I Selective - Credit Hours: 3.00
- Senior Capstone II Selective - Credit Hours: 3.00

Other Departmental/Program Course Requirements (62-72 credits)

- TECH 12000 - Design Thinking In Technology **Credits: 3.00** (satisfies Science, Technology & Society and Information Literacy for core)
- THTR 16300 - Introduction To Sound Design And Technology **Credits: 2.00**
- THTR 35300 - Theatre Audio Techniques I **Credits: 3.00**
- MET 31800 - Applied Room Acoustics **Credits: 3.00**

Intro to C Programming Selective

- CNIT 10500 - Introduction To C Programming **Credits: 3.00** (preferred) or
- CS 15900 - C Programming **Credits: 3.00**

Applied Calculus I Selective (satisfies Quantitative Reasoning for core)

- MA 16010 - Applied Calculus I **Credits: 3.00** (preferred) or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00** or
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**

Applied Calculus II Selective

- MA 16020 - Applied Calculus II **Credits: 3.00** (preferred) or
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00** or
- MA 16600 - Analytic Geometry And Calculus II **Credits: 4.00**

General Physics I Selective (satisfies Science for core)

- PHYS 22000 - General Physics **Credits: 4.00** (preferred) or
- PHYS 17200 - Modern Mechanics **Credits: 4.00**

General Physics II Selective (satisfies Science for core)

- PHYS 22100 - General Physics **Credits: 4.00** (preferred) or
- PHYS 24100 - Electricity And Optics **Credits: 3.00** or
- PHYS 27200 - Electric And Magnetic Interactions **Credits: 4.00**

Statistics Selective

- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**

English Composition Selective (satisfies Written Communication for core)

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

Written Communication Selective

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00** or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**

Freshman Speech Selective (satisfies Oral Communication for core)

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

Audio Production Selective

- FLM 32100 - Live Production I: Theater/Music/Arts **Credits: 1.00 to 4.00** or
- MUS 38300 - Digital Audio Recording And Production I **Credits: 3.00** or
- THTR 25300 - Survey Of Audio Production **Credits: 3.00** or
- THTR 26300 - Introduction To Sound Studios **Credits: 3.00**

Theater Production Selective

- THTR 36800 - Theatre Production II **Credits: 1.00 to 2.00** or
- DANC 36800 - Dance Sound Design **Credits: 1.00**

Industrial Economics Selective

- AGECE 33000 - Management Methods For Agricultural Business **Credits: 3.00** or
- AGECE 35200 - Quantitative Techniques For Firm Decision Making **Credits: 3.00** or
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00** or
- MGMT 20000 - Introductory Accounting **Credits: 3.00** or
- MGMT 21200 - Business Accounting **Credits: 3.00**
- **Business Selective** - Credit Hours: 3.00
 - Human Cultures: Behavioral/Social Sciences requirement for core can be satisfied through the Business Selective or the General Education Selective
- **General Education Selective** - Credit Hours: 3.00
 - Human Cultures: Behavioral/Social Sciences requirement for core can be satisfied through the Business Selective or the General Education Selective
 - Human Cultures: Humanities requirement for core can be satisfied through a Theater and Sound Selective or a General Education Selective
- **Oral Communication Selective** - Credit Hours: 3.00
- **Theater and Sound Selectives** - Credit Hours: 6.00
 - Human Cultures: Humanities requirement for core can be satisfied through a Theater and Sound Selective or a General Education Selective
- **Global / Professional Selective** - Credit Hours: 3.00
- **Intercultural Requirement** - 0.0 Credit Hours
- **Professional Requirement/Internship** - 0.0 Credit Hours

Electives (3 credits)

Any non-remedial course.

Supplemental List

[Click here for Audio Engineering Technology Supplemental Information .](#)

Professional Experience

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response. See supplemental information for approved experiences.

Grade Requirements

- Students must earn a "D-" or better in all courses.
- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.

GPA Requirements

- 2.0 Graduation GPA is required for the Bachelor of Science degree.

Course Requirements and Notes

- Human Cultures Behavioral/Social Science for University Core may be selected to satisfy either the Business Selective or a General Education Selective requirement.
- Human Cultures Humanities for University Core Curriculum may be selected to satisfy either a Theater and Sound Selective or a General Education Selective requirement.
- Senior Capstone Selective I/II and 12 hours of ECET lab-based courses at the 300-level or higher must be taken at Purdue University West Lafayette and/or Polytechnic Statewide.

Non-course / Non-credit Requirements

- Intercultural Requirement (ungraded) must be completed.
- Professional Requirement (ungraded) must be completed.
- Professional and Intercultural requirements will be satisfied by completion of experiences, assessments, and courses that are pre-approved by the ECET Curriculum Committee. Approved courses may fulfill other degree requirements.
- Choose from list: Refer to the Audio Engineering Technology Supplemental Information for a complete list of selectives and requirements (including ungraded requirements).

Pass/No Pass Policy

- Pass/no pass grading allowed for General Education Selectives and Electives (up to 9 hrs).

Transfer Credit Policy

Transfer credit from other institutions, including courses taken as dual or concurrent credit in high school, and credit from testing such as Advanced Placement and International Baccalaureate that are an exact match for Purdue courses, may be applied to degree requirements.

For undistributed credit to be applied to degree requirements, the course or courses will need to be evaluated by the ECET Curriculum Committee for approval. Additional approvals will be required for courses to meet University Core Curriculum requirements. In both cases approval is not automatic.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Additional Information

- The Audio Engineering Technology (AUET) major is within the Electrical Engineering Technology program.

Sample 4-Year Plan

Fall 1st Year

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00**

Applied Calculus I Selective:

- MA 16010 - Applied Calculus I **Credits: 3.00** (preferred) or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00** or
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**

Intro to C Programming Selective:

- CNIT 10500 - Introduction To C Programming **Credits: 3.00** (preferred) or
- CS 15900 - C Programming **Credits: 3.00**

English Composition Selective:

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

16-19 Credits

Spring 1st Year

- ECET 17700 - Data Acquisition And Systems Control **Credits: 3.00**
- ECET 17900 - Introduction To Digital Systems **Credits: 3.00**

Applied Calculus II Selective:

- MA 16020 - Applied Calculus II **Credits: 3.00** (preferred) or
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00** or
- MA 16600 - Analytic Geometry And Calculus II **Credits: 4.00**

General Physics I Selective:

- PHYS 22000 - General Physics **Credits: 4.00** (preferred) or
- PHYS 17200 - Modern Mechanics **Credits: 4.00**

Freshman Speech Selective:

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

16-18 Credits

Fall 2nd Year

- ECET 22700 - DC And Pulse Electronics **Credits: 3.00** ♦
- ECET 22900 - Concurrent Digital Systems **Credits: 3.00**
- THTR 16300 - Introduction To Sound Design And Technology **Credits: 2.00**

General Physics II Selective:

- PHYS 22100 - General Physics **Credits: 4.00** (preferred) or
- PHYS 24100 - Electricity And Optics **Credits: 3.00** or
- PHYS 27200 - Electric And Magnetic Interactions **Credits: 4.00**

Written Communication Selective:

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00** or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**

14-15 Credits

Spring 2nd Year

- ECET 27000 - Electronics Prototype Development And Construction **Credits: 3.00**
- ECET 27700 - AC And Power Electronics **Credits: 3.00**
- ECET 31800 - Foundations Of Audio Electronics **Credits: 3.00** ♦
- Oral Communication Selective - Credit Hours: 3.00
- Theater and Sound Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- ECET 27900 - Embedded Digital Systems **Credits: 3.00** ♦
 - ECET 37600 - Electrical Energy Systems **Credits: 3.00**
 - ECET 38800 - Analog IC Applications **Credits: 3.00**
- Audio Production Selective:**
- FLM 32100 - Live Production I: Theater/Music/Arts **Credits: 1.00 to 4.00** or
 - MUS 38300 - Digital Audio Recording And Production I **Credits: 3.00** or
 - THTR 25300 - Survey Of Audio Production **Credits: 3.00** or
 - THTR 26300 - Introduction To Sound Studios **Credits: 3.00**
- Global / Professional Selective - Credit Hours: 3.00

13-16 Credits

Spring 3rd Year

- ECET 27400 - Wireless Communications **Credits: 3.00**

- ECET 33700 - Continuous Systems Analysis And Design **Credits: 3.00**
- MET 31800 - Applied Room Acoustics **Credits: 3.00**

Statistics Selective:

- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**

Theater Production Selective:

- THTR 36800 - Theatre Production II **Credits: 1.00 to 2.00** or
- DANC 36800 - Dance Sound Design **Credits: 1.00**

- **Business Selective** - Credit Hours: 3.00

16-17 Credits

Fall 4th Year

- ECET 33900 - Digital Signal Processing **Credits: 3.00**
- THTR 35300 - Theatre Audio Techniques I **Credits: 3.00**
- Senior Capstone I Selective - Credit Hours: 3.00
- General Education Selective - Credit Hours: 3.00

Industrial Economics Selective:

- AGECE 33000 - Management Methods For Agricultural Business **Credits: 3.00** or
- AGECE 35200 - Quantitative Techniques For Firm Decision Making **Credits: 3.00** or
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00** or
- MGMT 20000 - Introductory Accounting **Credits: 3.00** or
- MGMT 21200 - Business Accounting **Credits: 3.00**

15 Credits

Spring 4th Year

- ECET 42801 - Advanced Acoustics And Audio Engineering Technologies **Credits: 3.00**
- Senior Capstone II Selective - Credit Hours: 3.00
- Theater and Sound Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

12 Credits

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be

proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Automation and Systems Integration Engineering Technology, BS

About the Program

The Automation & Systems Integration Engineering Technology major is part of the Manufacturing Engineering Technology program. The manufacturing engineering technology program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the commission's general criteria and program criteria for Manufacturing Engineering Technology and similarly named programs.

This is one of three majors offered for students who seek to contribute at the interface between manufacturing, electrical, mechanical, and computing areas in primarily industrial environments.

When you major in automation and systems integration engineering technology, you will address what is needed to move product concepts into efficient, automated production. The curriculum focuses on the entire design and manufacturing process; you'll understand how each team member benefits the system.

Automation and Systems Integration Engineering Technology (website)

School of Engineering Technology Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (120 credits)

Required Major Courses (59 credits)

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- MET 10200 - Production Design And Specifications **Credits: 3.00** ♦

- MET 11100 - Applied Statics **Credits: 3.00**
- MET 11300 - Mechanics Applications **Credits: 1.00**
- MET 23000 - Fluid Power **Credits: 3.00**
- MET 24500 - Manufacturing Systems **Credits: 3.00** ♦
- MET 28400 - Introduction To Industrial Controls **Credits: 3.00** ♦
- MFET 24800 - Industrial Robot Programming And Applications **Credits: 3.00**
- MFET 34400 - Automated Manufacturing Processes **Credits: 3.00**
- MFET 37400 - Manufacturing Integration I **Credits: 3.00**
- **Materials and Processes Selective**
- MET 14300 - Materials And Processes I **Credits: 3.00** or
- MET 14400 - Materials And Processes II **Credits: 3.00**
- Continuous Control Selective - Credit Hours: 3.00

ASET Courses (24 credits, included in required major courses total)

- ECET 33700 - Continuous Systems Analysis And Design **Credits: 3.00**
- CNIT 10500 - Introduction To C Programming **Credits: 3.00**
- **Materials and Processes Selective**
- MET 14300 - Materials And Processes I **Credits: 3.00** or
- MET 14400 - Materials And Processes II **Credits: 3.00**
- Manufacturing Selective - Credit Hours: 3.00
- Manufacturing/Controls/Graphic Selective - Credit Hours: 3.00
- CNIT or CS Selective - Credit Hours: 3.00
- **Senior Capstone Selective I**
- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00** or
Senior Capstone Selective II
- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00** or

Other Departmental/Program Course Requirements (57 credits)

- CHM 11100 - General Chemistry **Credits: 3.00** (Preferred) or
- CHM 11500 - General Chemistry **Credits: 4.00**
- ECET 22400 - Electronic Systems **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00** (Preferred) (satisfies Quantitative Reasoning for core) or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00** or
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**
- MA 16020 - Applied Calculus II **Credits: 3.00** (Preferred) or
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00** or
- MA 16600 - Analytic Geometry And Calculus II **Credits: 4.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** (satisfies Information Literacy and Science, Technology & Society for core)
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00**
Freshman Composition Selective (satisfies Written Communication for core)
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**
Freshman Speech Selective (satisfies Oral Communication for core)

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
 - SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**
- Technical Writing Selective**
- ENGL 42100 - Technical Writing **Credits: 3.00** or
 - ENGL 42000 - Business Writing **Credits: 3.00** or
 - ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**
- Communication Selective**
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
 - COM 32000 - Small Group Communication **Credits: 3.00** or
 - COM 41500 - Discussion Of Technical Problems **Credits: 3.00** or
 - EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- Physics Selective** (satisfies for Science for core)
- PHYS 22000 - General Physics **Credits: 4.00** or
 - PHYS 17200 - Modern Mechanics **Credits: 4.00**
- Statistics or Quality Selective**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** or
 - IET 31600 - Statistical Quality Control **Credits: 3.00**
- Computer Graphics Selective**
- MFET 10301 - Geometric Modeling Applications **Credits: 3.00** or
 - CGT 11000 - Technical Graphics Communications **Credits: 3.00** or
 - MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00** or
 - ENGT 10500 - Industrial Technology Introduction To Design **Credits: 3.00**
- Science Selective (satisfies Science for core) - Credit Hours: 3.00
 - Human Cultures: Humanities Foundation Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
 - Human Cultures: Behavior/Social Sciences Foundation Selective (satisfies Human Cultures: Behavioral Sciences for core) - Credit Hours: 3.00
 - Humanities/Social Science Elective - Credit Hours: 3.00
 - Global / Professional Selective - Credit Hours: 3.00
 - Technical Elective - Credit Hours: 3.00
 - Intercultural Requirement - Credit Hours: 0.00
 - Professional Requirement - Credit Hours: 0.00

Electives (4 credits)

Supplemental List

[Click here for Automation and Systems Integration Engineering Technology Supplemental Information.](#)

Professional Requirement

Grade Requirements

- Students must earn a "D-" or better in all courses.

GPA Requirements

- 2.0 Graduation GPA required for the Bachelor of Science Degree.

Course Requirements and Notes

- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF, and all graded attempts.

Non-course / Non-credit Requirements

- Complete a Professional Requirement.
- Complete an Intercultural Requirement.

Pass/No Pass Policy

- MFET majors do not allow P/NP grading for any classes that are used to meet degree requirements, all degree requirements must be taken for a grade. Electives may be taken P/NP.

Transfer Credit Policy

Transfer credit from other institutions, including courses taken as dual or concurrent credit in high school, and credit from testing such as Advanced Placement and International Baccalaureate that are an exact match for Purdue courses, may be applied to degree requirements.

For undistributed credit to be applied to degree requirements, the course or courses will need to be evaluated by the Curriculum Committee for approval. Additional approvals will be required for courses to meet University Core Curriculum requirements. In both cases approval is not automatic.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency Website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Additional Information

+ denotes Cornerstone Certificate course option.

Sample 4-Year Plan

Fall 1st Year

- CNIT 10500 - Introduction To C Programming **Credits: 3.00**
- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**

- MA 16010 - Applied Calculus I **Credits: 3.00** (Preferred) or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00** or
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**

- MET 14300 - Materials And Processes I **Credits: 3.00** or
- MET 14400 - Materials And Processes II **Credits: 3.00**
- **Freshman Composition Selective**
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

12-16 Credits

Spring 1st Year

- MA 16020 - Applied Calculus II **Credits: 3.00** (Preferred) or

- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00** or
- MA 16600 - Analytic Geometry And Calculus II **Credits: 4.00**
- MET 11100 - Applied Statics **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
- Humanities Foundation Selective - Credit Hours: 3.00
Materials and Processes Selective
- MET 14300 - Materials And Processes I **Credits: 3.00** or
- MET 14400 - Materials And Processes II **Credits: 3.00**

15-17 Credits

Fall 2nd Year

- ECET 22400 - Electronic Systems **Credits: 3.00**
- MET 11300 - Mechanics Applications **Credits: 1.00**
- CHM 11100 - General Chemistry **Credits: 3.00** (Preferred) or
- CHM 11500 - General Chemistry **Credits: 4.00**
- Behavioral/Social Science Foundation Selective - Credit Hours: 3.00
Freshman Speech Selective
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**
Computer Graphics Selective
- MFET 10301 - Geometric Modeling Applications **Credits: 3.00** or
- CGT 11000 - Technical Graphics Communications **Credits: 3.00** or
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00** or
- ENGT 10500 - Industrial Technology Introduction To Design **Credits: 3.00**

15-17 Credits

Spring 2nd Year

- MET 10200 - Production Design And Specifications **Credits: 3.00** ♦
- MET 24500 - Manufacturing Systems **Credits: 3.00** ♦
- MET 28400 - Introduction To Industrial Controls **Credits: 3.00** ♦
Physics Selective
- PHYS 22000 - General Physics **Credits: 4.00** or
- PHYS 17200 - Modern Mechanics **Credits: 4.00**
- Elective - Credit Hours: 1.00

14 Credits

Fall 3rd Year

- MET 23000 - Fluid Power **Credits: 3.00**
- MFET 34400 - Automated Manufacturing Processes **Credits: 3.00**
Technical Writing Selective

- ENGL 42100 - Technical Writing **Credits: 3.00** + or
- ENGL 42000 - Business Writing **Credits: 3.00** + or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**
Statistics or Quality Selective
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** or
- IET 31600 - Statistical Quality Control **Credits: 3.00**
- Science Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- MFET 37400 - Manufacturing Integration I **Credits: 3.00**
- MFET 24800 - Industrial Robot Programming And Applications **Credits: 3.00**
- ECET 33700 - Continuous Systems Analysis And Design **Credits: 3.00**
- Manufacturing Selective - Credit Hours: 3.00
- CNIT or CS Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00**
- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00**
- Manufacturing/Controls/Graphics Selective - Credit Hours: 3.00
- Continuous Controls Selective - Credit Hours: 3.00
- Global / Professional Selective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**
- Communications Selective + - Credit Hours: 3.00
- Humanities/Social Science Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 0.00-3.00

12-15 Credits

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Computer Engineering Technology, BS

About the Program

The Computer Engineering Technology major is part of the Electrical Engineering Technology program. The Electrical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the commission's general criteria and program criteria for Electrical/Electronic(s) Engineering Technology and similarly named programs.

Computer Engineering Technology

School of Engineering Technology Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (52 credits)

Required Major Courses (49 credits)

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- ECET 17700 - Data Acquisition And Systems Control **Credits: 3.00**
- ECET 17900 - Introduction To Digital Systems **Credits: 3.00**
- ECET 22700 - DC And Pulse Electronics **Credits: 3.00 ♦**
- ECET 22900 - Concurrent Digital Systems **Credits: 3.00**
- ECET 27000 - Electronics Prototype Development And Construction **Credits: 3.00**
- ECET 27400 - Wireless Communications **Credits: 3.00**
- ECET 27900 - Embedded Digital Systems **Credits: 3.00 ♦**

- ECET 32900 - Advanced Embedded Digital Systems **Credits: 3.00**
- ECET 33900 - Digital Signal Processing **Credits: 3.00**
- ECET 34900 - Advanced Digital Systems **Credits: 3.00**
- Computer Engineering Technology Selective - Credit Hours: 6.00
- ECET Selective - Credit Hours: 3.00
- Senior Capstone Selective I - Credit Hours: 3.00
- Senior Capstone Selective II - Credit Hours: 3.00

Other Departmental/Program Course Requirements (65 credits)

- CNIT 17600 - Information Technology Architectures **Credits: 3.00**
- CNIT 18000 - Introduction To Systems Development **Credits: 3.00**
- CNIT 25501 - Object-Oriented Programming Introduction **Credits: 3.00**
- CNIT 34400 - Network Engineering Fundamentals **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** ♦ (satisfies Information Literacy and Science, Technology & Society for core)
Intro to C Programming Selective (3 credits)
- CNIT 10500 - Introduction To C Programming **Credits: 3.00** (preferred) or
- CS 15900 - C Programming **Credits: 3.00**
Applied Calculus I Selective (3-5 credits) - satisfies Quantitative Reasoning for core
- MA 16010 - Applied Calculus I **Credits: 3.00** (preferred) or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00** or
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**
Applied Calculus II Selective (3-5 credits)
- MA 16020 - Applied Calculus II **Credits: 3.00** (preferred) or
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00** or
- MA 16600 - Analytic Geometry And Calculus II **Credits: 4.00**
General Physics I Selective (4 credits) - satisfies Science for core
- PHYS 22000 - General Physics **Credits: 4.00** (preferred) or
- PHYS 17200 - Modern Mechanics **Credits: 4.00**
General Physics II Selective (3-4 credits) - satisfies Science for core
- PHYS 22100 - General Physics **Credits: 4.00** (preferred) or
- PHYS 24100 - Electricity And Optics **Credits: 3.00** or
- PHYS 27200 - Electric And Magnetic Interactions **Credits: 4.00**
Statistics Selective (3 credits)
- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
English Composition Selective (3-4 credits) - satisfies Written Communication for core
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**
Freshman Speech Selective (3 credits) - satisfies Oral Communication for core)
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**
Industrial Economics Selective (3 credits)
- AGECE 33000 - Management Methods For Agricultural Business **Credits: 3.00** or

- AGECE 35200 - Quantitative Techniques For Firm Decision Making **Credits: 3.00** or
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00** or
- MGMT 20000 - Introductory Accounting **Credits: 3.00** or
- MGMT 21200 - Business Accounting **Credits: 3.00**
Written Communication Selective (3 credits)
- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00** or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**
- **Business Selective** - Credit Hours: 3.00 (may satisfy Human Culture: Behavioral/Social Sciences for core)
- **General Education Selectives** - Credit Hours: 12.00 (may satisfy Human Culture: Humanities and Human Culture: Behavioral/Social Sciences for core)
- **Global/ Professional Selective** - Credit Hours: 3.00
- **Oral Communication Selectives** - Credit Hours: 3.00 (Any communications COM course at the 20000+ level or higher.)
- **Intercultural Requirement** - Credit Hours: 0.00
- **Professional Requirement** - Credit Hours: 0.00

Elective (3 credits)

- Any non-remedial course.

Supplemental List

Computer Engineering Technology Supplemental Information

Professional Requirement

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their profession prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response. See supplemental information for approved experiences.

Grade Requirements

- Students must earn a "D-" or better in all courses. Pass/no pass grading allowed for General Education Selectives and Electives (up to 15 hrs).
- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.

GPA Requirements

- 2.0 Graduation GPA is required for the Bachelor of Science degree.

Course Requirements and Notes

- Human Cultures Behavioral/Social Science for University Core may be selected to satisfy either the Business Selective or a General Education Selective requirement.
- Senior Capstone Selective I/II and 12 hours of ECET lab-based courses at the 300-level or higher must be taken at Purdue University West Lafayette and/or Polytechnic Statewide.

Non-course / Non-credit Requirements

- Intercultural Requirement (ungraded) must be completed.
- Professional Requirement (ungraded) must be completed.
- Professional and Intercultural requirements will be satisfied by completion of experiences, assessments, and courses that are pre-approved by the EET Curriculum Subcommittee. Approved courses may fulfill other degree requirements.
- Choose from list: Refer to the Computer Engineering Technology Supplemental Information for a complete list of selectives and requirements (including ungraded requirements).

Pass/No Pass Policy

- Pass/no pass grading allowed for General Education Selectives and Electives (up to 15 hrs).

Transfer Credit Policy

Transfer credit from other institutions, including courses taken as dual or concurrent credit in high school, and credit from testing such as Advanced Placement and International Baccalaureate that are an exact match for Purdue courses, may be applied to degree requirements.

For undistributed credit to be applied to degree requirements, the course or courses will need to be evaluated by the ECET Curriculum Committee for approval. Additional approvals will be required for courses to meet University Core Curriculum requirements. In both cases approval is not automatic.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)

- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Additional Information

- The Computer Engineering Technology (CEGT) major is within the Electrical Engineering Technology program.

Sample 4-Year Plan

Fall 1st Year

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
 - TECH 12000 - Design Thinking In Technology **Credits: 3.00**
- Intro to C Programming Selective:**
- CNIT 10500 - Introduction To C Programming **Credits: 3.00** (preferred) or
 - CS 15900 - C Programming **Credits: 3.00**
- Applied Calculus I Selective:**
- MA 16010 - Applied Calculus I **Credits: 3.00** (preferred) or
 - MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00** or
 - MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**
- English Composition Selective:**

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

16 Credits

Spring 1st Year

- ECET 17700 - Data Acquisition And Systems Control **Credits: 3.00**
- ECET 17900 - Introduction To Digital Systems **Credits: 3.00**

Applied Calculus II Selective:

- MA 16020 - Applied Calculus II **Credits: 3.00** (preferred) or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00** or
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**

General Physics I Selective:

- PHYS 22000 - General Physics **Credits: 4.00** (preferred) or
- PHYS 17200 - Modern Mechanics **Credits: 4.00**

Freshman Speech Selective:

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

16 Credits

Fall 2nd Year

- ECET 22700 - DC And Pulse Electronics **Credits: 3.00** ♦
- ECET 22900 - Concurrent Digital Systems **Credits: 3.00**

General Physics II Selective:

- PHYS 22100 - General Physics **Credits: 4.00** (preferred) or
- PHYS 24100 - Electricity And Optics **Credits: 3.00** or
- PHYS 27200 - Electric And Magnetic Interactions **Credits: 4.00**
- General Education Selective - Credit Hours: 3.00
- Oral Communication Selective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- ECET 27000 - Electronics Prototype Development And Construction **Credits: 3.00**
- ECET 27400 - Wireless Communications **Credits: 3.00**
- ECET 27900 - Embedded Digital Systems **Credits: 3.00** ♦
- CNIT 18000 - Introduction To Systems Development **Credits: 3.00**

Written Communication Selective:

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00** or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**

15 Credits

Fall 3rd Year

- ECET 34900 - Advanced Digital Systems **Credits: 3.00**
- ECET 33900 - Digital Signal Processing **Credits: 3.00**
- CNIT 25501 - Object-Oriented Programming Introduction **Credits: 3.00**
- General Education Selective - Credit Hours: 3.00
- Global/ Professional Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- ECET 32900 - Advanced Embedded Digital Systems **Credits: 3.00**
- CNIT 17600 - Information Technology Architectures **Credits: 3.00**
- Business Selective - Credit Hours: 3.00
- Computer Engineering Technology Selective - Credit Hours: 3.00
- General Education Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- Senior Capstone Selective I - Credit Hours: 3.00
- General Education Selective - Credit Hours: 3.00
- Computer Engineering Technology Selective - Credit Hours: 3.00
- CNIT 34400 - Network Engineering Fundamentals **Credits: 3.00**

Industrial Economics Selective:

- AGECE 33000 - Management Methods For Agricultural Business **Credits: 3.00** or

- AGECE 35200 - Quantitative Techniques For Firm Decision Making **Credits:** 3.00 or
- IET 33400 - Economic Analysis For Technology Systems **Credits:** 3.00 or
- MGMT 20000 - Introductory Accounting **Credits:** 3.00 or
- MGMT 21200 - Business Accounting **Credits:** 3.00

15 Credits

Spring 4th Year

- Senior Capstone Selective II - Credit Hours: 3.00
- ECET Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

Statistics Selective:

- STAT 22500 - Introduction To Probability Models **Credits:** 3.00 or
- STAT 30100 - Elementary Statistical Methods **Credits:** 3.00

12 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Digital Enterprise Systems, BS

About the Program

Modern products are increasingly supported by data-driven design, manufacturing, production and support throughout a product's lifecycle. With a major in Digital Enterprise Systems (DESS), you will use the latest software and hardware tools to effectively communicate and support each step in the product's development and use. In your classes, you will define, build, and visualize digital product and process models to demonstrate how products are built, how they are made, how they are serviced and supported, and how the data used throughout this process is managed. Your work will be done primarily with Product Lifecycle Management (PLM) software tools for simulation, Computer-Aided Design (CAD), Product Data Management (PDM), manufacturing execution systems (MES), and technical data packages.

The Digital Enterprise Systems major is part of the Manufacturing Engineering Technology program. The Manufacturing Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the commission's general criteria and program criteria for Manufacturing Engineering Technology and similarly named programs.

School of Engineering Technology Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (69-70 credits)

Required Major Courses

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00**
- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**
- MET 24500 - Manufacturing Systems **Credits: 3.00**
- TLI 21300 - Project Management **Credits: 3.00**
- IET 21400 - Introduction To Supply Chain Management Technology **Credits: 3.00**
- IET 23500 - Introduction To Systems Thinking And Process Improvement **Credits: 3.00**
- IET 31600 - Statistical Quality Control **Credits: 3.00**
- ECON 21000 - Principles Of Economics **Credits: 3.00**
- MGMT 45500 - Legal Background For Business I **Credits: 3.00**
- MFET 11301 - Product Data Management **Credits: 3.00**
- MFET 20301 - Model-Based Definition **Credits: 3.00 ♦**
- MFET 21301 - Simulation And Visualization Applications **Credits: 3.00 ♦**
- MFET 30301 - Digital Manufacturing **Credits: 3.00**
- MFET 31301 - The Business Of Managing Digital Product Data **Credits: 3.00**
Computer Graphics Selective - 1 Course
- MFET 10301 - Geometric Modeling Applications **Credits: 3.00** or
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00**
Computer Programming Selective - 1 Course
- CNIT 10500 - Introduction To C Programming **Credits: 3.00** or
- CNIT 15501 - Introduction To Software Development Concepts **Credits: 3.00** or
- CNIT 17500 - Visual Programming **Credits: 3.00**
Materials & Processes Selective - 1 Course
- MET 14300 - Materials And Processes I **Credits: 3.00** or
- MET 14400 - Materials And Processes II **Credits: 3.00**

Enterprise Systems Selective - 1 Course

- IET 43640 - Lean Six Sigma **Credits: 3.00** or
 - MFET 15900 - Introduction To The Smart Manufacturing Enterprise **Credits: 1.00** (and 2 additional credit hours of Free Elective may be used to fulfill the Enterprise Systems Selective).
- or
- MFET 25000 - Smart Manufacturing Cloud Computing Applications **Credits: 3.00**
 - Management Selective - Credit Hours: 3.00
 - Technical Selectives - Credit Hours: 9.00

Other Departmental/Program Course Requirements (43-44 credits)

- MA 16010 - Applied Calculus I **Credits: 3.00** (*satisfies Quantitative Reasoning Selective for core*)
- MA 16020 - Applied Calculus II **Credits: 3.00** (*satisfies Quantitative Reasoning Selective for core*)
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** (*satisfies Science, Tech and Society & Information Literacy for core*)

Oral Communication Selective - 1 Course (*satisfies OC for university core*)

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

Freshman Composition Selective - 1 Course (*satisfies WC for university core*)

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

Advanced Oral Communication Selective - 1 Course

- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00** or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**

Technical Writing Selective - 1 Course

- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00** or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**

Physics Selective - 1 Course (*satisfies SCI for university core*)

- PHYS 17200 - Modern Mechanics **Credits: 4.00** or
- PHYS 22000 - General Physics **Credits: 4.00**

Statistics Selective - 1 Course

- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** or
- STAT 35000 - Introduction To Statistics **Credits: 3.00**
- Lab Science Selective (*satisfies Science Selective for Core*) - Credit Hours: 3.00
- Humanities Foundation Selective (*satisfies Humanities for Core & possible Cornerstone Selective*) - Credit Hours: 3.00
- Behavioral/Social Sciences Foundation Selective (BSS) (*satisfies Human Cultures Behavior/Social Science for core*) - Credit Hours: 3.00
- Humanities Selective - Credit Hours: 6.00
- Intercultural Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

Electives (8 credits)

Any course, any subject. Credit Hours: 6.00-8.00

Supplemental List

[Click here for Digital Enterprise Systems Supplemental Information](#)

Professional Experience

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response. See supplemental information for approved experiences.

Grade Requirements

- Students must earn a "D-" or better in all courses.

GPA Requirements

- 2.00 Graduation GPA required for Bachelor of Science degree.

Course Requirements and Notes

- Purdue policy states that a student may attempt a course no more than three (3) times. An attempt is defined as all courses displayed on a student's transcript including, but not limited to A,B,C,D,E,F,W,WF,I and IF

Non-course / Non-credit Requirements

- Intercultural Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

Pass/No Pass Policy

- Pass/No Pass may be allowed for Electives or Technical Electives only.

Transfer Credit Policy

Transfer credit from other institutions, including courses taken as dual or concurrent credit in high school, and credit from testing such as Advanced Placement and International Baccalaureate that are an exact match for Purdue courses, may be applied to degree requirements.

For undistributed credit to be applied to degree requirements, the course or courses will need to be evaluated by the Curriculum Committee for approval. Additional approvals will be required for courses to meet University Core Curriculum requirements. In both cases approval is not automatic.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- MA 16010 - Applied Calculus I **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
Computer Graphics Selective
- MFET 10301 - Geometric Modeling Applications **Credits: 3.00**
or
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00**

Computer Programming Selective

- CNIT 10500 - Introduction To C Programming **Credits: 3.00**
or
- CNIT 15501 - Introduction To Software Development Concepts **Credits: 3.00**
or
- CNIT 17500 - Visual Programming **Credits: 3.00**
Behavioral/Social Science Foundation Selective - Credit Hours: 3.00

14-15 Credits

Spring 1st Year

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- MA 16020 - Applied Calculus II **Credits: 3.00**
Materials & Processes Selective
- MET 14300 - Materials And Processes I **Credits: 3.00** or
- MET 14400 - Materials And Processes II **Credits: 3.00**
Freshman Composition Selective - 1 Course
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**
Oral Communication Selective - 1 Course
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

16-17 Credits

Fall 2nd Year

- MFET 11301 - Product Data Management **Credits: 3.00**
- TLI 21300 - Project Management **Credits: 3.00**
Physics Selective - 1 Course
- PHYS 17200 - Modern Mechanics **Credits: 4.00** or
- PHYS 22000 - General Physics **Credits: 4.00**
- Humanities Foundation Selective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

15 Credits

Spring 2nd Year

- MFET 20301 - Model-Based Definition **Credits: 3.00** ♦
- IET 21400 - Introduction To Supply Chain Management Technology **Credits: 3.00**
- ECON 21000 - Principles Of Economics **Credits: 3.00**
- Lab Science Selective - Credit Hours: 3.00

- Technical Elective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- IET 23500 - Introduction To Systems Thinking And Process Improvement **Credits: 3.00**
- MFET 21301 - Simulation And Visualization Applications **Credits: 3.00** ♦
Statistics Selective - 1 Course
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** or
- STAT 35000 - Introduction To Statistics **Credits: 3.00**
- Humanities Selective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- IET 31600 - Statistical Quality Control **Credits: 3.00**
- MFET 30301 - Digital Manufacturing **Credits: 3.00**
- MET 24500 - Manufacturing Systems **Credits: 3.00**
Technical Writing Selective - 1 Course
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00** or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**
- Management Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- MFET 31301 - The Business Of Managing Digital Product Data **Credits: 3.00**
- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00**
- MGMT 45500 - Legal Background For Business I **Credits: 3.00**
- Humanities Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**

Advanced Oral Communication Selective - 1 Course

- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00** or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**

Enterprise Systems Selective - 1 Course

- IET 43640 - Lean Six Sigma **Credits: 3.00** or
- MFET 15900 - Introduction To The Smart Manufacturing Enterprise **Credits: 1.00** (and 2 additional credit hours of Electives may be used to fulfill the Enterprise System Selective) or
- MFET 25000 - Smart Manufacturing Cloud Computing Applications **Credits: 3.00**
- Technical Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Electrical Engineering Technology, BS

About the Program

The Electrical Engineering Technology major is part of the Electrical Engineering Technology program. The electrical engineering technology program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the commission's general criteria and program criteria for Electrical/Electronic(s) Engineering Technology and similarly named programs.

When you study electrical engineering technology, you study the lifeblood of today's technology: electronics and computers. Electronics technology is a part of most everything society relies on, from air conditioning to airplanes, and from trains to televisions. And because technology is constantly evolving, you will be engaged in learning methods that will help you adapt to and embrace new technologies and their uses.

Students in this program can apply to participate in a five-year combined bachelor's/master's degree program in electrical engineering technology.

Electrical Engineering Technology Website

School of Engineering Technology Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (55 credits)

Required Major Courses (55 credits)

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- ECET 17700 - Data Acquisition And Systems Control **Credits: 3.00**
- ECET 17900 - Introduction To Digital Systems **Credits: 3.00**
- ECET 22700 - DC And Pulse Electronics **Credits: 3.00**
- ECET 22900 - Concurrent Digital Systems **Credits: 3.00**
- ECET 27000 - Electronics Prototype Development And Construction **Credits: 3.00**
- ECET 27400 - Wireless Communications **Credits: 3.00**
- ECET 27700 - AC And Power Electronics **Credits: 3.00**
- ECET 27900 - Embedded Digital Systems **Credits: 3.00**
- ECET 37600 - Electrical Energy Systems **Credits: 3.00**

- ECET Advanced Analysis Selective - Credit Hours: 3.00
- ECET Selectives - Credit Hours: 12.00
- Senior Capstone I Selective - Credit Hours: 3.00
- Senior Capstone II Selective - Credit Hours: 3.00

Other Departmental/Program Course Requirements (62 credits)

- TECH 12000 - Design Thinking In Technology **Credits: 3.00** (satisfies Information Literacy and Science, Technology & Society for core)
Intro to C Programming Selective (3 credit)
- CNIT 10500 - Introduction To C Programming **Credits: 3.00** (preferred) or
- CS 15900 - C Programming **Credits: 3.00**
Applied Calculus I Selective (3 credits) - satisfies Quantitative Reasoning for core
- MA 16010 - Applied Calculus I **Credits: 3.00** (preferred) or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00** or
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**

Applied Calculus II Selective (4 credits)

- MA 16020 - Applied Calculus II **Credits: 3.00** (preferred) or
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00** or
- MA 16600 - Analytic Geometry And Calculus II **Credits: 4.00**
General Physics I Selective (4 credits) - satisfies Science for core
- PHYS 22000 - General Physics **Credits: 4.00** (preferred) or
- PHYS 17200 - Modern Mechanics **Credits: 4.00**
General Physics II Selective (3-4 credits) - satisfies Science for core
- PHYS 22100 - General Physics **Credits: 4.00** (preferred) or
- PHYS 24100 - Electricity And Optics **Credits: 3.00** or
- PHYS 27200 - Electric And Magnetic Interactions **Credits: 4.00**
Statistics Selective (3 credits)
- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
English Composition Selective (3-4 credits) - satisfies Written Communication for core
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

Written Communication Selective (3 credits)

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00** or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**
Freshman Speech Selective (3 credits) - satisfies Oral Communication for core
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

Industrial Economics Selective (3 credits)

- AGECE 33000 - Management Methods For Agricultural Business **Credits: 3.00** or
- AGECE 35200 - Quantitative Techniques For Firm Decision Making **Credits: 3.00** or
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00** or
- MGMT 20000 - Introductory Accounting **Credits: 3.00** or
- MGMT 21200 - Business Accounting **Credits: 3.00**
- **Business Selective** - Credit Hours: 3.00
- **General Education Selectives:** 12.00
- **Global/ Professional Selective** - Credit Hours: 3.00
- **Human Cultures: Humanities** requirement for core - Credit Hours: 3.00
- **Human Cultures: Behavioral/Social Sciences** requirement for core (can be met either through a General Education or Business Selective) - Credit Hours: 3.00
- **General Education Selective** - Credit Hours: 3.00
- **General Education Selective** - Credit Hour: 3.00
- **Oral Communication Selective** - Credit Hours: 3.00
- **Technical Selectives** (9 additional credit hours of *technical courses*, including additional ECET courses) - Credit Hours 9.00
- **Intercultural Requirement** - 0.0 Credit Hours
- **Professional Requirement** - 0.0 Credit Hours

Elective (3 credits)

- Any non-remedial course.

Supplemental List

[Click here for Electrical Engineering Technology Supplemental Information.](#)

Professional Experience

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response. See supplemental information for approved experiences.

Grade Requirements

- Students must earn a "D-" or better in all courses.
- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.

GPA Requirements

- 2.0 Graduation GPA is required for the Bachelor of Science degree.

Course Requirements and Notes

- Human Cultures Behavioral/Social Science for University Core may be selected to satisfy either the Business Selective or a General Education Selective requirement.
- Senior Capstone Selective I/II and 12 hours of ECET lab-based courses at the 300-level or higher must be taken at Purdue University West Lafayette and/or Polytechnic Statewide.

Non-course / Non-credit Requirements

- Intercultural Requirement (ungraded) must be completed.
- Professional Requirement (ungraded) must be completed.
- Professional and Intercultural requirements will be satisfied by completion of experiences, assessments, and courses that are pre-approved by the ECET Curriculum Subcommittee. Approved courses may fulfill other degree requirements.
- Choose from list: Refer to the Electrical Engineering Technology Supplemental Information for a complete list of selectives and requirements (including ungraded requirements).

Pass/No Pass Policy

- Pass/no pass grading allowed for General Education Selectives and Electives (up to 15 hrs).

Transfer Credit Policy

- Transfer credit from other institutions, including courses taken as dual or concurrent credit in high school, and credit from testing such as Advanced Placement and International Baccalaureate that are an exact match for Purdue courses, may be applied to degree requirements.
- For undistributed credit to be applied to degree requirements, the course or courses will need to be evaluated by the ECET Curriculum Committee for approval. Additional approvals will be required for courses to meet University Core Curriculum requirements. In both cases approval is not automatic.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Additional Information

- The Electrical Engineering Technology (EETC) major is within the Electrical Engineering Technology program.

Sample 4-Year Plan

Fall 1st Year

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00**

Applied Calculus I Selective:

- MA 16010 - Applied Calculus I **Credits: 3.00** (preferred) or
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00** or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00**

Intro to C Programming Selective:

- CNIT 10500 - Introduction To C Programming **Credits: 3.00** (preferred) or
- CS 15900 - C Programming **Credits: 3.00**

English Composition Selective:

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

16 Credits

Spring 1st Year

- ECET 17700 - Data Acquisition And Systems Control **Credits: 3.00**
- ECET 17900 - Introduction To Digital Systems **Credits: 3.00**

Applied Calculus II Selective:

- MA 16020 - Applied Calculus II **Credits: 3.00** (preferred) or
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00** or
- MA 16600 - Analytic Geometry And Calculus II **Credits: 4.00**

General Physics I Selective:

- PHYS 22000 - General Physics **Credits: 4.00** (preferred) or
- PHYS 17200 - Modern Mechanics **Credits: 4.00**

Freshman Speech Selective:

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

16 Credits

Fall 2nd Year

- ECET 22700 - DC And Pulse Electronics **Credits: 3.00** ♦
- ECET 22900 - Concurrent Digital Systems **Credits: 3.00**

General Physics II Selective:

- PHYS 22100 - General Physics **Credits: 4.00** (preferred) or
- PHYS 24100 - Electricity And Optics **Credits: 3.00**
or
- PHYS 27200 - Electric And Magnetic Interactions **Credits: 4.00**

Written Communication Selective:

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00** or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**
- General Education Selective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- ECET 27000 - Electronics Prototype Development And Construction **Credits: 3.00**
- ECET 27400 - Wireless Communications **Credits: 3.00**
- ECET 27700 - AC And Power Electronics **Credits: 3.00** ♦
- General Education Selective - Credit Hours: 3.00
- Oral Communication Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- ECET 37600 - Electrical Energy Systems **Credits: 3.00**
- ECET Advanced Analysis Selective - Credit Hours: 3.00
- ECET Selective - Credit Hours: 3.00
- Global/ Professional Selective - Credit Hours: 3.00

Statistics Selective:

- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**

15 Credits

Spring 3rd Year

- ECET 27900 - Embedded Digital Systems **Credits: 3.00** ♦
- ECET Selective - Credit Hours: 3.00
- Business Selective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00

Industrial Economics Selective:

- AGECE 33000 - Management Methods For Agricultural Business **Credits: 3.00** or
- AGECE 35200 - Quantitative Techniques For Firm Decision Making **Credits: 3.00** or
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00** or
- MGMT 20000 - Introductory Accounting **Credits: 3.00** or
- MGMT 21200 - Business Accounting **Credits: 3.00**

15 Credits

Fall 4th Year

- Senior Capstone I Selective - Credit Hours: 3.00
- ECET Selective - Credit Hours: 3.00
- General Education Selective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- Senior Capstone II Selective - Credit Hours: 3.00
- ECET Selective - Credit Hours: 3.00
- General Education Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

12 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be

proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Energy Engineering Technology, BS

About the Program

The Energy Engineering Technology major within the Electrical Engineering Technology Degree Program focuses elective classes on the efficient generation and use of energy in electrical systems. Smart Grid, power distribution, industrial codes and standards, efficient motor drives, and sustainable energy concepts are taught along with environmental policy issues.

The Energy Engineering Technology major is part of the Electrical Engineering Technology program. The electrical engineering technology program is accredited by the Engineering Technology Accreditation Commission of ABET, under the commission's general criteria and program criteria for Electrical/Electronic(s) Engineering Technology and similarly named programs.

School of Engineering Technology Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (52 credits)

Required Major Courses (52 credits)

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- ECET 17700 - Data Acquisition And Systems Control **Credits: 3.00**
- ECET 17900 - Introduction To Digital Systems **Credits: 3.00**
- ECET 22700 - DC And Pulse Electronics **Credits: 3.00**
- ECET 22900 - Concurrent Digital Systems **Credits: 3.00**
- ECET 27000 - Electronics Prototype Development And Construction **Credits: 3.00**
- ECET 27400 - Wireless Communications **Credits: 3.00**
- ECET 27700 - AC And Power Electronics **Credits: 3.00**
- ECET 27900 - Embedded Digital Systems **Credits: 3.00**
- ECET 37600 - Electrical Energy Systems **Credits: 3.00**
- ECET 33300 - Power Electronics In Energy Systems **Credits: 3.00**
- ECET 37300 - Applied Electronic Drives **Credits: 3.00**

- ECET 43600 - Electrical Power Transmissions, Distribution, And Smart Control **Credits:** 3.00
- ECET 47600 - Smart Grid Technology And Applications **Credits:** 3.00
- ECET Advanced Analysis Selective - Credit Hours: 3.00
- Senior Capstone Selective I - Credit Hours: 3.00
- Senior Capstone Selective II - Credit Hours: 3.00

Other Departmental/Program Course Requirements (64-70 credits)

- MET 22000 - Heat And Power **Credits:** 3.00
- POL 22300 - Introduction To Environmental Policy **Credits:** 3.00
- POL 32700 - Global Green Politics **Credits:** 3.00 (satisfies Behavioral/Social Sciences for core)
- TECH 12000 - Design Thinking In Technology **Credits:** 3.00 (satisfies Science, Technology and Society and Information Literacy for core)

Intro to C Programming Selective

- CNIT 10500 - Introduction To C Programming **Credits:** 3.00 (preferred) or
- CS 15900 - C Programming **Credits:** 3.00

Applied Calculus I Selective (satisfies Quantitative Reasoning for core)

- MA 16010 - Applied Calculus I **Credits:** 3.00 (preferred) or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits:** 5.00 or
- MA 16500 - Analytic Geometry And Calculus I **Credits:** 4.00

Applied Calculus II Selective (satisfies Science for core)

- MA 16020 - Applied Calculus II **Credits:** 3.00 (preferred) or
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits:** 5.00 or
- MA 16600 - Analytic Geometry And Calculus II **Credits:** 4.00

General Physics I Selective (satisfies Science for core)

- PHYS 22000 - General Physics **Credits:** 4.00 (preferred) or
- PHYS 17200 - Modern Mechanics **Credits:** 4.00

General Physics II Selective (satisfies Science for core)

- PHYS 22100 - General Physics **Credits:** 4.00 (preferred) or
- PHYS 24100 - Electricity And Optics **Credits:** 3.00 or
- PHYS 27200 - Electric And Magnetic Interactions **Credits:** 4.00

Statistics Selective:

- STAT 22500 - Introduction To Probability Models **Credits:** 3.00 or
- STAT 30100 - Elementary Statistical Methods **Credits:** 3.00

English Composition Selective (satisfies Written Communication for core)

- ENGL 10600 - First Year Composition With Conferences **Credits:** 4.00 or
- ENGL 10800 - First Year Composition **Credits:** 3.00 or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits:** 3.00 or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00

Written Composition Selective

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00** or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**

Freshmen Speech Selective (satisfies Oral Communication for core)

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

Industrial Economics Selective

- AGECE 33000 - Management Methods For Agricultural Business **Credits: 3.00** or
- AGECE 35200 - Quantitative Techniques For Firm Decision Making **Credits: 3.00** or
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00** or
- MGMT 20000 - Introductory Accounting **Credits: 3.00** or
- MGMT 21200 - Business Accounting **Credits: 3.00**

Sustainability Engineering Technology Selective

- AGECE 25000 - Economic Geography Of World Food And Resources **Credits: 3.00** or
- CE 35500 - Engineering Environmental Sustainability **Credits: 3.00** or
- EEE 35500 - Engineering Environmental Sustainability **Credits: 3.00** or
- MET 53000 - Facilities Engineering Technology **Credits: 3.00** or
- SFS 30200 - Principles Of Sustainability **Credits: 3.00**
- Oral Communication Selective - Credit Hours: 3.00
- Business Selective - Credit Hours: 3.00
- General Education Selectives - Credit Hours: 6.00
- Energy Related Technical Selective - Credit Hours: 3.00
- Global / Professional Selective - Credit Hours: 3.00
- Intercultural Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

Electives (3 credits)

Any non-remedial course.

Supplemental List

- Energy Engineering Technology Supplemental Information

Professional Experience

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their profession prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, etc. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response. See supplemental information for approved experiences.

Grade Requirements

- Students must earn a "D-" or better in all courses.
- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.

GPA Requirements

- 2.0 Graduation GPA is required for the Bachelor of Science degree.

Course Requirements and Notes

- Senior Capstone Selective I/II and 12 hours of ECET lab-based courses at the 300-level or higher must be taken at Purdue University West Lafayette and/or Polytechnic Statewide.

Non-course / Non-credit Requirements

- Intercultural Requirement (ungraded) must be completed.
- Professional Requirement (ungraded) must be completed.
- Professional and Intercultural requirements will be satisfied by completion of experiences, assessments, and courses that are pre-approved by the ECET Curriculum Subcommittee. Approved courses may fulfill other degree requirements.
- Choose from list: Refer to the Supplemental Information for a complete list of selectives and requirements (including ungraded requirements).

Pass/No Pass Policy

- Pass/no pass grading allowed for General Education Selectives and Electives (up to 9 hrs).

Transfer Credit Policy

Transfer credit from other institutions, including courses taken as dual or concurrent credit in high school, and credit from testing such as Advanced Placement and International Baccalaureate that are an exact match for Purdue courses, may be applied to degree requirements.

For undistributed credit to be applied to degree requirements, the course or courses will need to be evaluated by the ECET Curriculum Committee for approval. Additional approvals will be required for courses to meet University Core Curriculum requirements. In both cases approval is not automatic.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Additional Information

- The Energy Engineering Technology (ENET) major is within the Electrical Engineering Technology program.

Sample 4-Year Plan

Fall 1st Year

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
- **Applied Calculus I Selective:**
- MA 16010 - Applied Calculus I **Credits: 3.00** (preferred) or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00** or
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**

Intro to C Programming Selective:

- CNIT 10500 - Introduction To C Programming **Credits:** 3.00 (preferred) or
- CS 15900 - C Programming **Credits:** 3.00

English Composition Selective:

- ENGL 10600 - First Year Composition With Conferences **Credits:** 4.00 or
- ENGL 10800 - First Year Composition **Credits:** 3.00 or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits:** 3.00 or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00

16-19 Credits

Spring 1st Year

- ECET 17700 - Data Acquisition And Systems Control **Credits:** 3.00
- ECET 17900 - Introduction To Digital Systems **Credits:** 3.00

Applied Calculus II Selective:

- MA 16020 - Applied Calculus II **Credits:** 3.00 (preferred) or
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits:** 5.00 or
- MA 16600 - Analytic Geometry And Calculus II **Credits:** 4.00

General Physics I Selective:

- PHYS 22000 - General Physics **Credits:** 4.00 (preferred) or
- PHYS 17200 - Modern Mechanics **Credits:** 4.00

Freshmen Speech Selective:

- COM 11400 - Fundamentals Of Speech Communication **Credits:** 3.00 or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits:** 3.00

16-18 Credits

Fall 2nd Year

- ECET 22700 - DC And Pulse Electronics **Credits:** 3.00 ♦
- ECET 22900 - Concurrent Digital Systems **Credits:** 3.00
- POL 22300 - Introduction To Environmental Policy **Credits:** 3.00

General Physics II Selective:

- PHYS 22100 - General Physics **Credits:** 4.00 (preferred) or
- PHYS 24100 - Electricity And Optics **Credits:** 3.00 or
- PHYS 27200 - Electric And Magnetic Interactions **Credits:** 4.00

- Oral Communication Selective - Credit Hours: 3.00

15-16 Credits

Spring 2nd Year

- ECET 27000 - Electronics Prototype Development And Construction **Credits: 3.00**
- ECET 27700 - AC And Power Electronics **Credits: 3.00** ♦
- ECET 27900 - Embedded Digital Systems **Credits: 3.00** ♦
- POL 32700 - Global Green Politics **Credits: 3.00**

Written Composition Selective:

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00** or
- ENGL 30400 - Advanced Composition **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00** or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**

15 Credits

Fall 3rd Year

- ECET 37600 - Electrical Energy Systems **Credits: 3.00**
- ECET Advanced Analysis Selective - Credit Hours: 3.00
- Global / Professional Selective - Credit Hours: 3.00
- General Education Selective - Credit Hours: 3.00

Statistics Selective:

- STAT 22500 - Introduction To Probability Models **Credits: 3.00** or
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**

15 Credits

Spring 3rd Year

- ECET 27400 - Wireless Communications **Credits: 3.00**
- ECET 37300 - Applied Electronic Drives **Credits: 3.00**
- MET 22000 - Heat And Power **Credits: 3.00**

Industrial Economics Selective:

- AGECE 33000 - Management Methods For Agricultural Business **Credits: 3.00** or
- AGECE 35200 - Quantitative Techniques For Firm Decision Making **Credits: 3.00** or
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00** or
- MGMT 20000 - Introductory Accounting **Credits: 3.00** or
- MGMT 21200 - Business Accounting **Credits: 3.00**

- Business Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- ECET 33300 - Power Electronics In Energy Systems **Credits: 3.00**
- ECET 47600 - Smart Grid Technology And Applications **Credits: 3.00**
- Senior Capstone Selective I - Credit Hours: 3.00
- Energy Related Technical Selective - Credit Hours: 3.00
- General Education Selective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- ECET 43600 - Electrical Power Transmissions, Distribution, And Smart Control **Credits: 3.00**
- Sustainability Engineering Technology Selective:**
- AGECE 25000 - Economic Geography Of World Food And Resources **Credits: 3.00** or
 - CE 35500 - Engineering Environmental Sustainability **Credits: 3.00** or
 - EEE 35500 - Engineering Environmental Sustainability **Credits: 3.00** or
 - MET 53000 - Facilities Engineering Technology **Credits: 3.00** or
 - SFS 30200 - Principles Of Sustainability **Credits: 3.00**
- Elective - Credit Hours: 3.00
 - Senior Capstone Selective II - Credit Hours: 3.00

12 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Engineering Technology, BS (Statewide Locations Only)

About the Program

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (49 credits)

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- MET 11100 - Applied Statics **Credits: 3.00**
- MET 14300 - Materials And Processes I **Credits: 3.00** or
- MET 14400 - Materials And Processes II **Credits: 3.00**
- MET 21100 - Applied Strength Of Materials **Credits: 4.00**
- MET 24500 - Manufacturing Systems **Credits: 3.00**
- Computer Graphics Technology Selective - Credit Hours: 2.00
- IET 21400 - Introduction To Supply Chain Management Technology **Credits: 3.00**
- IET 31600 - Statistical Quality Control **Credits: 3.00**
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00** or

Concentration: Technology Integration (37 credits)

- Lab Science Foundation Selective - Credit Hours: 4.00 (satisfies Science for core)
- Humanities/Liberal Arts Elective - Credit Hours: 3.00
- Technical Selectives - Credit Hours: 24.00 (At least 6 credit hours must be in the same discipline) (15 credit hours must be 30000/40000 level, included in required major credits)
- Elective - Credit Hours: 6.00 (any course , any subject)

Concentration: Robotics (37 credits)

- Lab Science Foundation Selective - Credit Hours: 4.00 (satisfies Science for core)
- ECET 27900 Embedded Digital Systems - Credit Hours: 3.00
- ECET 32700 Data Acquisitions and Signal Processing - Credit Hours: 3.00
- MET 21300 Dynamics - Credit Hours: 3.00
- MET 23000 Fluid Power - Credit Hours: 3.00
- MET 28400 Introduction to Industrial Controls - Credit Hours: 3.00
- MFET 24800 Introduction to Robotics - Credit Hours: 3.00
- MFET 34400 Automated Manufacturing Processes - Credit Hours: 3.00
- Robotics Technical Selectives - Credit Hours: 9.00
- Free Elective - Credit Hours: 3.00

Concentration: Mechatronics (37 credits)

- MA 16020 Applied Calculus II - Credit Hours: 3.00
- PHYS 22100 General Physics II - Credit Hours: 4.00
- ECET 27900 Embedded Digital Systems - Credit Hours: 3.00
- ECET 32700 Data Acquisitions and Signal Processing - Credit Hours: 3.00
- ECET 33700 Analog Signal Processing - Credit Hours: 3.00
- MET 23000 Fluid Power - Credit Hours: 3.00
- MET 28400 Introduction to Industrial Controls - Credit Hours: 3.00
- MET 38200 Controls and Instrumentation - Credit Hours: 3.00
- MET 48200 Mechatronics - Credit Hours: 3.00
- MFET 24800 Introduction to Robotics - Credit Hours: 3.00
- MFET 34400 Automated Manufacturing Processes - Credit Hours: 3.00
- MFET 37400 Manufacturing Integration - Credit Hours: 3.00

Other Departmental/Program Course Requirements (34 credits)

- TECH 12000 - Design Thinking In Technology **Credits: 3.00** (satisfies Science, Technology, & Society Selective and Information Literacy for core)
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** (satisfies Quantitative Reasoning for core)
- MA 16010 - Applied Calculus I **Credits: 3.00**
- PHYS 22000 - General Physics **Credits: 4.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- ECON 21000 - Principles Of Economics **Credits: 3.00** (satisfies Human Culture Behavioral/Social Science for core) (satisfies Oral Communication for core) (satisfies Written Communication for core) (satisfies Human Cultures: Humanities for core)
Freshman Speech Selective
Freshman Composition Selective
Humanities Foundation Selective
Technical Writing Selective
Advanced Oral Communication Selective
- Intercultural Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

Supplemental List

[Click here for Engineering Technology Supplemental Information \(Statewide Locations\)](#)

Grade Requirements

Clearly list any/all grade requirements within the program.

- Courses at Purdue University may only be attempted a maximum (3) times, including W, EF, I, IF, and all graded attempts.

GPA Requirements

- 2.0 Graduation GPA required for Bachelor of Science degree

Course Requirements and Notes

Double-counting policy - where is it allowed and not allowed; specific notes or requirements about courses; repeatable limits, study abroad, etc.

Non-course / Non-credit Requirements

- Complete a Professional Requirement or Intercultural Requirement.

Pass/No Pass Policy

College, department, major P/NP policy. Any exceptions to the rule should also be included.

Transfer Credit Policy

College, department, major transfer credit (including any/all undistributed credit, TR graded course, AP/IB credit, etc.) should be clearly stated. Can transfer credit be applied to the major? If yes, how and where?

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the Civics Literacy Proficiency website.

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or

- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Additional Information

Any additional information that does not fit into any of the categories above.

Sample 4-Year Plan

Fall 1st Year

- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
Freshman Composition Selective - Credit Hours: 3.00
- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**
- Computer Graphics Selective - Credit Hours: 2.00

15 Credits

Spring 1st Year

- MA 16010 - Applied Calculus I **Credits: 3.00**
- Freshman Speech Selective - Credit Hours: 3.00
- MET 11100 - Applied Statics **Credits: 3.00**
- MET 14300 - Materials And Processes I **Credits: 3.00** or
- MET 14400 - Materials And Processes II **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**

15 Credits

Fall 2nd Year

- IET 21400 - Introduction To Supply Chain Management Technology **Credits: 3.00**
- MET 21100 - Applied Strength Of Materials **Credits: 4.00**
- PHYS 22000 - Credit Hours: 4.00
- ECET Selective - Credit Hours: 3.00

14 Credits

Spring 2nd Year

- ECON 21000 - Principles Of Economics **Credits: 3.00**
- IET 31600 - Statistical Quality Control **Credits: 3.00**
OR
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- Computer-Aided Design Selective - Credit Hours: 3.00
- ECET Selective - Credit Hours: 3.00
- Concentration Course - Credit Hours: 4.00

16 Credits

Fall 3rd Year

- MET 24500 - Manufacturing Systems **Credits: 3.00**
- Programming Selective - Credit Hours: 3.00
- Concentration Course - Credit Hours: 9.00

15 Credits

Spring 3rd Year

- Global/Professional Selective - Credit Hours: 3.00
- Humanities Foundation Selective - Credit Hours: 3.00
- Advanced Oral Communication Selective - Credit Hours: 3.00
- Concentration Course - Credit Hours: 6.00

15 Credits

Fall 4th Year

- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00**
Or

15 Credits

Spring 4th Year

- Senior Capstone Project Selective II - Credit Hours: 3.00
- Concentration Course - Credit Hours: 12.00

15 Credits

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

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Industrial Engineering Technology, BS

About the Program

The Industrial Engineering Technology major is part of the Industrial Engineering Technology program. The industrial engineering technology program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the commission's general criteria and program criteria for Industrial Engineering Technology and similarly named programs.

When you major in industrial engineering technology at Purdue University, you will gain skills to prepare you for a wide variety of career options: manufacturing plants, government agencies, hospitals, healthcare organizations, retail companies, and more. You will focus on both technical and human-centered approaches to technology management. You will learn how to manage and coordinate engineering operations and lead projects from design to implementation. Coursework is enhanced with an overview of business and economics.

Industrial Engineering Technology Website

School of Engineering Technology Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Department/Program Major Courses (40 credits)

Required Department Courses (40 credits)

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- IET 21400 - Introduction To Supply Chain Management Technology **Credits: 3.00**
- IET 23500 - Introduction To Systems Thinking And Process Improvement **Credits: 3.00**
- IET 31600 - Statistical Quality Control **Credits: 3.00**
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00**
- IET 33520 - Human Factors For Technology Systems **Credits: 3.00**
- IET 33620 - Total Productive Maintenance **Credits: 3.00**
- IET 43530 - Operations Planning And Management **Credits: 3.00**
- IET 43540 - Facilities Planning And Material Handling **Credits: 3.00**
- IET 43630 - Design Of Experiments **Credits: 3.00**
- IET 43640 - Lean Six Sigma **Credits: 3.00**
- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00**
- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**
- Professional Requirement - Credit Hours: 0.00
- Global/Intercultural Requirement - Credit Hours: 0.00

Other Departmental Courses (72 credits)

- ECON 21000 - Principles Of Economics **Credits: 3.00** ♦
- ECET 22400 - Electronic Systems **Credits: 3.00**
- MET 24500 - Manufacturing Systems **Credits: 3.00** ♦
- PHYS 22000 - General Physics **Credits: 4.00** ♦ (satisfies Science for core)
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** ♦
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** ♦ (satisfies both Information Literacy and Science, Technology and Society for core)
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00** ♦
- TLI 21300 - Project Management **Credits: 3.00** ♦
- Behavioral/Social Science Selective (satisfies Behavioral/Social Science for core) - Credit Hours: 3.00
- Humanities Selective (satisfies Humanities for core) - Credit Hours: 3.00
- Lab Science Selective (satisfies Science for core) - Credit Hours: 3.00
- Mathematics Selective (satisfies Quantitative Reasoning for core) - Credit Hours: 3.00
- Advanced Oral Communication Selective - Credit Hours: 3.00
- Advanced Written Communication Selective - Credit Hours: 3.00 ♦
- Computer Programming Selective - Credit Hours: 3.00 ♦
- Technical Electives - Credit Hours: 12.0
- **Oral Communication Selective** (satisfies Oral Communication for core)
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**
Written Communication Selective (satisfies Written Communication for core)
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**
- **Manufacturing Automation Selective** ♦
- MET 28400 - Introduction To Industrial Controls **Credits: 3.00** or
- MFET 24800 - Industrial Robot Programming And Applications **Credits: 3.00** or
- MFET 30000 - Applications Of Automation In Manufacturing **Credits: 3.00** or
- MFET 34400 - Automated Manufacturing Processes **Credits: 3.00**

Materials & Processes Selective ♦

- MET 14300 - Materials And Processes I Credits: 3.00 or
- MET 14400 - Materials And Processes II Credits: 3.00

Technical Graphic Selective ♦

- MFET 10301 - Geometric Modeling Applications Credits: 3.00 ♦ or
- CGT 11000 - Technical Graphics Communications Credits: 3.00 ♦ or
- MFET 16300 - Graphical Communication And Spatial Analysis Credits: 2.00 ♦ or
- ENGT 10500 - Industrial Technology Introduction To Design Credits: 3.00

Electives (8 credits)

Any course, any subject - Credit Hours: 8.00

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
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- Science #1 (SCI)
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- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.

- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Additional Requirements

[Click here for Industrial Engineering Technology Supplemental Information.](#)

Program Requirements

Fall 1st Year

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** ♦
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**
- Computer Programming Selective - Credit Hours: 3.00 ♦
- MFET 10301 - Geometric Modeling Applications **Credits: 3.00** ♦ or
- CGT 11000 - Technical Graphics Communications **Credits: 3.00** ♦ or
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00** ♦ or
- ENGT 10500 - Industrial Technology Introduction To Design **Credits: 3.00**

15 Credits

Spring 1st Year

- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00** ♦
- IET 21400 - Introduction To Supply Chain Management Technology **Credits: 3.00**
- MET 14300 - Materials And Processes I **Credits: 3.00** or
- MET 14400 - Materials And Processes II **Credits: 3.00**
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**
- Mathematics Selective - Credit Hours: 3.00

15 Credits

Fall 2nd Year

- IET 23500 - Introduction To Systems Thinking And Process Improvement **Credits: 3.00**
- ECET 22400 - Electronic Systems **Credits: 3.00**
- MET 24500 - Manufacturing Systems **Credits: 3.00**
- PHYS 22000 - General Physics **Credits: 4.00** ♦
- Humanities Selective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- ECON 21000 - Principles Of Economics **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** ♦
- TLI 21300 - Project Management **Credits: 3.00**
- Behavioral/Social Science Selective - Credit Hours: 3.00
- Lab Science Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- IET 31600 - Statistical Quality Control **Credits: 3.00**
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00**
- IET 33620 - Total Productive Maintenance **Credits: 3.00**
- Advanced Written Communication Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- IET 33520 - Human Factors For Technology Systems **Credits: 3.00**
- IET 43630 - Design Of Experiments **Credits: 3.00**
- IET 43640 - Lean Six Sigma **Credits: 3.00**
- MET 28400 - Introduction To Industrial Controls **Credits: 3.00** or
- MFET 24800 - Industrial Robot Programming And Applications **Credits: 3.00** or
- MFET 30000 - Applications Of Automation In Manufacturing **Credits: 3.00** or
- MFET 34400 - Automated Manufacturing Processes **Credits: 3.00**
- Advanced Oral Communication Selective - Credit Hours: 3.00 ♦

15 Credits

Fall 4th Year

- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00**
- IET 43530 - Operations Planning And Management **Credits: 3.00**
- Technical Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**
- IET 43540 - Facilities Planning And Material Handling **Credits: 3.00**
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

14 Credits

Notes

- 2.0 Graduation GPA required for Bachelor of Science degree.
- TIET majors allow Pass/No Pass grading for (Free) electives only all other degree requirements must be taken for a grade.
- 32 credits of upper division courses (30000 level or higher) must be taken at Purdue University, West Lafayette.
- ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, I AND IF).

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Mechanical Engineering Technology, BS

About the Program

The Mechanical Engineering Technology major is part of the Mechanical Engineering Technology program. The mechanical engineering technology program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the commission's general criteria and program criteria for Mechanical Engineering Technology and similarly named programs.

The careers of mechanical engineering technology graduates take them to a variety of employers (e.g. Rockwell Automation, Fender Guitars, Lockheed Martin, Caterpillar) yet they have many skills in common: problem-solving, leadership and teamwork. The program focuses on the methods, materials, machinery and manpower necessary to effectively operate in a manufacturing environment. You'll learn how to manage people, machines, and production resources to ensure maximum efficiency and safety.

Mechanical Engineering Technology Website

School of Engineering Technology Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (120 credits)

Required Major Courses (59 credits)

- MET 10200 - Production Design And Specifications **Credits: 3.00**
- MET 11100 - Applied Statics **Credits: 3.00**
- MET 14300 - Materials And Processes I **Credits: 3.00**
- MET 14400 - Materials And Processes II **Credits: 3.00**
- MET 21100 - Applied Strength Of Materials **Credits: 4.00**
- MET 21300 - Dynamics **Credits: 3.00**
- MET 22000 - Heat And Power **Credits: 3.00**
- MET 23000 - Fluid Power **Credits: 3.00**
- MET 24500 - Manufacturing Systems **Credits: 3.00**
- MET 28400 - Introduction To Industrial Controls **Credits: 3.00**
- MET 31400 - Applications Of Machine Elements **Credits: 3.00**
- MET 32000 - Applied Thermodynamics **Credits: 3.00**
- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00**
- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**
- Professional Requirement - Credit Hours: 0.00
- Intercultural Requirement - Credit Hours: 0.00

MET Selectives (12 credits included within major credits)

- MET Elective or approved Focus Area elective - Credit Hours: 9.00
- Technical Selective or approved Focus Area Selective - Credit Hours: 3.00

Other Departmental/Program Course Requirements (61 credits)

- CHM 11100 - General Chemistry **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00** (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II **Credits: 3.00**
- PHYS 22000 - General Physics **Credits: 4.00** (satisfies Science for core)

- PHYS 22100 - General Physics **Credits: 4.00** (satisfies Science for core)
- ECET 22400 - Electronic Systems **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** (satisfies Information Literacy and Science, Technology & Society for core)
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00**
Freshman Composition Selective (satisfies Written Communication for core)
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00** or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00**
Computer Graphics Technology Selective
- CGT 11000 - Technical Graphics Communications **Credits: 3.00** or
- ENGT 10500 - Industrial Technology Introduction To Design **Credits: 3.00** or
- MFET 10301 - Geometric Modeling Applications **Credits: 3.00** or
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00**
Freshman Speech Selective (satisfies Oral Communication for Core)
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**
Communications Selective
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00** or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
Technical Writing Selective
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00** or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**
- Economics/Finance Selective - Credit Hours 3.00
- Programming Selective - Credit Hours 3.00
- General Education Human Cultures: Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- General Education Human Cultures: Behavior/Social Sciences (satisfies Human Cultures: Behavioral Sciences for core) - Credit Hours: 3.00
- Global/Professional Selective - Credit Hours: 3.00
- Technical/Management Selective (TECH/MGMT Selective) - Credit Hours: 3.00
 - Course is a Management Selective. If ECET 38001 is the Global/Professional Selective then a Technical Selective is allowed.

Supplemental List

[Click here for Mechanical Engineering Technology Supplemental Information.](#)

Optional Concentrations

- Computer-Aided Design Technology Concentration for Mechanical Engineering Technology
- Fabrication and Welding Technology Concentration for Mechanical Engineering Technology

- Mechanics Concentration for Mechanical Engineering Technology
- Powertrains Concentration for Mechanical Engineering Technology

Professional Requirement

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response. See supplemental information for approved experiences.

Grade Requirements

- Students must earn a "D-" or better in all courses unless otherwise noted.

GPA Requirements

- 2.0 Graduation GPA required for the Bachelor of Science degree.

Course Requirements and Notes

- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.

Non-course / Non-credit Requirements

- Complete a Professional Requirement.
- Complete an Intercultural Requirement.

Pass/No Pass Policy

- MET does not allow P/NP grading for any classes that are used to meet degree requirements, all degree requirements must be taken for a grade.

Transfer Credit Policy

Transfer credit from other institutions, including courses taken as dual or concurrent credit in high school, and credit from testing such as Advanced Placement and International Baccalaureate that are an exact match for Purdue courses, may be applied to degree requirements.

For undistributed credit to be applied to degree requirements, the course or courses will need to be evaluated by the Curriculum Committee for approval. Additional approvals will be required for courses to meet University Core Curriculum requirements. In both cases approval is not automatic.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

Freshman Speech Selective

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**
- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- MA 16010 - Applied Calculus I **Credits: 3.00** (Preferred) or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00** or
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**
- MET 14400 - Materials And Processes II **Credits: 3.00**

Technical Graphics Selective

- MFET 10301 - Geometric Modeling Applications **Credits: 3.00** or
- CGT 11000 - Technical Graphics Communications **Credits: 3.00** or
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00** or
- ENGT 10500 - Industrial Technology Introduction To Design **Credits: 3.00**

15 Credits

Spring 1st Year

Freshman Composition Selective

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**
- MA 16020 - Applied Calculus II **Credits: 3.00** (Preferred) or
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00** or
- MA 16600 - Analytic Geometry And Calculus II **Credits: 4.00**
- MET 11100 - Applied Statics **Credits: 3.00**
- MET 14300 - Materials And Processes I **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00**

15 Credits

Fall 2nd Year

- ECET 22400 - Electronic Systems **Credits: 3.00**
- MET 21100 - Applied Strength Of Materials **Credits: 4.00** ♦
- PHYS 22000 - General Physics **Credits: 4.00** (Preferred) or
- PHYS 17200 - Modern Mechanics **Credits: 4.00**
- Programming Selective - Credit Hours: 3.00

14 Credits

Spring 2nd Year

- MET 10200 - Production Design And Specifications **Credits: 3.00** ♦
- MET 21300 - Dynamics **Credits: 3.00**
- MET 28400 - Introduction To Industrial Controls **Credits: 3.00**
- PHYS 22100 - General Physics **Credits: 4.00** (Preferred) or
- PHYS 24100 - Electricity And Optics **Credits: 3.00**
- Humanities Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- CHM 11100 - General Chemistry **Credits: 3.00** (Preferred) or
- CHM 11500 - General Chemistry **Credits: 4.00**
- MET 23000 - Fluid Power **Credits: 3.00**
- MET 22000 - Heat And Power **Credits: 3.00** ♦
- MET 24500 - Manufacturing Systems **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**

15 Credits

Spring 3rd Year

- MET 32000 - Applied Thermodynamics **Credits: 3.00**
- MET 31400 - Applications Of Machine Elements **Credits: 3.00**
- Economics/Finance Selective - Credit Hours: 3.00
- Global/Professional Selective - Credit Hours: 3.00
- MET Elective or Approved Focus Area Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

Technical Writing Selective

- ENGL 42100 - Technical Writing **Credits: 3.00** or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00** or
- ENGL 42000 - Business Writing **Credits: 3.00**
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00**
- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00**
- MET Elective or Approved Focus Area Elective - Credit Hours: 3.00
- Technical/Management (TECH/MGMT) Selective - Credit Hours: 3.00
 - Course is a Management Selective. If ECET 38001 is the Global/Professional Selective then a Technical Selective is allowed.

15 Credits

Spring 4th Year

Communications Selective

- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00** or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**
- MET Elective or approved Focus Area elective - Credit Hours: 3.00
- Technical Selective or approved Focus Area elective - Credit Hours: 3.00

- Behavioral Social Science Selective - Credit Hours: 3.00

15 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

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The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Mechatronics Engineering Technology, BS

About the Program

The Mechatronics Engineering Technology major is part of the Manufacturing Engineering Technology program. The manufacturing engineering technology program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the commission's general criteria and program criteria for Manufacturing Engineering Technology and similarly named programs.

This is one of three majors offered for students who seek to contribute at the interface between manufacturing, electrical, mechanical, and computing areas in primarily industrial environments. When you major in mechatronics engineering technology, you will focus on the development of the electromechanical products that are ubiquitous in modern life, dealing with interconnections that allow electronic control of mechanical, pneumatic, and hydraulic systems.

[Mechatronics Engineering Technology Website](#)

[School of Engineering Technology Major Change \(CODO\) Requirements](#)

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (120 credits)

Required Major Courses (74 credits)

- CNIT 10500 - Introduction To C Programming **Credits: 3.00** ♦
- CS 17700 - Programming With Multimedia Objects **Credits: 4.00**
- ECET 17900 - Introduction To Digital Systems **Credits: 3.00**
- ECET 27900 - Embedded Digital Systems **Credits: 3.00** ♦
- ECET 33700 - Continuous Systems Analysis And Design **Credits: 3.00**
- ECET 36900 - Applied Computer Vision For Sensing And Automation **Credits: 3.00**
- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00**
- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**
- MET 11100 - Applied Statics **Credits: 3.00**
- MET 21300 - Dynamics **Credits: 3.00**
- MET 22000 - Heat And Power **Credits: 3.00**
- MET 23000 - Fluid Power **Credits: 3.00**
- MET 28400 - Introduction To Industrial Controls **Credits: 3.00** ♦
- MET 31500 - Applied Mechanism Kinematics And Dynamics **Credits: 3.00**
- MET 33400 - Advanced Fluid Power **Credits: 3.00**
- MET 38200 - Controls And Instrumentation For Automation **Credits: 3.00**
- MET 43200 - Hydraulic Motion Control Systems **Credits: 3.00**
- MET 48200 - Mechatronics **Credits: 3.00**
- MFET 24100 - Automatic Control Systems **Credits: 3.00**
- MFET 36100 - Machine Learning And Manufacturing Analytics **Credits: 3.00**
- MFET 37100 - Introduction To Precision Machine Design **Credits: 3.00**
- MFET 47100 - Electric Machines **Credits: 3.00**
- **Materials and Processes Selective**
- MET 14300 - Materials And Processes I **Credits: 3.00** or
- MET 14400 - Materials And Processes II **Credits: 3.00**

Other Departmental/Program Course Requirements (42-49 credits)

- CHM 11100 - General Chemistry **Credits: 3.00** (Preferred) (satisfies Science for core) or
- CHM 11500 - General Chemistry **Credits: 4.00**
- ECET 22400 - Electronic Systems **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00** (Preferred) (satisfies Quantitative Reasoning for core) or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00** or
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**
- MA 16020 - Applied Calculus II **Credits: 3.00** (Preferred) or
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00** or
- MA 16600 - Analytic Geometry And Calculus II **Credits: 4.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** (satisfies Science Technology and Society and Information Literacy for core)

- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
Freshman Composition Selective + (satisfies Written Communication for core)
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**
Freshman Speech Selective + (satisfies Oral Communication for Core)
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**
Physics Selective (satisfies Science for core)
- PHYS 22000 - General Physics **Credits: 4.00** or
- PHYS 17200 - Modern Mechanics **Credits: 4.00**
Computer Graphics Selective
- MFET 10301 - Geometric Modeling Applications **Credits: 3.00** or
- CGT 11000 - Technical Graphics Communications **Credits: 3.00** or
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00** or
- ENGT 10500 - Industrial Technology Introduction To Design **Credits: 3.00**
Communications Selective +
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00** or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- Human Cultures: Humanities Foundational Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Human Cultures: Behavior/Social Science Foundational Selective (satisfies Human Cultures: Behavioral Sciences for core) - Credit Hours: 3.00
- Professional Requirement - Credit Hours: 0.00
- Intercultural Requirement - Credit Hours: 0.00

Electives (4 credits)

Any non-remedial course

Supplemental List

[Click here for Mechatronics Engineering Technology Supplemental Information.](#)

Professional Requirement

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response. See supplemental information for approved experiences.

Grade Requirements

- Students must earn a "D-" or better in all courses.

GPA Requirements

- A 2.0 Graduation GPA are required for the Bachelor of Science degree.

Course Requirements and Notes

- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.

Non-course / Non-credit Requirements

- Complete a Professional Requirement.
- Complete an Intercultural Requirement.

Pass/No Pass Policy

- MFET majors do not allow P/NP grading for any classes that are used to meet degree requirements, all degree requirements must be taken for a grade. Electives may be taken P/NP

Transfer Credit Policy

Transfer credit from other institutions, including courses taken as dual or concurrent credit in high school, and credit from testing such as Advanced Placement and International Baccalaureate that are an exact match for Purdue courses, may be applied to degree requirements.

For undistributed credit to be applied to degree requirements, the course or courses will need to be evaluated by the Curriculum Committee for approval. Additional approvals will be required for courses to meet University Core Curriculum requirements. In both cases approval is not automatic.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency Website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Additional Information

- + denotes Cornerstone Certificate course option.

Sample 4-Year Plan

Fall 1st Year

- CNIT 10500 - Introduction To C Programming **Credits: 3.00** ♦
- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- MA 16010 - Applied Calculus I **Credits: 3.00** (Preferred) or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00** or
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**
Materials and Processes Selective
- MET 14300 - Materials And Processes I **Credits: 3.00** or
- MET 14400 - Materials And Processes II **Credits: 3.00**
Freshman Composition Selective +
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

16-19 Credits

Spring 1st Year

- ECET 22400 - Electronic Systems **Credits: 3.00**
- MA 16020 - Applied Calculus II **Credits: 3.00** (Preferred) or
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00** or
- MA 16600 - Analytic Geometry And Calculus II **Credits: 4.00**
- MET 11100 - Applied Statics **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
- Humanities Foundational Selective - Credit Hours: 3.00

15-17 Credits

Fall 2nd Year

- MET 21300 - Dynamics **Credits: 3.00**
- ECET 17900 - Introduction To Digital Systems **Credits: 3.00**
- MET 28400 - Introduction To Industrial Controls **Credits: 3.00** ♦
- CS 17700 - Programming With Multimedia Objects **Credits: 4.00**
Freshman Speech Selective +
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

16 Credits

Spring 2nd Year

- MET 23000 - Fluid Power **Credits: 3.00**
- ECET 27900 - Embedded Digital Systems **Credits: 3.00** ♦
- MFET 24100 - Automatic Control Systems **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
Physics Selective
- PHYS 22000 - General Physics **Credits: 4.00** or
- PHYS 17200 - Modern Mechanics **Credits: 4.00**

16 Credits

Fall 3rd Year

- MET 33400 - Advanced Fluid Power **Credits: 3.00**
- ECET 36900 - Applied Computer Vision For Sensing And Automation **Credits: 3.00**
- MFET 36100 - Machine Learning And Manufacturing Analytics **Credits: 3.00**
Computer Graphics Selective
- MFET 10301 - Geometric Modeling Applications **Credits: 3.00** or
- CGT 11000 - Technical Graphics Communications **Credits: 3.00** or
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00** or
- ENGT 10500 - Industrial Technology Introduction To Design **Credits: 3.00**
Communications Selective +
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or

- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00** or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**

14-15 Credits

Spring 3rd Year

- MET 31500 - Applied Mechanism Kinematics And Dynamics **Credits: 3.00**
- MET 38200 - Controls And Instrumentation For Automation **Credits: 3.00**
- MFET 37100 - Introduction To Precision Machine Design **Credits: 3.00**
- CHM 11100 - General Chemistry **Credits: 3.00** (Preferred) or
- CHM 11500 - General Chemistry **Credits: 4.00**
- Elective - Credit Hours: 3.00

15-16 Credits

Fall 4th Year

- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00**
- MET 22000 - Heat And Power **Credits: 3.00**
- MET 48200 - Mechatronics **Credits: 3.00**
- MFET 47100 - Electric Machines **Credits: 3.00**
- Behavioral/Social Science Foundational Selective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00**
- MET 43200 - Hydraulic Motion Control Systems **Credits: 3.00**
- ECET 33700 - Continuous Systems Analysis And Design **Credits: 3.00**
- Elective - Credit Hours: 0.00-1.00

12-13 Credits

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be

proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Robotics Engineering Technology, BS

About the Program

The Robotics Engineering Technology major is part of the Manufacturing Engineering Technology program. The manufacturing engineering technology program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the commission's general criteria and program criteria for Manufacturing Engineering Technology and similarly named programs.

This is one of three majors offered in the Purdue Polytechnic Institute for students who seek to contribute at the intersection between manufacturing, electrical, mechanical, and computing areas in primarily industrial environments. When you major in robotics engineering technology, you will develop and apply robotic solutions to a broad range of industrial and consumer problems. Robots help people and companies be more productive and safer, and they help explore more frontiers.

Robotics Engineering Technology Website

School of Engineering Technology Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (76-77 credits)

Required Major Courses (76-77 credits)

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- CS 17700 - Programming With Multimedia Objects **Credits: 4.00** ♦
- CNIT 10500 - Introduction To C Programming **Credits: 3.00**
- ECET 22400 - Electronic Systems **Credits: 3.00** ♦
- ECET 33700 - Continuous Systems Analysis And Design **Credits: 3.00**
- ECET 36900 - Applied Computer Vision For Sensing And Automation **Credits: 3.00**
- MET 11100 - Applied Statics **Credits: 3.00**
- MET 21300 - Dynamics **Credits: 3.00** ♦

- MET 28400 - Introduction To Industrial Controls **Credits:** 3.00
- MET 31500 - Applied Mechanism Kinematics And Dynamics **Credits:** 3.00
- MFET 24800 - Industrial Robot Programming And Applications **Credits:** 3.00 ♦
- MFET 34800 - Introduction To Robot Kinematics **Credits:** 3.00
- MFET 36100 - Machine Learning And Manufacturing Analytics **Credits:** 3.00
- MFET 44000 - Smart Manufacturing Autonomous Human Robot Systems **Credits:** 3.00
- MFET 44200 - Programming Robots With ROS **Credits:** 3.00
- Technical Selective - Credit Hours: 3.00
- **Instrument and DAQ Design Selective**
- ECET 32700 - Instrumentation And Data Acquisition Design **Credits:** 3.00 or
- MET 38200 - Controls And Instrumentation For Automation **Credits:** 3.00
- **Technical Graphics Selective**
- MFET 10301 - Geometric Modeling Applications **Credits:** 3.00 or
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits:** 2.00 or
- CGT 11000 - Technical Graphics Communications **Credits:** 3.00 or
- ENGT 10500 - Industrial Technology Introduction To Design **Credits:** 3.00
- **Capstone Selective I**
- ENGT 48000 - Engineering Technology Capstone I **Credits:** 3.00
- **Capstone Selective II**
- ENGT 48100 - Engineering Technology Capstone II **Credits:** 3.00
- **Materials & Processes Selective**
- MET 14300 - Materials And Processes I **Credits:** 3.00 or
- MET 14400 - Materials And Processes II **Credits:** 3.00

Required Concentration (12 credits)

Choose one of the following Concentrations:

AI and Software Concentration for Robotics Engineering Technology

Autonomy and UXVs Concentration for Robotics Engineering Technology

Mechanisms and Controls Concentration for Robotics Engineering Technology

Intelligent Manufacturing Concentration for Robotics Engineering Technology

IoT and Systems Concentration for Robotics Engineering Technology

Other Departmental/Program Course Requirements (37-43 credits)

- CHM 11100 - General Chemistry **Credits:** 3.00 (satisfies Science for Core) (Preferred) or
- CHM 11500 - General Chemistry **Credits:** 4.00
- STAT 30100 - Elementary Statistical Methods **Credits:** 3.00
- TECH 12000 - Design Thinking In Technology **Credits:** 3.00 (satisfies Information Literacy and Science, Technology & Society for core)
- **Oral Communication Selective + (satisfies Oral Communication for core)**
- COM 11400 - Fundamentals Of Speech Communication **Credits:** 3.00 or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits:** 3.00

Freshman Composition Selective (satisfies Written Communication for core) +

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

Advanced Oral Communication Selective +

- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00** or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**

Technical Writing Selective +

- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00** or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**

Math Selective I (satisfies Quantitative Reasoning for core)

- MA 16010 - Applied Calculus I **Credits: 3.00** or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00** or
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**

Math Selective II

- MA 16020 - Applied Calculus II **Credits: 3.00** or
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00** or
- MA 16600 - Analytic Geometry And Calculus II **Credits: 4.00**

Physics Selective (satisfies Science for core)

- PHYS 22000 - General Physics **Credits: 4.00** or
- PHYS 17200 - Modern Mechanics **Credits: 4.00**
- Human Cultures: Humanities Foundational Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Human Cultures: Behavior/Social Science Foundational Selective (satisfies Human Cultures: Behavioral Sciences for core) - Credit Hours: 3.00
- Professional Requirement - Credit Hours: 0.00
- Global/Intercultural Requirement - Credit Hours: 0.00

Electives (0-7 credits)

Any non-remedial course

Supplemental List

[Click here for Robotics Engineering Technology Supplemental Information.](#)

Professional Experience

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response. See supplemental information for approved experiences.

Grade Requirements

- Students must earn a "D-" or better in all courses.

GPA Requirements

- 2.0 Graduation GPA are required for the Bachelor of Science degree.

Course Requirements and Notes

- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.
- Concentration Selectives must come from the same subject area.

Non-course / Non-credit Requirements

- Complete a Professional Requirement.
- Complete an Global/Intercultural Requirement.

Pass/No Pass Policy

- MFET majors do not allow P/NP grading for any classes that are used to meet degree requirements, all degree requirements must be taken for a grade. Electives may be taken P/NP.

Transfer Credit Policy

Transfer credit from other institutions, including courses taken as dual or concurrent credit in high school, and credit from testing such as Advanced Placement and International Baccalaureate that are an exact match for Purdue courses, may be applied to degree requirements.

For undistributed credit to be applied to degree requirements, the course or courses will need to be evaluated by the Curriculum Committee for approval. Additional approvals will be required for courses to meet University Core Curriculum requirements. In both cases approval is not automatic.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)

- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the Civics Literacy Proficiency website.

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (3000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Additional Information

- + denotes Cornerstone Certificate course option.

Sample 4-Year Plan

Fall 1st Year

- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
Technical Graphics Selective
- MFET 10301 - Geometric Modeling Applications **Credits: 3.00** or
- CGT 11000 - Technical Graphics Communications **Credits: 3.00** or
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00** or
- ENGT 10500 - Industrial Technology Introduction To Design **Credits: 3.00**
Oral Communication Selective +
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**
Math Selective I
- MA 16010 - Applied Calculus I **Credits: 3.00** or
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00** or

- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**

15-18 Credits

Spring 1st Year

- CS 17700 - Programming With Multimedia Objects **Credits: 4.00** ♦
- MET 11100 - Applied Statics **Credits: 3.00**
- CHM 11100 - General Chemistry **Credits: 3.00** (Preferred) or
- CHM 11500 - General Chemistry **Credits: 4.00**
- **Math Selective II**
- MA 16020 - Applied Calculus II **Credits: 3.00** or
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00** or
- MA 16600 - Analytic Geometry And Calculus II **Credits: 4.00**
- Humanities Foundational Selective - Credit Hours: 3.00

16-19 Credits

Fall 2nd Year

- CNIT 10500 - Introduction To C Programming **Credits: 3.00**
- ECET 22400 - Electronic Systems **Credits: 3.00** ♦
- MET 21300 - Dynamics **Credits: 3.00** ♦
- Behavioral/Social Science Foundation Selective - Credit Hours: 3.00
- **Freshman Composition Selective**
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

15-16 Credits

Spring 2nd Year

- MFET 24800 - Industrial Robot Programming And Applications **Credits: 3.00** ♦
- MET 28400 - Introduction To Industrial Controls **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- **Physics Selective**
- PHYS 22000 - General Physics **Credits: 4.00** or
- PHYS 17200 - Modern Mechanics **Credits: 4.00**
- **Materials & Processes Selective**
- MET 14300 - Materials And Processes I **Credits: 3.00** or
- MET 14400 - Materials And Processes II **Credits: 3.00**

16 Credits

Fall 3rd Year

- ECET 36900 - Applied Computer Vision For Sensing And Automation **Credits: 3.00**
- MFET 36100 - Machine Learning And Manufacturing Analytics **Credits: 3.00**
- Concentration Selective - Credit Hours: 3.00
Instrument and DAQ Design Selective
- ECET 32700 - Instrumentation And Data Acquisition Design **Credits: 3.00** or
- MET 38200 - Controls And Instrumentation For Automation **Credits: 3.00**
Advanced Oral Communication Selective +
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00** or
- COM 32000 - Small Group Communication **Credits: 3.00** or
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00** or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**

15 Credits

Spring 3rd Year

- ECET 33700 - Continuous Systems Analysis And Design **Credits: 3.00**
- MET 31500 - Applied Mechanism Kinematics And Dynamics **Credits: 3.00**
- MFET 44200 - Programming Robots With ROS **Credits: 3.00**
- Concentration Selective - Credit Hours: 3.00
Technical Writing Selective +
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00** or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**

15 Credits

Fall 4th Year

Capstone Selective I

- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00**
- MFET 34800 - Introduction To Robot Kinematics **Credits: 3.00**
- MFET 44000 - Smart Manufacturing Autonomous Human Robot Systems **Credits: 3.00**
- Concentration Selective - Credit Hours: 3.00
- Elective - Credit Hours: 0.00-3.00

12-15 Credits

Spring 4th Year

Capstone Selective II

- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**
- Concentration Selective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00-4.00

12-13 Credits

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

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The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

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Smart Manufacturing Industrial Informatics, BS

About the Program

The Smart Manufacturing Industrial Informatics (SMII) major features the holistic integration of the digital transformation technologies and capabilities of Industry 4.0. It introduces students to topics in Industrial Internet of Things (IIoT), cyber-physical systems, manufacturing intelligence/analytics, cloud/edge computing, augmented reality, simulation, autonomous and human robot interactions, additive manufacturing, and industrial cybersecurity, all presented in the context of smart manufacturing applications. Central to this new curriculum is the integration of physical operational technologies with the information technologies to implement data driven production systems and processes using artificial intelligence (AI) and Machine Learning (ML) techniques. Courses in the program will be aligned with the digitalization strategies of Industry 4.0, particularly with the systemic utilization of IIoT, data, AI/ML, and Cloud/Edge computing for optimizing production processes, improve productivity, quality, and efficiency of cyber-physical manufacturing operations in a smart connected enterprise.

The Smart Manufacturing Industrial Informatics major is part of the Manufacturing Engineering Technology program. The manufacturing engineering technology program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the commission's general criteria and program criteria for Manufacturing Engineering Technology and similarly named programs.

School of Engineering Technology Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (64 credits)

Required Major Courses (64 credits)

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- MET 14300 - Materials And Processes I **Credits: 3.00**
- MET 24500 - Manufacturing Systems **Credits: 3.00**
- MET 28400 - Introduction To Industrial Controls **Credits: 3.00**
- MFET 23000 - Industrial Internet Of Things, Networks, And Systems I **Credits: 3.00** ♦
- MFET 23100 - Industrial Internet Of Things, Networks, And Systems II **Credits: 3.00**
- MFET 24800 - Industrial Robot Programming And Applications **Credits: 3.00**
- MFET 25000 - Smart Manufacturing Cloud Computing Applications **Credits: 3.00** ♦
- MFET 34100 - Process And Continuous Control Applications **Credits: 3.00**
- MFET 34400 - Automated Manufacturing Processes **Credits: 3.00**
- MFET 35000 - Smart Manufacturing Systems Modeling & Simulation **Credits: 3.00**
- MFET 35100 - Mixed Reality Smart Manufacturing Applications & Design **Credits: 3.00**
- MFET 35200 - Smart Manufacturing Production Information Systems **Credits: 3.00**
- MFET 36100 - Machine Learning And Manufacturing Analytics **Credits: 3.00** ♦
- MFET 36300 - Intelligent Manufacturing Systems I **Credits: 3.00**
- MFET 36400 - Intelligent Manufacturing Systems II **Credits: 3.00**
- MFET 41000 - Introduction To Additive Manufacturing **Credits: 3.00**
- MFET 44000 - Smart Manufacturing Autonomous Human Robot Systems **Credits: 3.00**
- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00**
- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**
- **Materials and Processes Selective**
- MET 11100 - Applied Statics **Credits: 3.00** or
- MET 14400 - Materials And Processes II **Credits: 3.00**

Other Departmental/Program Course Requirements (51-53 credits)

- Lab Science Selective - Credit Hours: 3.00 (satisfies Science for core)
- CNIT 15501 - Introduction To Software Development Concepts **Credits: 3.00**
- ECET 22400 - Electronic Systems **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00** (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** (satisfies Information Literacy and Science, Technology & Society for core)
- IET 21400 - Introduction To Supply Chain Management Technology **Credits: 3.00**
- PHYS 22000 - General Physics **Credits: 4.00** (satisfies Science for core)
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- Human Cultures: Humanities Foundation Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Human Cultures: Behavior/Social Sciences Foundation Selective (satisfies Human Cultures: Behavioral Sciences for core) - Credit Hours: 3.00
- Communications Selective + - Credit Hours: 3.00

Computer Graphics Selective

- MFET 10301 - Geometric Modeling Applications **Credits: 3.00** or
 - MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00**
- Freshman Composition Selective + (satisfies Written Communication for core)**
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
 - ENGL 10800 - First Year Composition **Credits: 3.00** or
 - SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

Oral Communications Selective + (satisfies Oral Communication for core)

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
 - SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**
- IET/TECH/MGMT Selective**

- AGECE 33000 - Management Methods For Agricultural Business **Credits: 3.00** or
 - IE 34300 - Engineering Economics **Credits: 3.00** or
 - IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00** or
 - MGMT 20000 - Introductory Accounting **Credits: 3.00** or
 - MGMT 21200 - Business Accounting **Credits: 3.00**
- Technical Writing Selective +**
- ENGL 42000 - Business Writing **Credits: 3.00** or
 - ENGL 42100 - Technical Writing **Credits: 3.00** or
 - ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**
 - Intercultural Requirement - Credit Hours: 0.00
 - Professional Requirement - Credit Hours: 0.00

Electives (3-5 credits)

Supplemental List

[Click here for Smart Manufacturing Industrial Informatics Supplemental Information](#)

Grade Requirements

- Students must earn a "D-" or better in all courses.

GPA Requirements

- 2.0 Graduation GPA required for the Bachelor of Science Degree.

Course Requirements and Notes

- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF, and all graded attempts.

Non-course / Non-credit Requirements

- Complete a Professional Requirement.
- Complete an Intercultural Requirement.

Pass/No Pass Policy

- Electives may be taken P/NP.

Transfer Credit Policy

Transfer credit from other institutions, including courses taken as dual or concurrent credit in high school, and credit from testing such as Advanced Placement and International Baccalaureate that are an exact match for Purdue courses, may be applied to degree requirements.

For undistributed credit to be applied to degree requirements, the course or courses will need to be evaluated by the Curriculum Committee for approval. Additional approvals will be required for courses to meet University Core Curriculum requirements. In both cases approval is not automatic.

University Requirements

University Core Requirements

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- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency Website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

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- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Additional Information

- + denotes Cornerstone Certificate course option.

Sample 4-Year Plan

Fall 1st Year

- MA 16010 - Applied Calculus I **Credits: 3.00**
- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- MET 14300 - Materials And Processes I **Credits: 3.00**
- Lab Science Selective - Credit Hours: 3.00
Freshman Composition Selective +
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

16-17 Credits

Spring 1st Year

- CNIT 15501 - Introduction To Software Development Concepts **Credits: 3.00**
- MA 16020 - Applied Calculus II **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
Computer Graphics Selective
- MFET 10301 - Geometric Modeling Applications **Credits: 3.00** or
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00**
Oral Communication Selective +
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

14-15 Credits

Fall 2nd Year

- MFET 23000 - Industrial Internet Of Things, Networks, And Systems I **Credits: 3.00** ♦
- MFET 25000 - Smart Manufacturing Cloud Computing Applications **Credits: 3.00** ♦
- PHYS 22000 - General Physics **Credits: 4.00**
- ECET 22400 - Electronic Systems **Credits: 3.00**
Technical Writing Selective +
- ENGL 42000 - Business Writing **Credits: 3.00** or
- ENGL 42100 - Technical Writing **Credits: 3.00** or
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**

16 Credits

Spring 2nd Year

- MFET 23100 - Industrial Internet Of Things, Networks, And Systems II **Credits: 3.00**
- MFET 24800 - Industrial Robot Programming And Applications **Credits: 3.00**
- MET 24500 - Manufacturing Systems **Credits: 3.00**
- MET 28400 - Introduction To Industrial Controls **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**

15 Credits

Fall 3rd Year

- MFET 34100 - Process And Continuous Control Applications **Credits: 3.00**
- MFET 35000 - Smart Manufacturing Systems Modeling & Simulation **Credits: 3.00**
- MFET 35100 - Mixed Reality Smart Manufacturing Applications & Design **Credits: 3.00**
- MFET 36100 - Machine Learning And Manufacturing Analytics **Credits: 3.00** ♦
Materials and Processes Selective
- MET 11100 - Applied Statics **Credits: 3.00** or
- MET 14400 - Materials And Processes II **Credits: 3.00**

15 Credits

Spring 3rd Year

- MFET 34400 - Automated Manufacturing Processes **Credits: 3.00**
- MFET 35200 - Smart Manufacturing Production Information Systems **Credits: 3.00**
- MFET 36300 - Intelligent Manufacturing Systems I **Credits: 3.00**
- IET 21400 - Introduction To Supply Chain Management Technology **Credits: 3.00**
- Humanities Foundation Selective - 3.00 credits

15 Credits

Fall 4th Year

- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00**
- MFET 36400 - Intelligent Manufacturing Systems II **Credits: 3.00**
- MFET 44000 - Smart Manufacturing Autonomous Human Robot Systems **Credits: 3.00**
- Elective - Credit Hours: 3.00
IET/TECH/MGMT Selective
- AGECE 33000 - Management Methods For Agricultural Business **Credits: 3.00** or
- IE 34300 - Engineering Economics **Credits: 3.00** or
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00** or
- MGMT 20000 - Introductory Accounting **Credits: 3.00** or
- MGMT 21200 - Business Accounting **Credits: 3.00**

15 Credits

Spring 4th Year

- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**
- MFET 41000 - Introduction To Additive Manufacturing **Credits: 3.00**
- Behavioral/Social Science Foundation Selective - Credit Hours: 3.00
- Communications Selective + - Credit Hours: 3.00 ♦
- Elective - Credit Hours: 0.00-2.00

12-14 Credits

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

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Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Professional Experience

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response. See supplemental information for approved experiences.

Supply Chain & Sales Engineering Technology, BS

About the Program

The Supply Chain & Sales Engineering Technology major is part of the Industrial Engineering Technology program. The industrial engineering technology program is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the commission's general criteria and program criteria for Industrial Engineering Technology and similarly named programs.

Virtually all corporations are dependent upon their supply chains to manage the flow of goods, services and information to help customers. You will study the entire supply chain enterprise yet have the flexibility to select courses for your chosen career path. The top ERP (Enterprise Resource Planning) software in the industry, SAP ERP, is embedded throughout the curriculum. The latest technology and software is also used to help graduates become career-ready.

Supply Chain & Sales Engineering Technology Website

School of Engineering Technology Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Department/Program Major Courses (46 credits)

Required Department Courses (46 credits)

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- IET 21400 - Introduction To Supply Chain Management Technology **Credits: 3.00**
- IET 23500 - Introduction To Systems Thinking And Process Improvement **Credits: 3.00**
- IET 31600 - Statistical Quality Control **Credits: 3.00** ♦
- IET 34200 - Warehouse And Inventory Management **Credits: 3.00**
- IET 34300 - Technical And Service Selling **Credits: 3.00**
- IET 34350 - Business To Business Sales Management **Credits: 3.00**
- IET 41400 - Financial Analysis For Technology Systems **Credits: 3.00**
- IET 43530 - Operations Planning And Management **Credits: 3.00**
- IET 43630 - Design Of Experiments **Credits: 3.00**
- IET 43640 - Lean Six Sigma **Credits: 3.00**
- IET 44275 - Global Transportation And Logistics Management **Credits: 3.00**
- IET 44500 - Strategic Supply Chain Management **Credits: 3.00**
- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00**

- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**
- Globalization/Intercultural Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

Other Departmental Courses (69 Credits)

- ECET 22400 - Electronic Systems **Credits: 3.00**
- ECON 21000 - Principles Of Economics **Credits: 3.00**
- MET 24500 - Manufacturing Systems **Credits: 3.00**
- MGMT 21200 - Business Accounting **Credits: 3.00** (Preferred) or
- MGMT 20000 - Introductory Accounting **Credits: 3.00**
- PHYS 22000 - General Physics **Credits: 4.00** (satisfies Science for core)
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** (satisfies both Information Literacy and Science, Technology and Society for core)
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 21300 - Project Management **Credits: 3.00**
- Behavioral/Social Science Selective (satisfies Behavioral/Social Science for core) - Credit Hours: 3.00
- Humanities Selective (satisfies Humanities for core) - Credit Hours: 3.00
- Lab Science Selective (satisfies Science for core) - Credit Hours: 3.00
- Mathematics Selective (satisfies Quantitative Reasoning for core) - Credit Hours: 3.00 ♦
- Advanced Oral Communication Selective - Credit Hours: 3.00
- Advanced Written Communication Selective - Credit Hours: 3.00
- Computer Programming Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 6.00
- **Oral Communication Selective** (satisfies Oral Communication for core)
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**
Written Communication Selective (satisfies Written Communication for core)
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**
- **Materials & Processes Selective**
- MET 14300 - Materials And Processes I **Credits: 3.00** or
- MET 14400 - Materials And Processes II **Credits: 3.00**
- **Technical Graphics Selective**
- MFET 10301 - Geometric Modeling Applications **Credits: 3.00** or
- CGT 11000 - Technical Graphics Communications **Credits: 3.00** or
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00** or
- ENGT 10500 - Industrial Technology Introduction To Design **Credits: 3.00**
- **Manufacturing Automation Selective**
- MET 28400 - Introduction To Industrial Controls **Credits: 3.00** or
- MFET 24800 - Industrial Robot Programming And Applications **Credits: 3.00** or
- MFET 30000 - Applications Of Automation In Manufacturing **Credits: 3.00** or
- MFET 34400 - Automated Manufacturing Processes **Credits: 3.00**

Electives (5 credits)

Any non-remedial course.

Supplemental List

Click here for Supply Chain & Sales Engineering Technology Supplemental Information.

Grade Requirements

- Students must earn a "D-" or better in all courses.

GPA Requirements

- 2.0 Graduation GPA required for Bachelor of Science degree.

Course Requirements and Notes

- ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, I AND IF).

Non-course / Non-credit Requirements

- Globalization/Intercultural Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

Pass/No Pass Policy

- Pass/No Pass grading for electives only; all other degree requirements must be taken for a grade.

Transfer Credit Policy

Transfer credit from other institutions, including courses taken as dual or concurrent credit in high school, and credit from testing such as Advanced Placement and International Baccalaureate that are an exact match for Purdue courses, may be applied to degree requirements.

For undistributed credit to be applied to degree requirements, the course or courses will need to be evaluated by the Curriculum Committee for approval. Additional approvals will be required for courses to meet University Core Curriculum requirements. In both cases approval is not automatic.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)

- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
- Mathematics Selective - Credit Hours: 3.00 ♦
- Computer Programming Selective - Credit Hours: 3.00
- **Technical Graphics Selective**
- MFET 10301 - Geometric Modeling Applications **Credits: 3.00** or
- CGT 11000 - Technical Graphics Communications **Credits: 3.00** or
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00** or
- ENGT 10500 - Industrial Technology Introduction To Design **Credits: 3.00**
- **Oral Communication Selective**
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

14 Credits

Spring 1st Year

- ENGT 18200 - Gateway To Engineering Technology **Credits: 4.00**
- IET 21400 - Introduction To Supply Chain Management Technology **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
Written Communication Selective
- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00** or
- ENGL 10800 - First Year Composition **Credits: 3.00** or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**
Materials and Processes Selective
- MET 14300 - Materials And Processes I **Credits: 3.00** or
- MET 14400 - Materials And Processes II **Credits: 3.00**

16 Credits

Fall 2nd Year

- ECET 22400 - Electronic Systems **Credits: 3.00**
- IET 23500 - Introduction To Systems Thinking And Process Improvement **Credits: 3.00**
- MET 24500 - Manufacturing Systems **Credits: 3.00**
- MGMT 21200 - Business Accounting **Credits: 3.00** (Preferred) or
- MGMT 20000 - Introductory Accounting **Credits: 3.00**
- PHYS 22000 - General Physics **Credits: 4.00**

16 Credits

Spring 2nd Year

- ECON 21000 - Principles Of Economics **Credits: 3.00**
- IET 34200 - Warehouse And Inventory Management **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- TLI 21300 - Project Management **Credits: 3.00**
Lab Science Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- IET 31600 - Statistical Quality Control **Credits: 3.00** ♦
- IET 34300 - Technical And Service Selling **Credits: 3.00**
- IET 44275 - Global Transportation And Logistics Management **Credits: 3.00**
- Humanities Selective - Credit Hours: 3.00
- Behavioral/Social Science Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- IET 34350 - Business To Business Sales Management **Credits: 3.00**
- IET 43630 - Design Of Experiments **Credits: 3.00**
- IET 43640 - Lean Six Sigma **Credits: 3.00**
- Technical Elective - Credit Hours 3.00
Manufacturing Automation Selective
- MET 28400 - Introduction To Industrial Controls **Credits: 3.00** or
- MFET 24800 - Industrial Robot Programming And Applications **Credits: 3.00** or
- MFET 30000 - Applications Of Automation In Manufacturing **Credits: 3.00** or
- MFET 34400 - Automated Manufacturing Processes **Credits: 3.00**

15 Credits

Fall 4th Year

- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00**
- IET 41400 - Financial Analysis For Technology Systems **Credits: 3.00**
- IET 43530 - Operations Planning And Management **Credits: 3.00**
- Advanced Written Communication Selective - Credit Hours 3.00
- Technical Elective - Credit Hours 3.00

15 Credits

Spring 4th Year

- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**
- IET 44500 - Strategic Supply Chain Management **Credits: 3.00**
- Advanced Oral Communication Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

14 Credits

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

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Certificate

Industrial Engineering Technology Certificate

Requirements for the Certificate (18 credits)

Industrial Engineering Technology (Choose 18 credits)

- IET 21400 - Introduction To Supply Chain Management Technology **Credits: 3.00**
- IET 23500 - Introduction To Systems Thinking And Process Improvement **Credits: 3.00**
- IET 31300 - Technology Innovation And Integration: Bar Codes To Biometrics **Credits: 3.00**
- IET 31600 - Statistical Quality Control **Credits: 3.00**
- IET 33100 - Advanced Industrial Safety And Health Management **Credits: 3.00**
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00**
- IET 33520 - Human Factors For Technology Systems **Credits: 3.00**
- IET 33620 - Total Productive Maintenance **Credits: 3.00**
- IET 34200 - Warehouse And Inventory Management **Credits: 3.00**
- IET 34300 - Technical And Service Selling **Credits: 3.00**
- IET 43640 - Lean Six Sigma **Credits: 3.00**

Notes

- Students must earn a "C-" or higher in all courses.
- Transfer credit applied to the certificate is limited to no more than 6 credits.

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Minor

Electrical Engineering Technology Minor

The EET minor can be attached to any Purdue University major that will accommodate or allow it. It is not available for students with any majors in the Electrical Engineering Technology program, including Electrical Engineering Technology, Energy Engineering Technology, Computer Engineering Technology and Audio Engineering Technology.

Requirements for the Minor (15 credits)

Required Courses (15 credits)

- ECET 17700 - Data Acquisition And Systems Control **Credits: 3.00** or
- ECET 22400 - Electronic Systems **Credits: 3.00**
or
- ECE 20001 - Electrical Engineering Fundamentals I **Credits: 3.00**
and
- ECE 20007 - Electrical Engineering Fundamentals I Lab **Credits: 1.00**
or
- ECE 20100 - Linear Circuit Analysis I **Credits: 3.00** and
- ECE 20700 - Electronic Measurement Techniques **Credits: 1.00**
- ECET 17900 - Introduction To Digital Systems **Credits: 3.00**
- ECET 22700 - DC And Pulse Electronics **Credits: 3.00**
- ECET 27700 - AC And Power Electronics **Credits: 3.00** or
- ECET 27900 - Embedded Digital Systems **Credits: 3.00**
- Additional Lab-based ECET 20000-level or higher - Credit Hours: 3.00 (Approved substitution for additional ECET course: MET 28400. ECET 22400 cannot be applied to this requirement. Lab assistant courses cannot be applied to this requirement.)

Pre-Requisite Information

A C programming course is a pre-requisite to ECET 17900. C programming courses at Purdue include:

- CNIT 10500 - Introduction To C Programming **Credits: 3.00**
- CS 15900 - C Programming **Credits: 3.00**
- CS 24000 - Programming In C **Credits: 3.00**

Notes

- EET minors must earn an overall GPA of 2.0 or better in courses on the minor.
- No course may be taken pass/fail.
- Transfer credit, course substitutions and credit by exam limited to three (3) credit hours.
- At least 12 credit hours of lab-based ECET courses must be taken at Purdue University.
- Course requisites must be met.

Availability

The EET minor can be attached to any Purdue University major that will accommodate or allow it. It is not available for students earning degrees in any of the majors within the Electrical Engineering Technology Program, including Audio Engineering

Technology (AUET), Computer Engineering Technology (CEGT), Electrical Engineering Technology (EETC) and Energy Engineering Technology (ENET).

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

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Product Lifecycle Management Minor

A minor in Product Lifecycle Management (PLM) will expose any Purdue major to manufacturing graphics expertise. Students who complete the minor will gain applied knowledge in current and emerging graphics theories and computer technologies associated with the design, documentation, and manufacture and support of products and related services.

Requirements for the Minor (14-15 credits)

Prerequisite Courses (2-3 credits)

- MFET 10301 - Geometric Modeling Applications **Credits:** 3.00 or
- CGT 11000 - Technical Graphics Communications **Credits:** 3.00 or
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits:** 2.00 or
- An approved substitution

Required Courses (6 credits)

- MFET 11301 - Product Data Management **Credits:** 3.00
- MFET 20301 - Model-Based Definition **Credits:** 3.00

Selective - Choose Two (6 credits)

- MFET 21301 - Simulation And Visualization Applications **Credits:** 3.00
- MFET 30301 - Digital Manufacturing **Credits:** 3.00
- MFET 31301 - The Business Of Managing Digital Product Data **Credits:** 3.00

Notes

- The PLM minor is open only to any Purdue University West Lafayette campus major.
- All courses in the minor must be taken for a grade. A grade of "C-" or better is required in all classes. (P/NP is not an option)
- Only students pursuing four-year degrees are eligible for the PLM minor.
- Other courses outside of the PLM minor offered by the CGT will not be available for enrollment for non-CGT majors who are accepted in the CGT/PLM minor.

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

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Smart Manufacturing Enterprise Minor

The Smart Manufacturing Enterprise Minor is a trans-disciplinary offering from Purdue Polytechnic Institute that helps prepare students for an entry level career in a manufacturing environment or related industry by gaining knowledge about smart manufacturing practices and current manufacturing techniques, organizations, methods and technologies.

Requirements for the Minor (15 credits)

Required Courses (15 credits)

- CNIT 15501 - Introduction To Software Development Concepts **Credits: 3.00**
- ECET 22400 - Electronic Systems **Credits: 3.00**
- MFET 23000 - Industrial Internet Of Things, Networks, And Systems I **Credits: 3.00**
- MFET 25000 - Smart Manufacturing Cloud Computing Applications **Credits: 3.00**
- MFET 35000 - Smart Manufacturing Systems Modeling & Simulation **Credits: 3.00**

Notes

- 2.5 GPA in all minor courses.

Disclaimer

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Supply Chain Engineering Technology Minor

Supply Chain Engineering Technology is a discipline that is needed to some degree by virtually every organization. The minor offers the basic knowledge and understanding of supply chain management technologies to seek employment opportunities with a supporting skill set for supply chain operations.

Four key technologies typically influence the supply chain: software, electronic business technologies (including web portals), visibility and productivity technologies (bar codes, RFID, etc.), and process advances, such as Six Sigma and Lean processes.

Requirements for the Minor (15 credits)

Required Courses (15 credits)

- IET 21400 - Introduction To Supply Chain Management Technology **Credits: 3.00**
- IET 23500 - Introduction To Systems Thinking And Process Improvement **Credits: 3.00**
- IET 31600 - Statistical Quality Control **Credits: 3.00**
- IET 34200 - Warehouse And Inventory Management **Credits: 3.00**
- IET 34300 - Technical And Service Selling **Credits: 3.00**

Note

- All courses must have a grade of a "C-" or higher and have an overall minor GPA of 2.0.

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

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Program Information

Audio Engineering Technology Supplemental Information

Senior Capstone I and II Selective (6 credits)

Select one pair of Senior Capstone I and II Selectives. Senior Capstone Selectives I and II must be taken in consecutive semesters to count toward degree requirements.

- ENGT 48000 - Engineering Technology Capstone I **Credits:** 3.00 and
 - ENGT 48100 - Engineering Technology Capstone II **Credits:** 3.00
- or
- ECET 43000 - Electrical And Electronic Product And Program Management **Credits:** 3.00 and
 - ECET 46000 - Project Design And Development **Credits:** 3.00
- or
- ECET 43100 - International Capstone Project Planning And Design **Credits:** 3.00 and
 - ECET 46100 - International Capstone Project Execution **Credits:** 3.00

Applied Calculus I Selective (3 credits)

- MA 16010 - Applied Calculus I **Credits:** 3.00 (preferred)
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits:** 5.00
- MA 16500 - Analytic Geometry And Calculus I **Credits:** 4.00

Applied Calculus II Selective (3 credits)

- MA 16020 - Applied Calculus II **Credits:** 3.00 (preferred)
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits:** 5.00
- MA 16600 - Analytic Geometry And Calculus II **Credits:** 4.00

Introduction to C Programming Selective (3 credits)

- CNIT 10500 - Introduction To C Programming **Credits:** 3.00 (preferred)
- CS 15900 - C Programming **Credits:** 3.00

General Physics I Selective (4 credits)

- PHYS 22000 - General Physics **Credits:** 4.00 (preferred)
- PHYS 17200 - Modern Mechanics **Credits:** 4.00

General Physics II Selective (4 credits)

- PHYS 22100 - General Physics **Credits:** 4.00 (preferred)
- PHYS 24100 - Electricity And Optics **Credits:** 3.00
- PHYS 27200 - Electric And Magnetic Interactions **Credits:** 4.00

Statistics Selective (3 credits)

- STAT 22500 - Introduction To Probability Models **Credits:** 3.00
- STAT 30100 - Elementary Statistical Methods **Credits:** 3.00

English Composition Selective (3 credits)

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

Written Communication Selective (3 credits)

- ENGL 20500 - Introduction To Creative Writing **Credits: 3.00**
- ENGL 30400 - Advanced Composition **Credits: 3.00**
- ENGL 42000 - Business Writing **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**

Freshman Speech Selective (3 credits)

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

Oral Communication Selective (3 credits)

- Any communications (COM) course at the 20000 level or higher.

Business Selective (3 credits)

Select 3 hours in one of the disciplines listed below, or any of the courses listed below, subject to the following conditions:

- The course must be from the UCC approved list of Human Culture: Behavioral/Social Sciences, unless the student selects a General Education Selective, which meets the Human Culture: Behavioral/Social Sciences requirement for core.
- Any Agricultural Economics course (AGEC) at the 200-level or higher: AGEC 20000 or higher.
- Any Economics (ECON) course at the 200-level or higher: ECON 20000 or higher.
- Any Entrepreneurship (ENTR) course at the 200-level or higher: ENTR 20000 or higher.
- Any Management (MGMT) course at the 200-level or higher: MGMT 20000 or higher.
- Or the select one of the following courses:
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness **Credits: 3.00**
- AGEC 20400 - Introduction To Resource Economics And Environmental Policy **Credits: 3.00**
- AGEC 21700 - Economics **Credits: 3.00**
- AGEC 25000 - Economic Geography Of World Food And Resources **Credits: 3.00**
- CSR 34200 - Personal Finance **Credits: 3.00**
- ECON 21000 - Principles Of Economics **Credits: 3.00**
- ECON 25100 - Microeconomics **Credits: 3.00**
- ECON 25200 - Macroeconomics **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**

- TLI 15200 - Business Principles For Organizational Leadership **Credits:** 3.00
- TLI 21300 - Project Management **Credits:** 3.00
- IET 21400 - Introduction To Supply Chain Management Technology **Credits:** 3.00
- IET 34200 - Warehouse And Inventory Management **Credits:** 3.00
- IET 34300 - Technical And Service Selling **Credits:** 3.00

Industrial Economics Selective (3 credits)

- AGECE 33000 - Management Methods For Agricultural Business **Credits:** 3.00
- AGECE 35200 - Quantitative Techniques For Firm Decision Making **Credits:** 3.00
- IET 33400 - Economic Analysis For Technology Systems **Credits:** 3.00
- MGMT 20000 - Introductory Accounting **Credits:** 3.00
- MGMT 21200 - Business Accounting **Credits:** 3.00

General Education Selective (3 credits)

Select 3 hours in one or more of the subject areas (disciplines) listed below, subject to the following conditions:

- The course must be from the UCC approved list of Human Culture: Behavioral/Social Sciences, unless the student selects a Business Selective, which meets the Human Culture: Behavioral/Social Sciences requirement for core.
- Only one of the following courses may be applied to a student's plan of study: ECON 21000 Principles of Economics and AGECE 21700 Economics.

Foreign languages (except for courses in a student's native language); African American Studies (AAS); Art and Design (AD); American Studies (AMST); Anthropology (ANTH); Asian American Studies (ASAM); American Sign language (ASL); Bands (BAND); Classics (CLCS); Comparative Literature (CMPL); Communication (COM); Economics (ECON), English (ENGL); History (HIST); Interdisciplinary Studies (IDIS); Linguistics (LING); Music History and Theory (MUS); Philosophy (PHIL); Political Science (POL); Psychology (PSY); Religious Studies (REL); Sociology (SOC); Theater (THTR); Women's Studies (WGSS); ROTC (AFT, MSL, NS)

Audio Production Selective (3 credits)

- FLM 32100 - Live Production I: Theater/Music/Arts **Credits:** 1.00 to 4.00
- MUS 38300 - Digital Audio Recording And Production I **Credits:** 3.00
- THTR 25300 - Survey Of Audio Production **Credits:** 3.00
- THTR 26300 - Introduction To Sound Studios **Credits:** 3.00

Theater and Sound Selective (6 credits)

- CGT 10501 - Introduction To Games **Credits:** 3.00
- ECET 34900 - Advanced Digital Systems **Credits:** 3.00
- FLM 24100 - Foundations Of Cinema Production **Credits:** 3.00
- FLM 32100 - Live Production I: Theater/Music/Arts **Credits:** 1.00 to 4.00
- MUS 11200 - Fundamentals Of Music **Credits:** 3.00
- MUS 13200 - Music Theory I **Credits:** 3.00

- MUS 13300 - Music Theory II **Credits:** 3.00
- MUS 23200 - Music Theory III **Credits:** 3.00
- MUS 25000 - Music Appreciation **Credits:** 3.00
- MUS 27000 - Computer Skills In Music **Credits:** 3.00
- THTR 20100 - Theatre Appreciation **Credits:** 3.00
- THTR 36300 - Sound Design **Credits:** 3.00
- THTR 55000 - Advanced Scenery Technology **Credits:** 3.00

Theater Production Selective (1-2 credits)

- DANC 36800 - Dance Sound Design **Credits:** 1.00
- THTR 36800 - Theatre Production II **Credits:** 1.00 to 2.00

Global / Professional Selective (3 credits)

- COM 30300 - Intercultural Communication **Credits:** 3.00
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits:** 3.00
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits:** 3.00
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits:** 3.00
- OLS 34600 - Critical Thinking And Ethics **Credits:** 3.00
- OLS 38600 - Leadership For Organizational Change **Credits:** 3.00
- PSY 33500 - Stereotyping And Prejudice **Credits:** 3.00
- TECH 32000 - Technology And The Organization **Credits:** 3.00
- TECH 33000 - Technology And The Global Society **Credits:** 3.00
- TLI 21300 - Project Management **Credits:** 3.00

Minors

Minors are offered through a variety of disciplines. The discipline offering the minor establishes the requirement. A minor is not required.

- The Electrical Engineering Technology minor cannot be added to this major.

Double Majors within the Electrical Engineering Technology Program

Within the PIECET-BS Program, double majors of AUET or CEGT or ENET are allowed without restriction. A double major with EETC requires an additional 12 hours of ECET courses. The additional courses will fulfill the EETC major for the purposes of double majors. The additional courses have the following restrictions:

- No 100-level course may be used.
- Only three (3) credits of a 200-level course may be used, excluding: ECET 22400 Electronic Systems, ECET 29000 International Experience and ECET 29900 Selected EET Subjects, which may not be used.
- All courses must be taken on the PWL and/or PSW campuses.

Intercultural Requirement

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete one (1) of the following global experiences:*

- Participate in A Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in a full semester abroad program program, or
- Complete 3 credit hours from the Polytechnic list of recommended Global/Cultural courses.

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pre-test).

*Global experiences must take place during the time of enrollment in Polytechnic to complete Step 2. Experiences taken place prior to a student's initial enrollment will not serve to complete Step 2. Intercultural competencies gained on experiences prior to Polytechnic enrollment will be captured as baseline data on a student's IDI.

Approved Global/Cultural Course List for Intercultural Requirement

Professional Requirement

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response.

Table 1: Approved Professional Experiences

Approval by	Experience
Automatic	Any TECH Professional Practice course (co-op, intern, etc.)
Automatic	MET 29900 Internship for Credit
Automatic	EPICS courses, minimum of two
Advisor	Any approved internship (assuming student and/or employer provide documentation)
Advisor	Military service (ROTC completion, reservist, active duty, veteran)
Faculty	Supervised undergraduate research experiences or laboratory assistantships (e.g., employed in the AEL as lab technician)
Faculty	Independent study - by petition to ensure the project meets the spirit of the requirement
Faculty	Professional society/club activities (e.g., led the Solar Racing team) - by petition
Faculty	Any approved employment or industry project.

*Approval Key:

- Automatic - student participation in this professional experience is already documented through existing means.
- Advisor - advisor reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.
- Faculty - designated committee reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.

Automation and Systems Integration Engineering Technology Supplemental Information

Freshman Composition Selective +

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

Freshman Speech Selective+

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

Communication Selective+

- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**

Technical Writing Selective+

- ENGL 42000 - Business Writing **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**

Materials and Processes Selective

- MET 14300 - Materials And Processes I **Credits: 3.00**
- MET 14400 - Materials And Processes II **Credits: 3.00**

Computer Graphics Selective

- MFET 10301 - Geometric Modeling Applications **Credits: 3.00**
- CGT 11000 - Technical Graphics Communications **Credits: 3.00**
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00**

- ENGT 10500 - Industrial Technology Introduction To Design **Credits: 3.00**

Graphics Selective

- MFET 11301 - Product Data Management **Credits: 3.00**
- CGT 22600 - Introduction To Constraint-Based Modeling **Credits: 3.00**
- MET 30200 - CAD In The Enterprise **Credits: 3.00**

CNIT or CS Selective

- CNIT 15500 - Introduction To Object-Oriented Programming **Credits: 3.00**
- CNIT 15501 - Introduction To Software Development Concepts **Credits: 3.00**
- CNIT 16100 - Introduction To Programming And Data Management For Smart Manufacturing **Credits: 3.00**
- CNIT 17500 - Visual Programming **Credits: 3.00**
- MET 16400 - Computing In Engineering Technology **Credits: 3.00**
- CS 15900 - C Programming **Credits: 3.00**

Technical Elective

All Polytechnic Institute courses at the 30000 level or above (excluding MFET 30000) that are not required for the major.

- ECET 27900 - Embedded Digital Systems **Credits: 3.00**
- FNR 30110 - Sustainable Wood Products Manufacturing **Credits: 3.00**
- MGMT 45500 - Legal Background For Business I **Credits: 3.00**
- AT 30000-49900,
- CGT 30000-499000,
- CM 30000-49900,
- CNIT 30000-49900,
- ECET 30000-49900,
- ENGT 30000-49900,
- IET 30000-49900,
- MET 30000-49900,
- MFET 30000-49900,
- OLS 30000-49900,
- TECH 30000-49900,
- TLI 30000-49900,
- AFT 30000-49900,
- MSL 30000-49900,
- NS 30000-49900

Statistics or Quality Selective

- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- IET 31600 - Statistical Quality Control **Credits: 3.00**

Physics Selective

- PHYS 22000 - General Physics **Credits: 4.00**
- PHYS 17200 - Modern Mechanics **Credits: 4.00**

Science Selective

- BIOL 11000 - Fundamentals Of Biology I **Credits: 4.00**
- BIOL 20300 - Human Anatomy And Physiology **Credits: 4.00**
- CHM 11200 - General Chemistry **Credits: 3.00**
- CHM 11600 - General Chemistry **Credits: 4.00**
- PHYS 22100 - General Physics **Credits: 4.00**
- PHYS 24100 - Electricity And Optics **Credits: 3.00**

Continuous Control Selective

- ECET 37201 - Continuous Control Electronics **Credits: 3.00**
- MET 33400 - Advanced Fluid Power **Credits: 3.00**
- MET 43200 - Hydraulic Motion Control Systems **Credits: 3.00**
- MET 43600 - Pneumatic Motion Control Systems **Credits: 3.00**
- MET 48200 - Mechatronics **Credits: 3.00**
- MFET 29200 - Projects In Automation, Robotics And Mechatronics **Credits: 1.00 to 3.00**
- MFET 39200 - Advanced Projects In Automation, Robotics, And Mechatronics **Credits: 1.00 to 3.00**

Controls Selective

- ECET 27400 - Wireless Communications **Credits: 3.00**
- ECET 32700 - Instrumentation And Data Acquisition Design **Credits: 3.00**
- ECET 35901 - Computer Based Data Acquisition Applications **Credits: 3.00**
- ECET 36900 - Applied Computer Vision For Sensing And Automation **Credits: 3.00**
- ECET 37201 - Continuous Control Electronics **Credits: 3.00**
- IET 31300 - Technology Innovation And Integration: Bar Codes To Biometrics **Credits: 3.00**
- MET 33400 - Advanced Fluid Power **Credits: 3.00**
- MET 38200 - Controls And Instrumentation For Automation **Credits: 3.00**
- MET 43200 - Hydraulic Motion Control Systems **Credits: 3.00**
- MET 43600 - Pneumatic Motion Control Systems **Credits: 3.00**
- MFET 29200 - Projects In Automation, Robotics And Mechatronics **Credits: 1.00 to 3.00**
- MFET 39200 - Advanced Projects In Automation, Robotics, And Mechatronics **Credits: 1.00 to 3.00**

Manufacturing Selective

- AT 27200 - Introduction To Composite Technology **Credits: 3.00**
- AT 30802 - Aircraft Materials Processes **Credits: 3.00**
- AT 47200 - Advanced Composite Technology **Credits: 3.00**
- ECET 27000 - Electronics Prototype Development And Construction **Credits: 3.00**
- IET 33520 - Human Factors For Technology Systems **Credits: 3.00**
- IET 33620 - Total Productive Maintenance **Credits: 3.00**
- IET 34200 - Warehouse And Inventory Management **Credits: 3.00**

- IET 43640 - Lean Six Sigma **Credits: 3.00**
- IET 44275 - Global Transportation And Logistics Management **Credits: 3.00**
- MET 30200 - CAD In The Enterprise **Credits: 3.00**
- MET 34900 - Stringed Instrument Design And Manufacture **Credits: 3.00**
- MET 38200 - Controls And Instrumentation For Automation **Credits: 3.00**
- MET 45100 - Manufacturing Quality Control **Credits: 3.00**
- MFET 20301 - Model-Based Definition **Credits: 3.00**
- MFET 21301 - Simulation And Visualization Applications **Credits: 3.00**
- MFET 23000 - Industrial Internet Of Things, Networks, And Systems I **Credits: 3.00**
- MFET 25000 - Smart Manufacturing Cloud Computing Applications **Credits: 3.00**
- MFET 29200 - Projects In Automation, Robotics And Mechatronics **Credits: 1.00 to 3.00**
- MFET 30301 - Digital Manufacturing **Credits: 3.00**
- MFET 31301 - The Business Of Managing Digital Product Data **Credits: 3.00**
- MFET 34800 - Introduction To Robot Kinematics **Credits: 3.00**
- MFET 39200 - Advanced Projects In Automation, Robotics, And Mechatronics **Credits: 1.00 to 3.00**
- MFET 41000 - Introduction To Additive Manufacturing **Credits: 3.00**
- MFET 44200 - Programming Robots With ROS **Credits: 3.00**
- MFET 49900 - Manufacturing Engineering Technology Independent Project **Credits: 1.00 to 3.00 ***
(Technology, Innovation and Culture in Bavaria (Study Abroad))

Senior Capstone Selective I

- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00**

Senior Capstone Selective II

- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**

Global / Professional Selective

- COM 30300 - Intercultural Communication **Credits: 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- OLS 34600 - Critical Thinking And Ethics **Credits: 3.00**
- OLS 38600 - Leadership For Organizational Change **Credits: 3.00**
- PSY 33500 - Stereotyping And Prejudice **Credits: 3.00**
- TECH 32000 - Technology And The Organization **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- TLI 21300 - Project Management **Credits: 3.00**

Humanities Foundation Selective

<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Behavioral/Social Science Foundation Selective

Humanities/Social Science Elective

Any 20000 level course or higher in PSY, SOC, HIST, ECON, POL, PHIL, REL, ANTH, English Literature, a foreign language or

- AD 22600 - History Of Art To 1400 **Credits: 3.00**
- AD 22700 - History Of Art Since 1400 **Credits: 3.00**
- AD 25100 - History Of Photography I **Credits: 3.00**
- AD 25500 - Art Appreciation **Credits: 3.00**
- AD 30701 - History Of Contemporary Photography **Credits: 3.00**
- AD 31100 - Ancient Greek Art **Credits: 3.00**
- AD 31200 - Ancient Roman Art **Credits: 3.00**
- MUS 25000 - Music Appreciation **Credits: 3.00**
- MUS 37600 - World Music **Credits: 3.00**
- MUS 37800 - Jazz History **Credits: 3.00**
- MUS 38100 - Music History I: Antiquity To Mozart **Credits: 3.00**
- MUS 38200 - Music History II: Beethoven To The Present **Credits: 3.00**

Intercultural Requirement

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete one (1) of the following global experiences:*

- Participate in A Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in a full semester abroad program program, or
- Complete 3 credit hours from the Polytechnic list of recommended Global/Cultural courses.

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pre-test).

*Global experiences must take place during the time of enrollment in Polytechnic to complete Step 2. Experiences taken place prior to a student's initial enrollment will not serve to complete Step 2. Intercultural competencies gained on experiences prior to Polytechnic enrollment will be captured as baseline data on a student's IDI.

Approved Global/Cultural Course List for Intercultural Requirement

Professional Requirement

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response.

Table 1: Approved Professional Experiences

Approval by	Experience
Automatic	Any TECH Professional Practice course (co-op, intern, etc.)
Automatic	MET 29900 Internship for Credit
Automatic	EPICS courses, minimum of two
Advisor	Any approved internship (assuming student and/or employer provide documentation)
Advisor	Military service (ROTC completion, reservist, active duty, veteran)
Faculty	Supervised undergraduate research experiences or laboratory assistantships (e.g., employed in the AEL as lab technician)
Faculty	Independent study - by petition to ensure the project meets the spirit of the requirement
Faculty	Professional society/club activities (e.g., led the Solar Racing team) - by petition
Faculty	Any approved employment or industry project

* Approval Key:

- Automatic - student participation in this professional experience is already documented through existing means.
- Advisor - advisor reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.
- Faculty - designated committee reviews student's experience to determine if it meets the spirit of the Professional Experience requirement

Computer-Aided Design Technology Concentration for Mechanical Engineering Technology

Computer-Aided Design Technology is a concentration in the Mechanical Engineering Technology program that focuses on computer-aided engineering (CAE), computer-aided manufacturing (CAM), and computer-aided design (CAD).

Computer-Aided Design Technology Concentration (9 credits)

- MET 30200 - CAD In The Enterprise **Credits:** 3.00
- MET 41100 - Introduction To The Finite Element Method **Credits:** 3.00
- MFET 34400 - Automated Manufacturing Processes **Credits:** 3.00

Digital Enterprise Systems Supplemental Information

Freshman Composition Selective

- ENGL 10600 - First Year Composition With Conferences **Credits:** 4.00
- ENGL 10800 - First Year Composition **Credits:** 3.00
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00

Oral Communication Selective

- COM 11400 - Fundamentals Of Speech Communication **Credits:** 3.00
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits:** 3.00

Advanced Oral Communication Selective

- COM 31500 - Speech Communication Of Technical Information **Credits:** 3.00
- COM 32000 - Small Group Communication **Credits:** 3.00
- COM 41500 - Discussion Of Technical Problems **Credits:** 3.00
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits:** 3.00

Technical Writing Selective

- ENGL 42000 - Business Writing **Credits:** 3.00
- ENGL 42100 - Technical Writing **Credits:** 3.00
- ENGL 42400 - Writing For High Technology Industries **Credits:** 3.00

Computer Graphics Selective

- MFET 10301 - Geometric Modeling Applications **Credits:** 3.00
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits:** 2.00

Materials & Processes Selective

- MET 14300 - Materials And Processes I **Credits:** 3.00
- MET 14400 - Materials And Processes II **Credits:** 3.00

Computer Programming Selective

- CNIT 10500 - Introduction To C Programming **Credits:** 3.00
- CNIT 15501 - Introduction To Software Development Concepts **Credits:** 3.00
- CNIT 17500 - Visual Programming **Credits:** 3.00

Physics Selective

- PHYS 17200 - Modern Mechanics **Credits:** 4.00
- PHYS 22000 - General Physics **Credits:** 4.00

Statistics Selective

- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- STAT 35000 - Introduction To Statistics **Credits: 3.00**

Technical Selective

Any Course within the Purdue Polytechnic Institute, Engineering, Management, or Science. Subjects include: AAE, ABE, AFT, ASTR, AT, BCHM, BCM, BIOL, BME, BMS, CE, CGT, CHE, CHM, CLPH, CM, CNIT, CPB, CS, EAPS, ECE, ECET, ECON, EEE, ENE, ENFY, ENGR, ENGT, ENTM, ENTR, EPCS, EPPH, GEP, IDE, IE, IET, IT, MA, MCMP, ME, MET, MFET, MGMT, MSE, MSL, NS, NUCL, NUPH, NUR, OBHR, OLS, PHPR, PHRM, PHYS, PTEC, SCI, STAT, TECH, & TLI.

Enterprise Systems Selective

- IET 43640 - Lean Six Sigma **Credits: 3.00**
- MFET 15900 - Introduction To The Smart Manufacturing Enterprise **Credits: 1.00 #**
MFET 15900 (1 credit hour) plus 2 additional credit hours of Free Elective can be used to fulfill the Enterprise Systems Selective.
- MFET 25000 - Smart Manufacturing Cloud Computing Applications **Credits: 3.00**

Management Selective

Any Course in Economics (ECON), Entrepreneurship (ENTR), Management (MGMT), Organizational Behavior & Human Resources (OBHR), Organizational Leadership & Supervision (OLS) or Technology, Leadership & Innovation (TLI).

Lab Science Selective

- BIOL 11000 - Fundamentals Of Biology I **Credits: 4.00**
- BIOL 11100 - Fundamentals Of Biology II **Credits: 4.00**
- BIOL 20300 - Human Anatomy And Physiology **Credits: 4.00**
- BIOL 20400 - Human Anatomy And Physiology **Credits: 4.00**
- BTNY 11000 - Introduction To Plant Science **Credits: 4.00**
- CHM 11100 - General Chemistry **Credits: 3.00**
- CHM 11200 - General Chemistry **Credits: 3.00**
- CHM 11500 - General Chemistry **Credits: 4.00**
- CHM 11600 - General Chemistry **Credits: 4.00**
- CHM 13600 - General Chemistry Honors **Credits: 4.00**
- EAPS 11100 - Physical Geology **Credits: 3.00**
- EAPS 11200 - Earth Through Time **Credits: 3.00**

- PHYS 22100 - General Physics **Credits: 4.00**
- PHYS 27200 - Electric And Magnetic Interactions **Credits: 4.00**

Humanities Selective

Any Course within the Purdue College of Liberal Arts. Subjects include: AAS, AD, AMST, ANTH, ARAB, ASAM, ASL, CHNS, CLCS, CMPL, COM, DANC, ENGL, FR, FVS, GER, GREK, GS, GSLA, HEBR, HIST, IDIS, ITAL, JPNS, JWST, KOR, LALS, LATN, LC, LING, MARS, MUS, PHIL, POL, PTGS, REL, RUSS, SCLA, SOC, SPAN, THTR, & WGSS.

Humanities Foundation Selective

Approved Human Cultures: Humanities Core Courses

Behavioral/Social Science Foundational Selective

Approved Human Cultures: Behavioral/Social Science Core Courses

Intercultural Requirement

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Faculty	Any approved employment or industry project

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- Faculty - designated committee reviews student's experience to determine if it meets the spirit of the Professional Experience requirement

Electrical Engineering Technology Supplemental Information

ECET Electives (12 credits)

Please note that not all ECET Electives are offered every year.

- ECET 30201 - Introduction To Industrial Controls **Credits: 3.00**
- ECET 31800 - Foundations Of Audio Electronics **Credits: 3.00**
- ECET 32100 - Introduction To Nanotechnology **Credits: 3.00**
- ECET 32300 - Introduction To Electric Vehicle Systems **Credits: 3.00**
- ECET 32700 - Instrumentation And Data Acquisition Design **Credits: 3.00**

- ECET 32900 - Advanced Embedded Digital Systems **Credits: 3.00**
- ECET 33300 - Power Electronics In Energy Systems **Credits: 3.00**
- ECET 33500 - Computer Architecture And Performance Evaluation **Credits: 3.00**
- ECET 33700 - Continuous Systems Analysis And Design **Credits: 3.00**
- ECET 33900 - Digital Signal Processing **Credits: 3.00**
- ECET 34900 - Advanced Digital Systems **Credits: 3.00**
- ECET 35901 - Computer Based Data Acquisition Applications **Credits: 3.00**
- ECET 36400 - Fundamentals Of Electromagnetics **Credits: 3.00**
- ECET 36900 - Applied Computer Vision For Sensing And Automation **Credits: 3.00**
- ECET 37201 - Continuous Control Electronics **Credits: 3.00**
- ECET 37300 - Applied Electronic Drives **Credits: 3.00**
- ECET 38600 - Building Electrical Codes And Standard Practices **Credits: 3.00**
- ECET 38800 - Analog IC Applications **Credits: 3.00**
- ECET 42301 - Electrical Vehicle Integration And Fabrication **Credits: 3.00**
- ECET 42800 - Audio Electronics-Selected Topics **Credits: 3.00**
- ECET 43600 - Electrical Power Transmissions, Distribution, And Smart Control **Credits: 3.00**
- ECET 43900 - Advanced Digital Signal Processing **Credits: 3.00**
- ECET 44200 - Programming Robots With ROS **Credits: 3.00**
- ECET 44400 - Wireless Systems: Design And Measurement **Credits: 3.00**
- ECET 47600 - Smart Grid Technology And Applications **Credits: 3.00**

Advanced Analysis Selectives (3 credits)

- ECET 33700 - Continuous Systems Analysis And Design **Credits: 3.00**
- ECET 33900 - Digital Signal Processing **Credits: 3.00**

Senior Capstone I & II Selectives (6 credits)

Select one pair of Senior Capstone I and II Selectives. Senior Capstone Selectives I and II must be taken in consecutive semesters to count toward degree requirements.

- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00** and
- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**

or

- ECET 43000 - Electrical And Electronic Product And Program Management **Credits: 3.00** and
- ECET 46000 - Project Design And Development **Credits: 3.00**

or

- ECET 43100 - International Capstone Project Planning And Design **Credits: 3.00** and
- ECET 46100 - International Capstone Project Execution **Credits: 3.00**

Applied Calculus I Selective (3 credits)

- MA 16010 - Applied Calculus I **Credits: 3.00** (preferred)

- MA 16100 - Plane Analytic Geometry And Calculus I **Credits:** 5.00
- MA 16500 - Analytic Geometry And Calculus I **Credits:** 4.00

Applied Calculus II Selective (3 credits)

- MA 16020 - Applied Calculus II **Credits:** 3.00 (preferred)
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits:** 5.00
- MA 16600 - Analytic Geometry And Calculus II **Credits:** 4.00

Introduction to C Programming Selective (3 credits)

- CNIT 10500 - Introduction To C Programming **Credits:** 3.00 (preferred)
- CS 15900 - C Programming **Credits:** 3.00

General Physics I Selective (4 credits)

- PHYS 22000 - General Physics **Credits:** 4.00 (preferred)
- PHYS 17200 - Modern Mechanics **Credits:** 4.00

General Physics II Selective (4 credits)

- PHYS 22100 - General Physics **Credits:** 4.00 (preferred)
- PHYS 24100 - Electricity And Optics **Credits:** 3.00
- PHYS 27200 - Electric And Magnetic Interactions **Credits:** 4.00

Statistics Selective (3 credits)

- STAT 22500 - Introduction To Probability Models **Credits:** 3.00 (preferred)
- STAT 30100 - Elementary Statistical Methods **Credits:** 3.00

English Composition Selective (3 credits)

- ENGL 10600 - First Year Composition With Conferences **Credits:** 4.00
- ENGL 10800 - First Year Composition **Credits:** 3.00
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits:** 3.00
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00

Written Communication Selective (3 credits)

- ENGL 20500 - Introduction To Creative Writing **Credits:** 3.00
- ENGL 30400 - Advanced Composition **Credits:** 3.00
- ENGL 42000 - Business Writing **Credits:** 3.00
- ENGL 42100 - Technical Writing **Credits:** 3.00
- ENGL 42400 - Writing For High Technology Industries **Credits:** 3.00

Freshman Speech Selective (3 credits)

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

Oral Communication Selective (3 credits)

- Any communication (COM) course at the 20000 level or higher.

Business Selective (3 credits)

Select 3 hours in one of the disciplines listed below, or any of the designated courses, subject to the following conditions:

- The course must be from the UCC approved list of Human Culture: Behavioral/Social Sciences, unless the student selects a General Education Selective, which meets the Human Culture: Behavioral/Social Sciences requirement for core.
- Any Agricultural Economics course (AGEC) at the 200-level or higher
- Any Economics (ECON) course at the 200-level or higher
- Any Entrepreneurship (ENTR) course at the 200-level or higher
- Any Management (MGMT) course at the 200-level or higher
- Or select one of the following courses:
- AGECE 20300 - Introductory Microeconomics For Food And Agribusiness **Credits: 3.00**
- AGECE 20400 - Introduction To Resource Economics And Environmental Policy **Credits: 3.00**
- AGECE 21700 - Economics **Credits: 3.00**
- AGECE 25000 - Economic Geography Of World Food And Resources **Credits: 3.00**
- CSR 34200 - Personal Finance **Credits: 3.00**
- ECON 21000 - Principles Of Economics **Credits: 3.00**
- ECON 25100 - Microeconomics **Credits: 3.00**
- ECON 25200 - Macroeconomics **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 15200 - Business Principles For Organizational Leadership **Credits: 3.00**
- TLI 21300 - Project Management **Credits: 3.00**
- IET 21400 - Introduction To Supply Chain Management Technology **Credits: 3.00**
- IET 34200 - Warehouse And Inventory Management **Credits: 3.00**
- IET 34300 - Technical And Service Selling **Credits: 3.00**

General Education Selectives (12 credits)

Select 12 hours in one or more of the subject areas (disciplines) listed below, subject to the following conditions:

Foreign languages (except for courses in a student's native language); African American Studies (AAS); Art and Design (AD); American Studies (AMST); Anthropology (ANTH); Asian American Studies (ASAM); American Sign language (ASL); Bands (BAND); Classics (CLCS); Comparative Literature (CMPL); Communication (COM); Economics (ECON); English (ENGL); History (HIST); Interdisciplinary Studies (IDIS); Linguistics (LING); Music History and Theory (MUS); Philosophy (PHIL); Political Science (POL); Psychology (PSY); Religious Studies (REL); Sociology (SOC); Theater (THTR); Women's Studies (WGSS); ROTC (AFT, MSL, NS)

- One course must be from the UCC approved list of Human Culture: Humanities.

- One course must be from the UCC approved list of Human Culture: Behavioral/Social Sciences, unless the student selects a Business Selective, which meets the Human Culture: Behavioral/Social Sciences requirement for core.
- Only one of AGECE 21700 Economics and ECON 21000 Principles of Economics can be applied to the Plan of Study.
- BAND courses are limited to 6 hours.

Industrial Economics Selective (3 credits)

- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00**
- MGMT 20000 - Introductory Accounting **Credits: 3.00**
- MGMT 21200 - Business Accounting **Credits: 3.00**
- AGECE 33000 - Management Methods For Agricultural Business **Credits: 3.00**
- AGECE 35200 - Quantitative Techniques For Firm Decision Making **Credits: 3.00**

Technical Selectives (9 credits)

- ECET: ECET 29900 and other lab assistant courses are limited to 3 credit hours.
- College of Engineering: ME 29700 and Engineering Projects in Community Service (EPICS) are each limited to 3 credit hours. First Year Engineering (ENGR) courses cannot be used.
- Purdue Polytechnic Institute: CNIT 13600 and CNIT 15501 cannot be used.
- College of Science: Additional lab-based physics (PHYS), chemistry (CHM) and biology (BIOL) courses; computer Science (CS) courses; and higher-level mathematics (MA) courses: MA 26100, MA 26500, and MA 26600. CS 11000, CS 23500, CS 15900 cannot be used.
- College of Liberal Arts: Up to 9 hours of THTR 25300, THTR 35300, THTR 55300, FVS 26100, FVS 33200, FVS 33700, or FVS 33800.
- ECET Co-op sessions 1, 2 and 3 with seminar
- ECET 49900 - Electrical Engineering Technology **Credits: 1.00 to 9.00**
Sust Engy Tech: Intl Perspectv Purdue In Germany

Global / Professional Selective (3 credits)

- COM 30300 - Intercultural Communication **Credits: 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- OLS 34600 - Critical Thinking And Ethics **Credits: 3.00**
- OLS 38600 - Leadership For Organizational Change **Credits: 3.00**
- PSY 33500 - Stereotyping And Prejudice **Credits: 3.00**
- TECH 32000 - Technology And The Organization **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- TLI 21300 - Project Management **Credits: 3.00**

Elective (3 credits)

Any non-remedial course.

Minors

Minors are offered through a variety of disciplines. The discipline offering the minor establishes the requirement. A minor is not required.

The Electrical Engineering Technology minor cannot be added to this major.

Double Majors within the Electrical Engineering Technology Program

Within the PIECET-BS Program, double majors of AUET or CEGT or ENET are allowed without restriction. A double major with EETC requires an additional 12 hours of ECET courses. The additional courses will fulfill the EETC major for the purposes of double majors. The additional courses have the following restrictions:

- No 100-level course may be used.
- Only three (3) credits of a 200-level course may be used, excluding: ECET 22400 Electronic Systems, ECET 29000 International Experience and ECET 29900 Selected EET Subjects, which may not be used.
- All courses must be taken on the PWL and/or PSW campuses.

Professional Requirement

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response.

Table 1: Approved Professional Experiences

Approval by	Experience
Automatic	Any TECH Professional Practice course (co-op, intern, etc.)
Automatic	MET 29900 Internship for Credit
Automatic	EPICS courses, minimum of two
Advisor	Any approved internship (assuming student and/or employer provide documentation)
Advisor	Military service (ROTC completion, reservist, active duty, veteran)
Faculty	Supervised undergraduate research experiences or laboratory assistantships (e.g., employed in the AEL as lab technician)
Faculty	Independent study - by petition to ensure the project meets the spirit of the requirement
Faculty	Professional society/club activities (e.g., led the Solar Racing team) - by petition
Faculty	Any approved employment or industry project.

*Approval Key:

- Automatic - student participation in this professional experience is already documented through existing means.
- Advisor - advisor reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.

- Faculty - designated committee reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.

Intercultural Requirement

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete one (1) of the following global experiences:*

- Participate in A Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in a full semester abroad program program, or
- Complete 3 credit hours from the Polytechnic list of recommended Global/Cultural courses.

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pre-test).

*Global experiences must take place during the time of enrollment in Polytechnic to complete Step 2. Experiences taken place prior to a student's initial enrollment will not serve to complete Step 2. Intercultural competencies gained on experiences prior to Polytechnic enrollment will be captured as baseline data on a student's IDI.

Approved Global/Cultural Course List for Intercultural Requirement

Energy Engineering Technology Supplemental Information

Senior Capstone Selective I and II (6 credits)

Select one pair of Senior Capstone Selectives I and II. Senior Capstone Selectives must be taken in subsequent semesters to count toward degree requirements.

- ENGT 48000 - Engineering Technology Capstone I **Credits:** 3.00 and
- ENGT 48100 - Engineering Technology Capstone II **Credits:** 3.00
- or
- ECET 43000 - Electrical And Electronic Product And Program Management **Credits:** 3.00 and
- ECET 46000 - Project Design And Development **Credits:** 3.00
- or
- ECET 43100 - International Capstone Project Planning And Design **Credits:** 3.00 and
- ECET 46100 - International Capstone Project Execution **Credits:** 3.00

ECET Advanced Analysis Selective (3 credits)

- ECET 33700 - Continuous Systems Analysis And Design **Credits:** 3.00
- ECET 33900 - Digital Signal Processing **Credits:** 3.00

Introduction to C Programming Selective (3 credits)

- CNIT 10500 - Introduction To C Programming **Credits:** 3.00 (preferred)

- CS 15900 - C Programming **Credits:** 3.00

Applied Calculus I Selective (3 credits)

- MA 16010 - Applied Calculus I **Credits:** 3.00 (preferred)
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits:** 5.00
- MA 16500 - Analytic Geometry And Calculus I **Credits:** 4.00

Applied Calculus II Selective (3 credits)

- MA 16020 - Applied Calculus II **Credits:** 3.00 (preferred)
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits:** 5.00
- MA 16600 - Analytic Geometry And Calculus II **Credits:** 4.00

General Physics I Selective (4 credits)

- PHYS 22000 - General Physics **Credits:** 4.00 (preferred)
- PHYS 17200 - Modern Mechanics **Credits:** 4.00

General Physics II Selective (4 credits)

- PHYS 22100 - General Physics **Credits:** 4.00 (preferred)
- PHYS 24100 - Electricity And Optics **Credits:** 3.00
- PHYS 27200 - Electric And Magnetic Interactions **Credits:** 4.00

Statistics Selective (3 credits)

- STAT 22500 - Introduction To Probability Models **Credits:** 3.00
- STAT 30100 - Elementary Statistical Methods **Credits:** 3.00

English Composition Selective (3 credits)

- ENGL 10600 - First Year Composition With Conferences **Credits:** 4.00
- ENGL 10800 - First Year Composition **Credits:** 3.00
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits:** 3.00
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00

Written Communication Selective (3 credits)

- ENGL 20500 - Introduction To Creative Writing **Credits:** 3.00
- ENGL 30400 - Advanced Composition **Credits:** 3.00
- ENGL 42000 - Business Writing **Credits:** 3.00
- ENGL 42100 - Technical Writing **Credits:** 3.00
- ENGL 42400 - Writing For High Technology Industries **Credits:** 3.00

Freshman Speech Selective (3 credits)

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

Oral Communication Selective (3 credits)

- Any communications (COM) course at the 20000 level or higher - 3.00 credit hours.

Business Selective (3 credits)

Select 3 hours in one of the disciplines listed below, or any of the designated courses:

- Any Agricultural Economics course (AGEC) at the 200-level or higher: AGEC 20000 or higher.
- Any Economics (ECON) course at the 200-level or higher: ECON 20000 or higher.
- Any Entrepreneurship (ENTR) course at the 200-level or higher: ENTR 20000 or higher.
- Any Management (MGMT) course at the 200-level or higher: MGMT 20000 or higher.
- Or the select one of the following courses:
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness **Credits: 3.00**
- AGEC 20400 - Introduction To Resource Economics And Environmental Policy **Credits: 3.00**
- AGEC 21700 - Economics **Credits: 3.00**
- AGEC 25000 - Economic Geography Of World Food And Resources **Credits: 3.00**
- CSR 34200 - Personal Finance **Credits: 3.00**
- ECON 21000 - Principles Of Economics **Credits: 3.00**
- ECON 25100 - Microeconomics **Credits: 3.00**
- ECON 25200 - Macroeconomics **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 15200 - Business Principles For Organizational Leadership **Credits: 3.00**
- TLI 21300 - Project Management **Credits: 3.00**
- IET 21400 - Introduction To Supply Chain Management Technology **Credits: 3.00**
- IET 34200 - Warehouse And Inventory Management **Credits: 3.00**
- IET 34300 - Technical And Service Selling **Credits: 3.00**

Industrial Economics Selective (3 credits)

- AGEC 33000 - Management Methods For Agricultural Business **Credits: 3.00**
- AGEC 35200 - Quantitative Techniques For Firm Decision Making **Credits: 3.00**
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00**
- MGMT 20000 - Introductory Accounting **Credits: 3.00**
- MGMT 21200 - Business Accounting **Credits: 3.00**

General Education Selective (6 credits)

Select 6 hours in one or more of the subject areas (disciplines) listed below, subject to the following conditions:

- One course must be from the UCC approved list of Human Culture: Humanities.

- Only one of AGECE 21700 Economics and ECON 21000 Principles of Economics can be applied to the Plan of Study.

Foreign languages (except for courses in a student's native language); African American Studies (AAS); Art and Design (AD); American Studies (AMST); Anthropology (ANTH); Asian American Studies (ASAM); American Sign language (ASL); Bands (BAND); Classics (CLCS); Comparative Literature (CMPL); Communication (COM); Economics (ECON); English (ENGL); History (HIST); Interdisciplinary Studies (IDIS); Linguistics (LING); Music History and Theory (MUS); Philosophy (PHIL); Political Science (POL); Psychology (PSY); Religious Studies (REL); Sociology (SOC); Theater (THTR); Women's Studies (WGSS); ROTC (AFT, MSL, NS)

Energy Related Technical Selective (3 credits)

- EAPS 30100 - Oil! **Credits: 3.00**
- EAPS 32700 - Climate, Science And Society **Credits: 3.00**
- EAPS 37500 - Great Issues - Fossil Fuels, Energy And Society **Credits: 3.00**
- MET 23000 - Fluid Power **Credits: 3.00**
- MET 42200 - Power Plants And Energy Conversion **Credits: 3.00**
- SFS 30200 - Principles Of Sustainability **Credits: 3.00**

Sustainability Engineering Technology Selective (3 credits)

- AGECE 25000 - Economic Geography Of World Food And Resources **Credits: 3.00**
- CE 35500 - Engineering Environmental Sustainability **Credits: 3.00**
- EEE 35500 - Engineering Environmental Sustainability **Credits: 3.00**
- MET 53000 - Facilities Engineering Technology **Credits: 3.00**
- SFS 30200 - Principles Of Sustainability **Credits: 3.00**

Global / Professional Selective (3 credits)

- COM 30300 - Intercultural Communication **Credits: 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- OLS 34600 - Critical Thinking And Ethics **Credits: 3.00**
- OLS 38600 - Leadership For Organizational Change **Credits: 3.00**
- PSY 33500 - Stereotyping And Prejudice **Credits: 3.00**
- TECH 32000 - Technology And The Organization **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- TLI 21300 - Project Management **Credits: 3.00**

Elective (3 credits)

Any non-remedial course.

Double Majors within the Electrical Engineering Technology Program

Within the PIECET-BS Program, double majors of AUET or CEGT or ENET are allowed without restriction. A double major with EETC requires an additional 12 hours of ECET courses. The additional courses will fulfill the EETC major for the purposes of double majors. The additional courses have the following restrictions:

- No 100-level course may be used.
- Only three (3) credits of a 200-level course may be used, excluding: ECET 22400 Electronic Systems, ECET 29000 International Experience and ECET 29900 Selected EET Subjects, which may not be used.
- All courses must be taken on the PWL and/or PSW campuses.

Minors

Minors are offered through a variety of disciplines. The discipline offering the minor establishes the requirement. A minor is not required.

- The Electrical Engineering Technology minor cannot be added to this major.

Professional Requirement

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response.

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Automatic	MET 29900 Internship for Credit
Automatic	EPICS courses, minimum of two
Advisor	Any approved internship (assuming student and/or employer provide documentation)
Advisor	Military service (ROTC completion, reservist, active duty, veteran)
Faculty	Supervised undergraduate research experiences or laboratory assistantships (e.g., employed in the AEL as lab technician)
Faculty	Independent study - by petition to ensure the project meets the spirit of the requirement
Faculty	Professional society/club activities (e.g., led the Solar Racing team) - by petition
Faculty	Any approved employment or industry project.

*Approval Key:

- Automatic - student participation in this professional experience is already documented through existing means.

- Advisor - advisor reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.
- Faculty - designated committee reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.

Intercultural Requirement

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete one (1) of the following global experiences:*

- Participate in A Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in a full semester abroad program program, or
- Complete 3 credit hours from the Polytechnic list of recommended Global/Cultural courses.

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pre-test).

*Global experiences must take place during the time of enrollment in Polytechnic to complete Step 2. Experiences taken place prior to a student's initial enrollment will not serve to complete Step 2. Intercultural competencies gained on experiences prior to Polytechnic enrollment will be captured as baseline data on a student's IDI.

Approved Global/Cultural Course List for Intercultural Requirement

Engineering Technology Supplemental Information (Statewide Locations)

Freshman Composition Selective

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

Freshman Speech Selective

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

Technical Writing Selective

- ENGL 42100 - Technical Writing **Credits: 3.00**
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**

Programming Selectives

- CNIT 10500 - Introduction To C Programming **Credits: 3.00**
- CNIT 15501 - Introduction To Software Development Concepts **Credits: 3.00**
- CNIT 17500 - Visual Programming **Credits: 3.00**
- MET 16400 - Computing In Engineering Technology **Credits: 3.00**

ECET Selectives

- ECET 17900 - Introduction To Digital Systems **Credits: 3.00** and
- ECET 22400 - Electronic Systems **Credits: 3.00** and
OR
- ECET 30201 - Introduction To Industrial Controls **Credits: 3.00**

Computer Graphics Technology Selectives

- MFET 10301 - Geometric Modeling Applications **Credits: 3.00**
- CGT 11000 - Technical Graphics Communications **Credits: 3.00**
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00**
- ENGT 10500 - Industrial Technology Introduction To Design **Credits: 3.00**

Computer-Aided Design Selective

- CGT 22600 - Introduction To Constraint-Based Modeling **Credits: 3.00**
- MET 10200 - Production Design And Specifications **Credits: 3.00**

Global/Professional Selectives

- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- TLI 35600 - Global Technology Leadership **Credits: 3.00**
Approved Study Abroad

Advanced Oral Communication Selective

- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 31400 - Advanced Presentational Speaking **Credits: 3.00**

Technical Selectives

At least 15 credit hours must be at the 30000 level or above and at least 6 credit hours must be in the same discipline.

- CGT 32600 - Graphics Standards For Product Definition **Credits: 3.00**
- ECET 30201 - Introduction To Industrial Controls **Credits: 3.00**
- ECET 32100 - Introduction To Nanotechnology **Credits: 3.00**
- ECET 32700 - Instrumentation And Data Acquisition Design **Credits: 3.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
- TLI 31500 - New Product Development **Credits: 3.00**
- IET 23500 - Introduction To Systems Thinking And Process Improvement **Credits: 3.00**
- IET 33520 - Human Factors For Technology Systems **Credits: 3.00**
- IET 33610 - Risk Analysis And Assessment **Credits: 3.00**
- IET 33620 - Total Productive Maintenance **Credits: 3.00**
- IET 41400 - Financial Analysis For Technology Systems **Credits: 3.00**
- IET 43530 - Operations Planning And Management **Credits: 3.00**
- IET 43540 - Facilities Planning And Material Handling **Credits: 3.00**
- IET 43640 - Lean Six Sigma **Credits: 3.00**
- MET 30200 - CAD In The Enterprise **Credits: 3.00**
- MET 32000 - Applied Thermodynamics **Credits: 3.00**
- MET 38200 - Controls And Instrumentation For Automation **Credits: 3.00**
- MET 34600 - Advanced Materials In Manufacturing **Credits: 3.00**
- MET 42100 - Air Conditioning And Refrigeration **Credits: 3.00**
- MET 43200 - Hydraulic Motion Control Systems **Credits: 3.00**
- MET 43600 - Pneumatic Motion Control Systems **Credits: 3.00**
- MET 45100 - Manufacturing Quality Control **Credits: 3.00**
- MFET 30000 - Applications Of Automation In Manufacturing **Credits: 3.00**
- MFET 34400 - Automated Manufacturing Processes **Credits: 3.00**
- MFET 34800 - Introduction To Robot Kinematics **Credits: 3.00**
- MFET 37400 - Manufacturing Integration I **Credits: 3.00**
- TECH 22000 - Designing Technology For People **Credits: 3.00**

Robotics Technical Selectives

- CNIT 32500 Object-Oriented Application Development
- CNIT 35500 Software Development Mobile Computer
- ECET 33700 Continuous Systems Analysis & Design
- ECET 36900 Applied Computer Vision
- MET 31400 Applications of Machine Elements
- MET 31500 Applied Mechanism Kinematics and Dynamics
- MET 31601 Mechanics of Machine Design
- MET 38200 Controls & Instrumentation for Automation
- MFET 34800 Advanced Industrial Robotics
- MFET 41000 Introduction to Additive Manufacturing

Humanities Foundation Selective

See approved UCC Humanities list.

Humanities/Liberal Arts Electives

Any course from the following disciplines: Anthropology, English, History, Philosophy, Political Science, Psychology, Religious Studies, Sociology, Theatre, Women's Studies, or Foreign Languages (except native language courses)

Lab Science Selectives

See approved UCC Science list.

Elective

Any non-remedial course offered for credit at the University not already required/being used on the Plan of Study.

Fabrication and Welding Technology Concentration for Mechanical Engineering Technology

About the Program

Fabrication and Welding Technology is a concentration in the Mechanical Engineering Technology program that focuses on designing various joining and welding processes related to materials in manufacturing. Topics include weldment design, fasteners, other joining processes, and modern materials used to manufacture consumer products, industrial equipment and structures.

Fabrication and Welding Technology Concentration (9 credits)

- MET 34500 - Welding Processes **Credits:** 3.00
- MET 34600 - Advanced Materials In Manufacturing **Credits:** 3.00
- MET 44301 - Joining Processes **Credits:** 3.00

Industrial Engineering Technology Supplemental Information

Behavioral Social Science Elective (3 credits)

Must be a Behavioral Social Science course from the approved UCC list:

<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Humanities Selective (3 credits)

Must be a Humanities course from the approved UCC list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Materials & Processes Selective (3 Credits)

- MET 14300 - Materials And Processes I **Credits: 3.00**
- MET 14400 - Materials And Processes II **Credits: 3.00**

Mathematics Selective (3 Credits)

- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00**
- MA 16020 - Applied Calculus II **Credits: 3.00**
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00**
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00**
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**
- MA 16600 - Analytic Geometry And Calculus II **Credits: 4.00**

Oral Communication Selective (3 Credits)

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

Written Communication Selective (3 Credits)

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

Computer Programming Selective (3 Credits)

- CNIT 10500 - Introduction To C Programming **Credits: 3.00**
- CNIT 15500 - Introduction To Object-Oriented Programming **Credits: 3.00**
- CNIT 15501 - Introduction To Software Development Concepts **Credits: 3.00**
- CNIT 17500 - Visual Programming **Credits: 3.00**
- CS 15900 - C Programming **Credits: 3.00**
- CS 17700 - Programming With Multimedia Objects **Credits: 4.00**
- CS 18000 - Problem Solving And Object-Oriented Programming **Credits: 4.00**
- MET 16400 - Computing In Engineering Technology **Credits: 3.00**

Lab Science Selective (3 Credits)

- ASTR 26300 - Descriptive Astronomy: The Solar System **Credits: 3.00**
- ASTR 26400 - Descriptive Astronomy: Stars And Galaxies **Credits: 3.00**
- BIOL 11000 - Fundamentals Of Biology I **Credits: 4.00**
- BIOL 11100 - Fundamentals Of Biology II **Credits: 4.00**
- BIOL 20300 - Human Anatomy And Physiology **Credits: 4.00**
- BIOL 20400 - Human Anatomy And Physiology **Credits: 4.00**
- BTNY 11000 - Introduction To Plant Science **Credits: 4.00**

- CHM 11100 - General Chemistry **Credits: 3.00**
- CHM 11200 - General Chemistry **Credits: 3.00**
- CHM 11500 - General Chemistry **Credits: 4.00**
- CHM 11600 - General Chemistry **Credits: 4.00**
- CHM 13600 - General Chemistry Honors **Credits: 4.00**
- EAPS 11100 - Physical Geology **Credits: 3.00**
- EAPS 11200 - Earth Through Time **Credits: 3.00**
- ENTM 22810 - Forensic Investigation **Credits: 4.00**
- ENTM 22820 - Forensic Analysis **Credits: 4.00**
- HORT 10100 - Fundamentals Of Horticulture **Credits: 3.00**
- PHYS 22100 - General Physics **Credits: 4.00**
- PHYS 27200 - Electric And Magnetic Interactions **Credits: 4.00**

Technical Graphics Selective (2 Credits)

- MFET 10301 - Geometric Modeling Applications **Credits: 3.00**
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00**
- CGT 11000 - Technical Graphics Communications **Credits: 3.00**
- ENGT 10500 - Industrial Technology Introduction To Design **Credits: 3.00**

Advanced Oral Communication Selective (3 Credits)

- COM 31400 - Advanced Presentational Speaking **Credits: 3.00**
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00**
- COM 31800 - Principles Of Persuasion **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 32400 - Introduction To Organizational Communication **Credits: 3.00**
- COM 32500 - Interviewing: Principles And Practice **Credits: 3.00**
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00**
- COM 43500 - Communication And Emerging Technologies **Credits: 3.00**

Advanced Written Communication Selective (3 Credits)

- ENGL 30400 - Advanced Composition **Credits: 3.00**
- ENGL 30600 - Introduction To Professional Writing **Credits: 3.00**
- ENGL 41900 - Multimedia Writing **Credits: 3.00**
- ENGL 42000 - Business Writing **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**

Manufacturing Automation Selective (3 Credits)

- MET 28400 - Introduction To Industrial Controls **Credits: 3.00**
- MFET 24800 - Industrial Robot Programming And Applications **Credits: 3.00**
- MFET 30000 - Applications Of Automation In Manufacturing **Credits: 3.00**
- MFET 34400 - Automated Manufacturing Processes **Credits: 3.00**

Technical Elective (12 Credits)

- Any Polytechnic Institute or Engineering (ENGR or EPCS) course not already required on the plan of study.
- AT 10000-49999
 - CGT 10000-49999
 - CM 10000-49999
 - CNIT 10000-49999
 - ECET 10000-49999
 - ENGT 10000-49999
 - MET 10000-49999
 - MFET 10000-49999
 - OLS 10000-49999
 - TECH 10000-49999
 - TLI 10000-49999
 - AFT 30000-49999
 - MSL 30000-49999
 - NS 30000-49999
- ENTR 20000 - Introduction To Entrepreneurship And Innovation **Credits: 3.00**
- ENTR 31000 - Marketing And Management For New Ventures **Credits: 3.00**
- ENTR 31500 - Business Planning For Social Entrepreneurship **Credits: 3.00**

Free Elective (8 Credits)

Any non-remedial course

Global/Intercultural Requirement (0 Credits)

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete one (1) of the following global experiences:*

- Participate in A Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in a full semester abroad program program, or
- Complete 3 credit hours from the Polytechnic list of recommended Global/Cultural courses.

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pre-test).

*Global experiences must take place during the time of enrollment in Polytechnic to complete Step 2. Experiences taken place prior to a student's initial enrollment will not serve to complete Step 2. Intercultural competencies gained on experiences prior to Polytechnic enrollment will be captured as baseline data on a student's IDI.

- AAS 27100 - Introduction To African American Studies **Credits: 3.00**
- AAS 37300 - Issues In African American Studies **Credits: 3.00**
- AGR 20100 - Communicating Across Culture **Credits: 3.00**
- ANSC 38100 - Leadership For A Diverse Workplace **Credits: 3.00**
- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21000 - Technology And Culture **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 34100 - Culture And Personality **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- ARAB 28000 - Arabic Culture **Credits: 3.00**
- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- AT 22300 - Human Factors For Flight Crews **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- COM 42300 - Leadership, Communication And Organizations **Credits: 3.00**
- ECET 29000 - International Experience **Credits: 1.00 to 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 30000 - Student Leadership Development **Credits: 1.00 to 3.00**
- EDPS 30100 - Peer Counseling Training **Credits: 1.00 to 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- EDPS 31700 - Collaborative Leadership: Mentoring **Credits: 3.00**
- ENGL 41400 - Studies In Literature And Culture **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HDFS 33200 - Stress And Coping In Contemporary Families **Credits: 3.00**
- HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits: 3.00**
- HIST 33805 - History Of Human Rights **Credits: 3.00**
- HIST 35000 - Science And Society In The Twentieth Century World **Credits: 3.00**
- HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
- HIST 37700 - History And Culture Of Native America **Credits: 3.00**
- HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
- HTM 37000 - Sustainable Tourism And Responsible Travel **Credits: 3.00**
- HTM 37200 - Global Tourism Geography **Credits: 3.00**

- MSL 20100 - Leadership And Ethics **Credits: 2.00 to 3.00**
- OLS 35000 - Creativity In Business And Industry **Credits: 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 43500 - Philosophy Of Mind **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 32600 - Black Political Participation In America **Credits: 3.00**
- POL 32700 - Global Green Politics **Credits: 3.00**
- POL 36000 - Women And The Law **Credits: 3.00**
- POL 41300 - Analysis Of Political Attitudes And Behavior **Credits: 3.00**
- POL 42300 - International Environmental Policy **Credits: 3.00**
- POL 42900 - Contemporary Political Problems **Credits: 3.00** - It's A Complex World
- POL 43300 - International Organization **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- SOC 31000 - Race And Ethnicity **Credits: 3.00**
- SOC 33900 - Sociology Of Global Development **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**
- WGSS 38300 - Women, Work, And Labor **Credits: 3.00**

Professional Requirement (0 Credits)

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response.

Table 1: Approved Professional Experiences

Approval by	Experience
Automatic	Any TECH Professional Practice course (co-op, intern, etc.)
Automatic	MET 29900 Internship for Credit
Automatic	EPICS courses, minimum of two
Advisor	Any approved internship (assuming student and/or employer provide documentation)
Advisor	Military service (ROTC completion, reservist, active duty, veteran)
Faculty	Supervised undergraduate research experiences or laboratory assistantships (e.g., employed in the AEL as lab technician)
Faculty	Independent study - by petition to ensure the project meets the spirit of the requirement
Faculty	Professional society/club activities (e.g., led the Solar Racing team) - by petition

Faculty	Any approved employment or industry project.
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*Approval Key:

- Automatic - student participation in this professional experience is already documented through existing means.
- Advisor - advisor reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.
- Faculty - designated committee reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.

Industrial Engineering Technology Supplemental Information (Statewide)

Behavioral Social Science Elective (3 credits)

Must be a Behavioral Social Science course from the approved UCC list:

<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Humanities Selective (3 credits)

Must be a Humanities course from the approved UCC list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Materials & Processes Selective (3 Credits)

- MET 14300 - Materials And Processes I **Credits: 3.00**
- MET 14400 - Materials And Processes II **Credits: 3.00**

Mathematics Selective (3 Credits)

- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**
- MA 16010 - Applied Calculus I **Credits: 3.00**
- MA 16020 - Applied Calculus II **Credits: 3.00**
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00**
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00**
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**
- MA 16600 - Analytic Geometry And Calculus II **Credits: 4.00**

Oral Communication Selective (3 Credits)

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

Written Communication Selective (3 Credits)

- ENGL 10600 - First Year Composition With Conferences **Credits:** 4.00
- ENGL 10800 - First Year Composition **Credits:** 3.00
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00

Computer Programming Selective (3 Credits)

- CNIT 10500 - Introduction To C Programming **Credits:** 3.00
- CNIT 15500 - Introduction To Object-Oriented Programming **Credits:** 3.00
- CNIT 15501 - Introduction To Software Development Concepts **Credits:** 3.00
- CNIT 17500 - Visual Programming **Credits:** 3.00
- CS 15900 - C Programming **Credits:** 3.00
- CS 17700 - Programming With Multimedia Objects **Credits:** 4.00
- CS 18000 - Problem Solving And Object-Oriented Programming **Credits:** 4.00
- MET 16400 - Computing In Engineering Technology **Credits:** 3.00

Lab Science Selective (3 Credits)

- Must be at least a 3 credit hours lab based course from the approved UCC Science list:
<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Technical Graphics Selective (2 Credits)

- MFET 10301 - Geometric Modeling Applications **Credits:** 3.00
- CGT 11000 - Technical Graphics Communications **Credits:** 3.00
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits:** 2.00
- ENGT 10500 - Industrial Technology Introduction To Design **Credits:** 3.00

Advanced Oral Communication Selective (3 Credits)

- COM 31400 - Advanced Presentational Speaking **Credits:** 3.00
- COM 31500 - Speech Communication Of Technical Information **Credits:** 3.00
- COM 31800 - Principles Of Persuasion **Credits:** 3.00
- COM 32000 - Small Group Communication **Credits:** 3.00
- COM 32400 - Introduction To Organizational Communication **Credits:** 3.00
- COM 32500 - Interviewing: Principles And Practice **Credits:** 3.00
- COM 41500 - Discussion Of Technical Problems **Credits:** 3.00
- COM 43500 - Communication And Emerging Technologies **Credits:** 3.00

Advanced Written Communication Selective (3 Credits)

- ENGL 30400 - Advanced Composition **Credits:** 3.00

- ENGL 30600 - Introduction To Professional Writing **Credits: 3.00**
- ENGL 41900 - Multimedia Writing **Credits: 3.00**
- ENGL 42000 - Business Writing **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**

Manufacturing Automation Selective (3 Credits)

- MET 28400 - Introduction To Industrial Controls **Credits: 3.00**
- MFET 24800 - Industrial Robot Programming And Applications **Credits: 3.00**
- MFET 30000 - Applications Of Automation In Manufacturing **Credits: 3.00**
- MFET 34400 - Automated Manufacturing Processes **Credits: 3.00**

Technical Elective (12 Credits)

- Any Polytechnic Institute or Engineering (ENGR or EPCS) course not already required on the plan of study.
- AT 10000-49999
 - CGT 10000-49999
 - CM 10000-49999
 - CNIT 10000-49999
 - ECET 10000-49999
 - ENGT 10000-49999
 - MET 10000-49999
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 - OLS 10000-49999
 - TECH 10000-49999
 - TLI 10000-49999
 - AFT 30000-49999
 - MSL 30000-49999
 - NS 30000-49999
- ENTR 20000 - Introduction To Entrepreneurship And Innovation **Credits: 3.00**
- ENTR 31000 - Marketing And Management For New Ventures **Credits: 3.00**
- ENTR 31500 - Business Planning For Social Entrepreneurship **Credits: 3.00**

Free Elective (8 Credits)

Any non-remedial course

Global/Intercultural Requirement (0 Credits)

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete one (1) of the following global experiences:*

- Participate in A Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in a full semester abroad program program, or

- Complete 3 credit hours from the Polytechnic list of recommended Global/Cultural courses.

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pre-test).

*Global experiences must take place during the time of enrollment in Polytechnic to complete Step 2. Experiences taken place prior to a student's initial enrollment will not serve to complete Step 2. Intercultural competencies gained on experiences prior to Polytechnic enrollment will be captured as baseline data on a student's IDI.

- AAS 27100 - Introduction To African American Studies **Credits: 3.00**
- AAS 37300 - Issues In African American Studies **Credits: 3.00**
- AGR 20100 - Communicating Across Culture **Credits: 3.00**
- ANSC 38100 - Leadership For A Diverse Workplace **Credits: 3.00**
- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21000 - Technology And Culture **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 34100 - Culture And Personality **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- ARAB 28000 - Arabic Culture **Credits: 3.00**
- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- AT 22300 - Human Factors For Flight Crews **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- COM 42300 - Leadership, Communication And Organizations **Credits: 3.00**
- ECET 29000 - International Experience **Credits: 1.00 to 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 30000 - Student Leadership Development **Credits: 1.00 to 3.00**
- EDPS 30100 - Peer Counseling Training **Credits: 1.00 to 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**

- EDPS 31700 - Collaborative Leadership: Mentoring **Credits: 3.00**
- ENGL 41400 - Studies In Literature And Culture **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HDFS 33200 - Stress And Coping In Contemporary Families **Credits: 3.00**
- HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits: 3.00**
- HIST 33805 - History Of Human Rights **Credits: 3.00**
- HIST 35000 - Science And Society In The Twentieth Century World **Credits: 3.00**
- HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
- HIST 37700 - History And Culture Of Native America **Credits: 3.00**
- HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
- HTM 37000 - Sustainable Tourism And Responsible Travel **Credits: 3.00**
- HTM 37200 - Global Tourism Geography **Credits: 3.00**
- MSL 20100 - Leadership And Ethics **Credits: 2.00 to 3.00**
- OLS 35000 - Creativity In Business And Industry **Credits: 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 43500 - Philosophy Of Mind **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 32600 - Black Political Participation In America **Credits: 3.00**
- POL 32700 - Global Green Politics **Credits: 3.00**
- POL 36000 - Women And The Law **Credits: 3.00**
- POL 41300 - Analysis Of Political Attitudes And Behavior **Credits: 3.00**
- POL 42300 - International Environmental Policy **Credits: 3.00**
- POL 42900 - Contemporary Political Problems **Credits: 3.00** - It's A Complex World
- POL 43300 - International Organization **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- SOC 31000 - Race And Ethnicity **Credits: 3.00**
- SOC 33900 - Sociology Of Global Development **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**
- WGSS 38300 - Women, Work, And Labor **Credits: 3.00**

Professional Requirement (0 Credits)

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response.

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Approval by	Experience
Automatic	Any TECH Professional Practice course (co-op, intern, etc.)

Automatic	MET 29900 Internship for Credit
Automatic	EPICS courses, minimum of two
Advisor	Any approved internship (assuming student and/or employer provide documentation)
Advisor	Military service (ROTC completion, reservist, active duty, veteran)
Faculty	Supervised undergraduate research experiences or laboratory assistantships (e.g., employed in the AEL as lab technician)
Faculty	Independent study - by petition to ensure the project meets the spirit of the requirement
Faculty	Professional society/club activities (e.g., led the Solar Racing team) - by petition
Faculty	Any approved employment or industry project.

*Approval Key:

- Automatic - student participation in this professional experience is already documented through existing means.
- Advisor - advisor reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.
- Faculty - designated committee reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.

Intelligent Manufacturing Concentration for Robotics Engineering Technology

Intelligent Manufacturing is one of the concentrations offered in the Robotics Engineering Technology major which is part of the Manufacturing Engineering Technology program in the School Engineering Technology, Purdue Polytechnic Institute.

With computer-controlled machinery and automation systems widely used in the manufacturing industry, the Intelligent Manufacturing concentration gives students a more in-depth understanding of the key technologies such as computer-aided design, computer-aided manufacturing, manufacturing system integration, information and communication in manufacturing processes, and process control.

Intelligent Manufacturing Concentration

Choose one of the following options:

Design for Manufacturing Option

- MET 10200 - Production Design And Specifications **Credits: 3.00**
- MET 24500 - Manufacturing Systems **Credits: 3.00**
- MET 30200 - CAD In The Enterprise **Credits: 3.00**
- MET 45200 - Advanced GD&T Concepts Applied To Product Quality **Credits: 3.00**

Manufacturing Process Option

- MET 24500 - Manufacturing Systems **Credits: 3.00**
- MFET 25000 - Smart Manufacturing Cloud Computing Applications **Credits: 3.00**
- MFET 34400 - Automated Manufacturing Processes **Credits: 3.00**
- MFET 41000 - Introduction To Additive Manufacturing **Credits: 3.00**

IoT and Systems Concentration for Robotics Engineering Technology

IoT (Internet of Things) and Systems is one of the concentrations offered in the Robotics Engineering Technology major which is part of the Manufacturing Engineering Technology program in the School Engineering Technology, Purdue Polytechnic Institute.

The IoT is a network of connected things (e.g. various devices, machines, tools, people, etc.). Such a system of interrelated things is able to transfer data over a network. The IoT and Systems concentration gives students a more in-depth understanding of key IoT technologies such as sensors, network connectivity, cloud computing, and automation systems in the context of industrial applications.

Students are required to take the following three courses:

- MFET 23000 - Industrial Internet Of Things, Networks, And Systems I **Credits: 3.00**
- MFET 23100 - Industrial Internet Of Things, Networks, And Systems II **Credits: 3.00**
- MFET 37400 - Manufacturing Integration I **Credits: 3.00**

Students are required to take either one of the following two courses:

- ECET 32700 - Instrumentation And Data Acquisition Design **Credits: 3.00** or
- MET 38200 - Controls And Instrumentation For Automation **Credits: 3.00**

Mechanics Concentration for Mechanical Engineering Technology

Mechanics is a concentration in the Mechanical Engineering Technology program that focuses on motion and forces to understand the behavior of machines and mechanical systems, and the strengths of structures and materials, in order to improve their designs and prevent failure.

Mechanics Concentration - Choose Three (9 credits)

- MET 31100 - Experimental Strength Of Materials **Credits: 3.00**
- MET 31700 - Machine Diagnostics **Credits: 3.00**
- MET 41100 - Introduction To The Finite Element Method **Credits: 3.00**
- MET 31400 - Applications Of Machine Elements **Credits: 3.00**
- MET 31500 - Applied Mechanism Kinematics And Dynamics **Credits: 3.00**
- MET 31601 - Mechanics Of Machine Design **Credits: 3.00**

Mechanisms and Controls Concentration for Robotics Engineering Technology

Mechanisms and Controls is one of the concentrations offered in the Robotics Engineering Technology major which is part of the Manufacturing Engineering Technology program in the School Engineering Technology, Purdue Polytechnic Institute.

At the intersection of mechanical engineering and electrical engineering, the Mechanisms and Controls concentration gives students a more in-depth understanding of how mechanisms move, algorithms for achieving desired motion, and the design and building of simply anything that moves.

Students are required to take the following three courses:

- MET 23000 - Fluid Power **Credits: 3.00**
- MET 43200 - Hydraulic Motion Control Systems **Credits: 3.00**
- MET 48200 - Mechatronics **Credits: 3.00**

Students are required to take any one of the following three courses:

- ECET 32700 - Instrumentation And Data Acquisition Design **Credits: 3.00** or
- MET 38200 - Controls And Instrumentation For Automation **Credits: 3.00** or
- MFET 34100 - Process And Continuous Control Applications **Credits: 3.00**

Mechatronics Engineering Technology Supplemental Information

Freshman Composition Selective +

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

Freshman Speech Selective +

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

Materials and Processes Selective

- MET 14300 - Materials And Processes I **Credits: 3.00**
- MET 14400 - Materials And Processes II **Credits: 3.00**

Computer Graphics Selective

- MFET 10301 - Geometric Modeling Applications **Credits: 3.00**
- CGT 11000 - Technical Graphics Communications **Credits: 3.00**
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00**
- ENGT 10500 - Industrial Technology Introduction To Design **Credits: 3.00**

Communications Selective +

- COM 31500 - Speech Communication Of Technical Information **Credits:** 3.00
- COM 32000 - Small Group Communication **Credits:** 3.00
- COM 41500 - Discussion Of Technical Problems **Credits:** 3.00
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits:** 3.00

Physics Selective

- PHYS 22000 - General Physics **Credits:** 4.00
- PHYS 17200 - Modern Mechanics **Credits:** 4.00

Behavioral/Social Science Foundational Selective

Must be a Behavioral Social Science course from the approved UCC list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Humanities Foundational Selective

Must be a Humanities course from the approved UCC list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Intercultural Requirement

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete one (1) of the following global experiences:*

- Participate in A Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in a full semester abroad program program, or
- Complete 3 credit hours from the Polytechnic list of recommended Global/Cultural courses.

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pre-test).

*Global experiences must take place during the time of enrollment in Polytechnic to complete Step 2. Experiences taken place prior to a student's initial enrollment will not serve to complete Step 2. Intercultural competencies gained on experiences prior to Polytechnic enrollment will be captured as baseline data on a student's IDI.

- AAS 27100 - Introduction To African American Studies **Credits:** 3.00
- AAS 37300 - Issues In African American Studies **Credits:** 3.00
- AGR 20100 - Communicating Across Culture **Credits:** 3.00
- ANSC 38100 - Leadership For A Diverse Workplace **Credits:** 3.00
- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits:** 3.00
- ANTH 20500 - Human Cultural Diversity **Credits:** 3.00
- ANTH 21000 - Technology And Culture **Credits:** 3.00
- ANTH 21200 - Culture, Food And Health **Credits:** 3.00

- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 34100 - Culture And Personality **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- ARAB 28000 - Arabic Culture **Credits: 3.00**
- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- AT 23300 - Ethics And Aviation **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- COM 42300 - Leadership, Communication And Organizations **Credits: 3.00**
- ECET 29000 - International Experience **Credits: 1.00 to 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 23500 - Learning And Motivation **Credits: 2.00 or 3.00**
- EDPS 30000 - Student Leadership Development **Credits: 1.00 to 3.00**
- EDPS 30100 - Peer Counseling Training **Credits: 1.00 to 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- EDPS 31700 - Collaborative Leadership: Mentoring **Credits: 3.00**
- ENGL 41400 - Studies In Literature And Culture **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HDFS 33200 - Stress And Coping In Contemporary Families **Credits: 3.00**
- HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits: 3.00**
- HIST 35000 - Science And Society In The Twentieth Century World **Credits: 3.00**
- HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
- HIST 37700 - History And Culture Of Native America **Credits: 3.00**
- HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
- HTM 37000 - Sustainable Tourism And Responsible Travel **Credits: 3.00**
- HTM 37200 - Global Tourism Geography **Credits: 3.00**
- MSL 20100 - Leadership And Ethics **Credits: 2.00 to 3.00**
- OLS 35000 - Creativity In Business And Industry **Credits: 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 43500 - Philosophy Of Mind **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 32600 - Black Political Participation In America **Credits: 3.00**
- POL 32700 - Global Green Politics **Credits: 3.00**
- POL 36000 - Women And The Law **Credits: 3.00**
- POL 41300 - Analysis Of Political Attitudes And Behavior **Credits: 3.00**
- POL 42300 - International Environmental Policy **Credits: 3.00**
- POL 42900 It's a Complex World
- POL 43300 - International Organization **Credits: 3.00**
- PSY 12000 - Elementary Psychology **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- SOC 31000 - Race And Ethnicity **Credits: 3.00**

- SOC 33900 - Sociology Of Global Development **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
- WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**
- WGSS 38300 - Women, Work, And Labor **Credits: 3.00**
Any foreign language 20000 level or higher (20100, 20200, 20100, 30200)

Professional Requirement

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response.

Table 1: Approved Professional Experiences

Approval by	Experience
Automatic	Any TECH Professional Practice course (co-op, intern, etc.)
Automatic	MET 29900 Internship for Credit
Automatic	EPICS courses, minimum of two
Advisor	Any approved internship (assuming student and/or employer provide documentation)
Advisor	Military service (ROTC completion, reservist, active duty, veteran)
Faculty	Supervised undergraduate research experiences or laboratory assistantships (e.g., employed in the AEL as lab technician)
Faculty	Independent study - by petition to ensure the project meets the spirit of the requirement
Faculty	Professional society/club activities (e.g., led the Solar Racing team) - by petition
Faculty	Any approved employment or industry project

* Approval Key:

- Automatic - student participation in this professional experience is already documented through existing means.
- Advisor - advisor reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.
- Faculty - designated committee reviews student's experience to determine if it meets the spirit of the Professional Experience requirement

Mechatronics Engr Tech Concentration for Engineering Technology (Statewide Locations Only)

Mechatronics is one of the concentrations in the Engineering Technology major offered for students who seek to contribute at the intersection between manufacturing, electrical, mechanical, and computing areas in primarily industrial environments. While pursuing a mechatronics degree, students will focus on the development of the electromechanical products that are ubiquitous in modern life, dealing with interconnections that allow electronic control of mechanical, pneumatic, and hydraulic systems.

Required Courses (37 credits)

Science, Mathematics, and Technology (13 credits)

- ECET 27900 - Embedded Digital Systems **Credits:** 3.00
- MA 16020 - Applied Calculus II **Credits:** 3.00
- MET 23000 - Fluid Power **Credits:** 3.00
- PHYS 22100 - General Physics **Credits:** 4.00

Mechatronics (24 credits)

- ECET 32700 - Instrumentation And Data Acquisition Design **Credits:** 3.00
- ECET 33700 - Continuous Systems Analysis And Design **Credits:** 3.00
- MET 28400 - Introduction To Industrial Controls **Credits:** 3.00
- MET 38200 - Controls And Instrumentation For Automation **Credits:** 3.00
- MET 48200 - Mechatronics **Credits:** 3.00
- MFET 24800 - Industrial Robot Programming And Applications **Credits:** 3.00
- MFET 34400 - Automated Manufacturing Processes **Credits:** 3.00
- MFET 37400 - Manufacturing Integration I **Credits:** 3.00

Powertrains Concentration for Mechanical Engineering Technology

Powertrains is a concentration in the Mechanical Engineering Technology program focusing on vehicle components that transfer energy into motion through internal combustion engines and/or electric vehicle systems.

Powertrains Concentration (9 credits)

- ECET 32300 - Introduction To Electric Vehicle Systems **Credits:** 3.00
- MET 31400 - Applications Of Machine Elements **Credits:** 3.00
- MET 42600 - Internal Combustion Engines **Credits:** 3.00

Robotics Engineering Technology Supplemental Information

Freshman Composition Selective +

- ENGL 10600 - First Year Composition With Conferences **Credits:** 4.00
- ENGL 10800 - First Year Composition **Credits:** 3.00
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00

Oral Communication Selective +

- COM 11400 - Fundamentals Of Speech Communication **Credits:** 3.00
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits:** 3.00

Advanced Oral Communication Selective +

- COM 31500 - Speech Communication Of Technical Information **Credits:** 3.00
- COM 32000 - Small Group Communication **Credits:** 3.00
- COM 41500 - Discussion Of Technical Problems **Credits:** 3.00
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits:** 3.00

Technical Writing Selective +

- ENGL 42000 - Business Writing **Credits:** 3.00
- ENGL 42100 - Technical Writing **Credits:** 3.00
- ENGL 42400 - Writing For High Technology Industries **Credits:** 3.00

Technical Graphics Selective

- MFET 10301 - Geometric Modeling Applications **Credits:** 3.00
- CGT 11000 - Technical Graphics Communications **Credits:** 3.00
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits:** 2.00
- ENGT 10500 - Industrial Technology Introduction To Design **Credits:** 3.00

Math Selective I

- MA 16010 - Applied Calculus I **Credits:** 3.00
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits:** 5.00
- MA 16500 - Analytic Geometry And Calculus I **Credits:** 4.00

Math Selective II

- MA 16020 - Applied Calculus II **Credits:** 3.00
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits:** 5.00
- MA 16600 - Analytic Geometry And Calculus II **Credits:** 4.00

Instrument and DAQ Design Selective

- ECET 32700 - Instrumentation And Data Acquisition Design **Credits:** 3.00
- MET 38200 - Controls And Instrumentation For Automation **Credits:** 3.00

Materials & Processes Selective

- MET 14300 - Materials And Processes I **Credits:** 3.00
- MET 14400 - Materials And Processes II **Credits:** 3.00

Physics Selective

- PHYS 22000 - General Physics **Credits: 4.00**
- PHYS 17200 - Modern Mechanics **Credits: 4.00**

Technical Selective

A 30000-40000 level ENGT, ENGR, MET, ECET, MFET or IET course not already required or used in the curriculum or

A CS, CNIT, MA, STAT or CGT course not already required or used in the curriculum or

- AT 27200 - Introduction To Composite Technology **Credits: 3.00**
- AT 27800 - Nondestructive Testing For Aircraft **Credits: 3.00**
- CNIT 25501 - Object-Oriented Programming Introduction **Credits: 3.00**
- ECET 22700 - DC And Pulse Electronics **Credits: 3.00**
- ECET 27400 - Wireless Communications **Credits: 3.00**
- ECET 27700 - AC And Power Electronics **Credits: 3.00**
- ECET 27900 - Embedded Digital Systems **Credits: 3.00**
- ECET 37300 - Applied Electronic Drives **Credits: 3.00**
- ECET 54400 - Real-Time And Embedded Systems **Credits: 3.00**
- MET 24500 - Manufacturing Systems **Credits: 3.00**
- MFET 11301 - Product Data Management **Credits: 3.00**
- MFET 20301 - Model-Based Definition **Credits: 3.00**
- MFET 21301 - Simulation And Visualization Applications **Credits: 3.00**
- MFET 23000 - Industrial Internet Of Things, Networks, And Systems I **Credits: 3.00**
- MFET 23100 - Industrial Internet Of Things, Networks, And Systems II **Credits: 3.00**
- MFET 25000 - Smart Manufacturing Cloud Computing Applications **Credits: 3.00**
- MFET 30301 - Digital Manufacturing **Credits: 3.00**

Capstone Selective I

- ENGT 48000 - Engineering Technology Capstone I **Credits: 3.00**

Capstone Selective II

- ENGT 48100 - Engineering Technology Capstone II **Credits: 3.00**

Behavioral/Social Science Foundational Selective

<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Humanities Foundational Selective

<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Intercultural Requirement

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete one (1) of the following global experiences:*

- Participate in A Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in a full semester abroad program program, or
- Complete 3 credit hours from the Polytechnic list of recommended Global/Cultural courses.

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pre-test).

*Global experiences must take place during the time of enrollment in Polytechnic to complete Step 2. Experiences taken place prior to a student's initial enrollment will not serve to complete Step 2. Intercultural competencies gained on experiences prior to Polytechnic enrollment will be captured as baseline data on a student's IDI.

Approved Global/Cultural Course List for Intercultural Requirement

Professional Requirement

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response.

Table 1: Approved Professional Experiences

Approval by	Experience
Automatic	Any TECH Professional Practice course (co-op, intern, etc.)
Automatic	MET 29900 Internship for Credit
Automatic	EPICS courses, minimum of two
Advisor	Any approved internship (assuming student and/or employer provide documentation)
Advisor	Military service (ROTC completion, reservist, active duty, veteran)
Faculty	Supervised undergraduate research experiences or laboratory assistantships (e.g., employed in the AEL as lab technician)
Faculty	Independent study - by petition to ensure the project meets the spirit of the requirement
Faculty	Professional society/club activities (e.g., led the Solar Racing team) - by petition
Faculty	Any approved employment or industry project

* Approval Key:

- Automatic - student participation in this professional experience is already documented through existing means.
- Advisor - advisor reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.
- Faculty - designated committee reviews student's experience to determine if it meets the spirit of the Professional Experience requirement

Smart Manufacturing Industrial Informatics Supplemental Information

Computer Graphics Selective

- MFET 10301 - Geometric Modeling Applications **Credits: 3.00**
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits: 2.00**

Materials and Processes Selective

- MET 11100 - Applied Statics **Credits: 3.00**
- MET 14400 - Materials And Processes II **Credits: 3.00**

IET/TECH/MGMT Selective

- AGECE 33000 - Management Methods For Agricultural Business **Credits: 3.00**
- IE 34300 - Engineering Economics **Credits: 3.00**
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00**
- MGMT 20000 - Introductory Accounting **Credits: 3.00**
- MGMT 21200 - Business Accounting **Credits: 3.00**

Lab Science Selective

- BIOL 11000 - Fundamentals Of Biology I **Credits: 4.00**
- BIOL 11100 - Fundamentals Of Biology II **Credits: 4.00**
- BIOL 20300 - Human Anatomy And Physiology **Credits: 4.00**
- BIOL 20400 - Human Anatomy And Physiology **Credits: 4.00**
- BTNY 11000 - Introduction To Plant Science **Credits: 4.00**
- CHM 11100 - General Chemistry **Credits: 3.00**
- CHM 11200 - General Chemistry **Credits: 3.00**
- CHM 11500 - General Chemistry **Credits: 4.00**
- CHM 11600 - General Chemistry **Credits: 4.00**
- CHM 13600 - General Chemistry Honors **Credits: 4.00**

- EAPS 11100 - Physical Geology **Credits: 3.00**
- EAPS 11200 - Earth Through Time **Credits: 3.00**
- PHYS 22100 - General Physics **Credits: 4.00**
- PHYS 27200 - Electric And Magnetic Interactions **Credits: 4.00**

Communications Selective +

- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- COM 42300 - Leadership, Communication And Organizations **Credits: 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**

Freshman Composition Selective +

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

Oral Communication Selective +

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

Technical Writing Selective +

- ENGL 42000 - Business Writing **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**
- ENGL 42400 - Writing For High Technology Industries **Credits: 3.00**

Behavioral/Social Science Foundational Selective

Must be a Behavioral Social Science course from the approved UCC list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Humanities Foundational Selective

Must be a Humanities course from the approved UCC list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Intercultural Requirement

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete one (1) of the following global experiences:*

- Participate in A Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in a full semester abroad program program, or
- Complete 3 credit hours from the Polytechnic list of recommended Global/Cultural courses.

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pre-test).

*Global experiences must take place during the time of enrollment in Polytechnic to complete Step 2. Experiences taken place prior to a student's initial enrollment will not serve to complete Step 2. Intercultural competencies gained on experiences prior to Polytechnic enrollment will be captured as baseline data on a student's IDI.

Approved Global/Cultural Course List for Intercultural Requirement

Professional Requirement

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Advisor	Military service (ROTC completion, reservist, active duty, veteran)
Faculty	Supervised undergraduate research experiences or laboratory assistantships (e.g., employed in the AEL as lab technician)
Faculty	Independent study - by petition to ensure the project meets the spirit of the requirement
Faculty	Professional society/club activities (e.g., led the Solar Racing team) - by petition
Faculty	Any approved employment or industry project

* Approval Key:

- Automatic - student participation in this professional experience is already documented through existing means.
- Advisor - advisor reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.
- Faculty - designated committee reviews student's experience to determine if it meets the spirit of the Professional Experience requirement

Supply Chain & Sales Engineering Technology Supplemental Information

Behavioral Social Science Elective (3 credits)

Must be a Behavioral Social Science course from the approved UCC list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Humanities Selective (3 credits)

Must be a Humanities course from the approved UCC list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Materials & Processes Selective (3 Credits)

- MET 14300 - Materials And Processes I **Credits:** 3.00
- MET 14400 - Materials And Processes II **Credits:** 3.00

Mathematics Selective (3 Credits)

- MA 15800 - Precalculus - Functions And Trigonometry **Credits:** 3.00
- MA 16010 - Applied Calculus I **Credits:** 3.00
- MA 16020 - Applied Calculus II **Credits:** 3.00

- MA 16100 - Plane Analytic Geometry And Calculus I **Credits: 5.00**
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits: 5.00**
- MA 16500 - Analytic Geometry And Calculus I **Credits: 4.00**
- MA 16600 - Analytic Geometry And Calculus II **Credits: 4.00**

Lab Science Selective (3 Credits)

- ASTR 26300 - Descriptive Astronomy: The Solar System **Credits: 3.00**
- ASTR 26400 - Descriptive Astronomy: Stars And Galaxies **Credits: 3.00**
- BIOL 11000 - Fundamentals Of Biology I **Credits: 4.00**
- BIOL 11100 - Fundamentals Of Biology II **Credits: 4.00**
- BIOL 20300 - Human Anatomy And Physiology **Credits: 4.00**
- BIOL 20400 - Human Anatomy And Physiology **Credits: 4.00**
- BTNY 11000 - Introduction To Plant Science **Credits: 4.00**
- CHM 11100 - General Chemistry **Credits: 3.00**
- CHM 11200 - General Chemistry **Credits: 3.00**
- CHM 11500 - General Chemistry **Credits: 4.00**
- CHM 11600 - General Chemistry **Credits: 4.00**
- CHM 13600 - General Chemistry Honors **Credits: 4.00**
- EAPS 11100 - Physical Geology **Credits: 3.00**
- EAPS 11200 - Earth Through Time **Credits: 3.00**
- ENTM 22810 - Forensic Investigation **Credits: 4.00**
- ENTM 22820 - Forensic Analysis **Credits: 4.00**
- HORT 10100 - Fundamentals Of Horticulture **Credits: 3.00**
- PHYS 22100 - General Physics **Credits: 4.00**
- PHYS 27200 - Electric And Magnetic Interactions **Credits: 4.00**

Oral Communication Selective (3 Credits)

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**

Written Communication Selective (3 Credits)

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

Computer Programming Selective (3 Credits)

- CNIT 10500 - Introduction To C Programming **Credits: 3.00**
- CNIT 15500 - Introduction To Object-Oriented Programming **Credits: 3.00**
- CNIT 15501 - Introduction To Software Development Concepts **Credits: 3.00**
- CNIT 17500 - Visual Programming **Credits: 3.00**
- CS 15900 - C Programming **Credits: 3.00**

- CS 17700 - Programming With Multimedia Objects **Credits:** 4.00
- CS 18000 - Problem Solving And Object-Oriented Programming **Credits:** 4.00
- MET 16400 - Computing In Engineering Technology **Credits:** 3.00

Technical Graphics Selective (2 Credits)

- MFET 10301 - Geometric Modeling Applications **Credits:** 3.00
- MFET 16300 - Graphical Communication And Spatial Analysis **Credits:** 2.00
- CGT 11000 - Technical Graphics Communications **Credits:** 3.00
- ENGT 10500 - Industrial Technology Introduction To Design **Credits:** 3.00

Advanced Oral Communication Selective (3 Credits)

- COM 31400 - Advanced Presentational Speaking **Credits:** 3.00
- COM 31500 - Speech Communication Of Technical Information **Credits:** 3.00
- COM 31800 - Principles Of Persuasion **Credits:** 3.00
- COM 32000 - Small Group Communication **Credits:** 3.00
- COM 32400 - Introduction To Organizational Communication **Credits:** 3.00
- COM 32500 - Interviewing: Principles And Practice **Credits:** 3.00
- COM 41500 - Discussion Of Technical Problems **Credits:** 3.00
- COM 43500 - Communication And Emerging Technologies **Credits:** 3.00

Advanced Written Communication Selective (3 Credits)

- ENGL 30400 - Advanced Composition **Credits:** 3.00
- ENGL 30600 - Introduction To Professional Writing **Credits:** 3.00
- ENGL 41900 - Multimedia Writing **Credits:** 3.00
- ENGL 42000 - Business Writing **Credits:** 3.00
- ENGL 42100 - Technical Writing **Credits:** 3.00
- ENGL 42400 - Writing For High Technology Industries **Credits:** 3.00

Manufacturing Automation Selective (3 Credits)

- MET 28400 - Introduction To Industrial Controls **Credits:** 3.00
- MFET 24800 - Industrial Robot Programming And Applications **Credits:** 3.00
- MFET 30000 - Applications Of Automation In Manufacturing **Credits:** 3.00
- MFET 34400 - Automated Manufacturing Processes **Credits:** 3.00

Free Elective (5 Credits)

Any non-remedial course

Technical Elective (6 Credits)

Any Polytechnic Institute or Engineering (ENGR or EPCS) course not already required on the plan of study,

- AT 10000-49999
 - CGT 10000-49999
 - CM 10000-49999
 - CNIT 10000-49999
 - ECET 10000-49999
 - ENGT 10000-49999
 - MET 10000-49999
 - MFET 10000-49999
 - OLS 10000-49999
 - TECH 10000-49999
 - TLI 10000-49999
 - AFT 30000-49999
 - MSL 30000-49999
 - NS 30000-49999
- ENTR 20000 - Introduction To Entrepreneurship And Innovation **Credits: 3.00**
- ENTR 31000 - Marketing And Management For New Ventures **Credits: 3.00**
- ENTR 31500 - Business Planning For Social Entrepreneurship **Credits: 3.00**

Global/Intercultural Requirement

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete one (1) of the following global experiences:*

- Participate in A Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in a full semester abroad program program, or
- Complete 3 credit hours from the Polytechnic list of recommended Global/Cultural courses.

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

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Approved Global/Cultural Course List for Intercultural Requirement

Professional Requirement (0 Credits)

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response.

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Advisor	Military service (ROTC completion, reservist, active duty, veteran)
Faculty	Supervised undergraduate research experiences or laboratory assistantships (e.g., employed in the AEL as lab technician)
Faculty	Independent study - by petition to ensure the project meets the spirit of the requirement
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Other Programs

AI and Software Concentration for Robotics Engineering Technology

AI and Software is one of the concentrations offered in the Robotics Engineering Technology major which is part of the Manufacturing Engineering Technology program in the School Engineering Technology, Purdue Polytechnic Institute.

Artificially intelligent robots are developed by applying Artificial Intelligence (AI) technologies to robots. The AI and Software concentration gives students a more in-depth understanding of using AI algorithms for learning, perception, and logical reasoning when developing Artificially intelligent robotic systems.

AI & Software Concentration

Choose one of the following options:

Data Collection & Analysis Option I

- CNIT 25501 - Object-Oriented Programming Introduction **Credits: 3.00**

- ECET 17900 - Introduction To Digital Systems **Credits: 3.00**
- ECET 27700 - AC And Power Electronics **Credits: 3.00**
- ECET 35901 - Computer Based Data Acquisition Applications **Credits: 3.00**

Data Collection & Analysis Option II

- CNIT 25501 - Object-Oriented Programming Introduction **Credits: 3.00**
- ECET 22900 - Concurrent Digital Systems **Credits: 3.00**
- ECET 34900 - Advanced Digital Systems **Credits: 3.00**
- ECET 35901 - Computer Based Data Acquisition Applications **Credits: 3.00**

Machine Learning Option I

- CNIT 25501 - Object-Oriented Programming Introduction **Credits: 3.00**
- CNIT 32500 - Object-Oriented Application Development **Credits: 3.00**
- CNIT 35500 - Mobile Programming **Credits: 3.00**
- CNIT 48300 - Applied Machine Learning **Credits: 3.00**

Machine Learning Option II

- CNIT 25501 - Object-Oriented Programming Introduction **Credits: 3.00**
- CNIT 32500 - Object-Oriented Application Development **Credits: 3.00**
- CNIT 35500 - Mobile Programming **Credits: 3.00**
- CNIT 40500 - Software Development Methodologies **Credits: 3.00**

Autonomy and UXVs Concentration for Robotics Engineering Technology

Autonomy and UXVs is one of the concentrations offered in the Robotics Engineering Technology major which is part of the Manufacturing Engineering Technology program in the School Engineering Technology, Purdue Polytechnic Institute.

Autonomous robots are intelligent machines that can perceive their environment, make decisions based on what they perceive, and take actions accordingly. The Autonomy and UXVs concentration gives students a more in-depth understanding of the key technologies in locomotion, mapping, navigation, sensing, etc., focusing on the design, development, and application of autonomous robots.

Autonomy and UXVs Concentration

Choose one of the following options:

System Control Option

- ECET 17700 - Data Acquisition And Systems Control **Credits: 3.00**
- ECET 27400 - Wireless Communications **Credits: 3.00**
- IET 31300 - Technology Innovation And Integration: Bar Codes To Biometrics **Credits: 3.00**

- MET 48200 - Mechatronics **Credits: 3.00**

Signal Processing Option

- ECET 17900 - Introduction To Digital Systems **Credits: 3.00**
- ECET 27900 - Embedded Digital Systems **Credits: 3.00**
- ECET 33900 - Digital Signal Processing **Credits: 3.00**
- ECET 43900 - Advanced Digital Signal Processing **Credits: 3.00**

Wireless Communication Option

- ECET 17900 - Introduction To Digital Systems **Credits: 3.00**
- ECET 27400 - Wireless Communications **Credits: 3.00**
- ECET 27900 - Embedded Digital Systems **Credits: 3.00**
- MET 48200 - Mechatronics **Credits: 3.00**

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Division of Military Science and Technology

The Division of Military Science and Technology in the Purdue Polytechnic Institute was approved by the Purdue University Board of Trustees July 18, 2014.

The division is the academic and administrative home to the three ROTC programs on campus.

ROTC program web sites:

- Army ROTC
- Air Force ROTC
- Naval ROTC

Minor

Aerospace Studies Minor

Requirements for the Minor (14 credits)

Required Courses (14 credits)

- AFT 23000 - Team And Leadership Fundamentals I **Credits: 1.00** or
- SFT 23000 - Evolution Of Space Power **Credits: 1.00**
- AFT 24000 - Team And Leadership Fundamentals II **Credits: 1.00** or
- SFT 24000 - Team And Leadership Fundamentals **Credits: 1.00**
- AFT 35100 - Leading People And Effective Communication I **Credits: 3.00** or
- SFT 35100 - Space Security, Law, Policy, And Doctrine I **Credits: 3.00**

- AFT 36100 - Leading People And Effective Communication II **Credits:** 3.00 or
- SFT 36100 - Space Security, Law, Policy, And Doctrine II **Credits:** 3.00
- AFT 47100 - National Security/Commissioning Preparation I **Credits:** 3.00 or
- SFT 47100 - National Security, Leadership Responsibilities, And Commissioning Preparation I **Credits:** 3.00
- AFT 48100 - National Security/Commissioning Preparation II **Credits:** 3.00 or
- SFT 48100 - National Security, Leadership Responsibilities, And Commissioning Preparation II **Credits:** 3.00

Notes

- AFT/SFT 30000-level courses may be taken in the same semester as AFT/SFT 40000-level courses, but requires a waiver from HQ AFROTC.
- All courses must have a grade of a "C" or higher.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Military Science and Leadership Minor

Requirements for the Minor (15 credits)

Required Courses (12 credits)

- MSL 30100 - Training Management And The Warfighting Function **Credits:** 3.00 to 4.00
- MSL 30200 - Applied Leadership In Small Unit Operations **Credits:** 3.00 to 4.00
- MSL 40100 - The Army Officer **Credits:** 3.00 to 4.00
- MSL 40200 - Company Grade Leadership **Credits:** 3.00 to 4.00

Military History/Policy Selective (3 credits)

- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits:** 3.00
- HIST 35100 - The Second World War **Credits:** 3.00
- HIST 35500 - History Of American Military Affairs **Credits:** 3.00 (preferred class for minor)
- HIST 43900 - Communist China **Credits:** 3.00
- MSL 35000 - American Military History And Leadership **Credits:** 3.00
- PHIL 23100 - Religions Of The West **Credits:** 3.00

- POL 23100 - Introduction To United States Foreign Policy **Credits: 3.00**
- POL 23700 - Modern Weapons And International Relations **Credits: 3.00**
- POL 43900 - United States Foreign Policy Making **Credits: 3.00**

Notes

- All courses must have a grade of a "C" or higher.
- MSL 49000 Directed Studies in Military Science may substitute for any required MSL course with department head approval.
- An alternative course may be used for the Military History/Policy Selective with department head approval.

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

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The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

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Naval Science Minor

Requirements for the Minor (15 credits)

Required Courses (12 credits)

- NS 11000 - Introduction To Naval Science **Credits: 3.00**
- NS 21300 - Sea Power And Maritime Affairs **Credits: 3.00**
- NS 21400 - Naval Leadership And Management **Credits: 3.00**
- NS 41300 - Naval Leadership And Ethics **Credits: 3.00**

Naval Science Selectives (3 credits)

- NS 21200 - Naval Ships Systems II (Weapons) **Credits: 3.00**
- NS 31000 - Naval Navigation **Credits: 3.00**
- NS 31100 - Naval Operations And Seamanship **Credits: 3.00**
- NS 33000 - Evolution Of Warfare **Credits: 3.00**
- NS 35000 - Naval Ship Systems-Engineering **Credits: 3.00**
- NS 44000 - Fundamentals Of Maneuver Warfare **Credits: 3.00**

Note

- All courses must have a grade of a "C" or higher.

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

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Department of Technology Leadership and Innovation

Overview

The Department of Technology Leadership & Innovation prepares students to lead the development and successful introduction of high-tech solutions in business, industry, and the classroom. Faculty members are experts in helping organizations improve, and their research reflects the latest in helpful solutions. From teaching tomorrow's teachers to understanding the nuances in each technological challenge, the department focuses on improving and shaping the future of technology and its uses.

Faculty

Department of Technology Leadership and Innovation Website

If you're a technology enthusiast with a passion for people, TLI offers the perfect major for you.

- Leading
- Managing
- Teaching

Contact Information

Technology Leadership & Innovation Department
Young Hall
155 S. Grant St.
West Lafayette, IN 47907

Phone: 765.494.5599
Email: tliinfo@purdue.edu

Graduate Information

For Graduate Information please see Technology Leadership and Innovation Graduate Program Information.

Baccalaureate

Engineering Technology Education, BS

About the Program

Every day, people with specialized knowledge share that knowledge with others, as teachers, trainers, consultants and more. With a national push to increase interest in science, technology, engineering, and math (STEM), you can help spread your knowledge too. By reaching students in middle school and high school, you will become an important part of the STEM education pipeline, providing inspiration to future STEM professionals as they are developing. The Engineering Technology Teacher Education major meets state and national licensure standards and is accredited by the Council for the Accreditation of Educator Preparation (CAEP) and the State of Indiana, State Board of Education.

Admission to and successful completion of the Teacher Education Program (TEP) Requirements and Milestones are required. Engineering and Technology Education Content Tests

[Engineering Technology Education Website](#)

[Engineering Technology Education Major Change \(CODO\) Requirements](#)

Degree Requirements

120 Credits Required

Major Required Courses (45 credits)

3.0 ETTE Content GPA required for all courses listed below.

- ECET 22400 - Electronic Systems **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00 *** (*satisfies Information Literacy and Science Technology & Society Selective for core*)
- TLI 16100 - Prototyping In Engineering/Technology Education **Credits: 3.00 ***
- TLI 26200 - Foundations Of Integrated STEM Education **Credits: 3.00 ***
- TLI 26500 - Teaching The TE Of STEM **Credits: 3.00 ♦ ***
- TLI 36100 - Engineering And Technology Education Instructional Planning And Evaluation **Credits: 3.00 ♦ ***
- TLI 36700 - Teaching Design And Innovation I **Credits: 3.00 ***
- TLI 46000 - Teaching Design And Innovation II **Credits: 3.00 ***
- TLI 46100 - Engineering/Technology Teacher Lab Planning **Credits: 3.00 ***

- TLI 46200 - Methods Of Teaching Engineering/Technology Education **Credits: 3.00** ♦ * *EDCI 55800 may substitute for TLI 46200 if TLI 46200 is not available to the student. If TLI 46200 is offered, EDCI 55800 may be substituted at the ETTE Program Chair's discretion. When the Chair's discretion is used, written permission from the program chair will be required prior to enrollment in the course.*
- Technical Electives - Credit Hours: 3.00 *
- Technical Electives - Credit Hours: 3.00 *
- Technical Electives - Credit Hours: 3.00 *
- Technical Electives - Credit Hours: 3.00 *

Professional Education Requirements (38 credits)

All Professional Education courses, including Learner (Specialty) Pathway Concentration courses, are calculated into the Professional Education GPA ("B" average with no grade lower than a "C").

Foundational Courses

- EDCI 20500 - Exploring Teaching As A Career **Credits: 2.00 to 3.00** ♦ (2 credits required; *satisfies Written Communication for core*)
- EDCI 27000 - Introduction To Educational Technology And Computing **Credits: 1.00 to 3.00** (1 credit required)
- EDCI 28500 - Multiculturalism And Education **Credits: 2.00 to 3.00** ♦ (2 credits required)
- EDCI 35000 - Community Issues & Applications For Educators **Credits: 1.00 to 3.00** (1 credit required)
- EDCI 37001 - Teaching And Learning English As A New Language **Credits: 2.00 or 3.00** (2 credits required)
- EDPS 23500 - Learning And Motivation **Credits: 2.00 or 3.00** (2 credits required; *satisfies Behavioral/Social Sciences for core*)
- EDPS 24000 - Children With Gifts, Creativity, And Talents **Credits: 1.00**
- EDPS 24800 - Differentiating Curriculum And Instruction **Credits: 1.00**
- EDPS 26501 - The Inclusive Classroom **Credits: 2.00**
- EDPS 32700 - Classroom Assessment **Credits: 1.00 to 3.00** (1 credit required)
- EDPS 36201 - Positive Behavioral Supports **Credits: 2.00 or 3.00** (2 credits required)
- EDPS 43010 - Secondary Creating And Managing Learning Environments **Credits: 1.00 to 3.00** (2 credits required)
- EDST 20010 - Educational Policies And Laws **Credits: 1.00 to 3.00** (1 credit required)
- EDCI 30900 - Reading In Middle And Secondary Schools: Methods And Problems **Credits: 1.00 to 3.00** (1 credit required)
- EDCI 20001 - Special Populations Seminar: Focus On Students With Disabilities And Differentiation Approaches **Credits: 1.00** or
- EDPS 20001 - Special Populations Seminar: Focus On Students With Disabilities And Differentiation Approaches **Credits: 1.00**
- EDCI 20002 - Special Populations Seminar: English Language Learners And Students With Gifts And Talents **Credits: 1.00** or
- EDPS 20002 - Special Populations Seminar: English Language Learners And Students With Gifts And Talents **Credits: 1.00**

Learner Pathway Selective (3 credits)

Choose one course from one of the learner pathway areas below. Students can elect to take additional coursework to complete a full concentration if they choose, but is not required. See the links for concentration requirements.

If you desire additional information regarding the Learner Pathway Concentrations, please reach out to your academic advisor or visit the Learner Specialty Concentrations tab found here.

English Language Learners

- EDCI 51900 - Teaching English Language Learners **Credits: 3.00**
- EDCI 52600 - Language Study For Educators **Credits: 3.00**
High Ability - All courses must be completed with a B- or better average.
- EDPS 54200 - Curriculum And Program Development In Gifted Education **Credits: 3.00**
- EDPS 54500 - Social And Affective Development Of Gifted Students **Credits: 3.00**

Special Education

- EDPS 21100 - Special Education Law, Policy, And Ethical Guidelines **Credits: 3.00**

Applied Behavior Analysis

- EDPS 34100 - Introduction To Philosophical Underpinnings And Concepts Of Applied Behavior Analysis **Credits: 3.00**
- EDPS 34200 - Applied Behavior Analysis - Assessment And Intervention **Credits: 3.00**

Capstone (12 credits)

- EDCI 49800 - Supervised Teaching **Credits: 8.00 to 16.00**

K-12 Integrated STEM Optional Concentration

- K-12 Integrated STEM Optional Concentration for Education

Other Departmental Requirements (25 credits)

- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** (*satisfies Oral Communication for core*)
- MA 15300 - College Algebra **Credits: 3.00** (*satisfies Quantitative Reasoning for core*)
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**
- PHYS 22000 - General Physics **Credits: 4.00** (*satisfies Science for core*)
- ECET 22400 - Electronic Systems **Credits: 3.00**
- Humanities Selective (*satisfies Human Cultures Humanities for core*) - Credit Hours: 3.00
- Science Selective (*satisfies Science for core*) - Credit Hours: 3.00
 - Must be a lab from the approved UCC Science list.
- Advanced Communication Selective - Credit Hours: 3.00
- Advanced Communication Selective - Credit Hours: 3.00

Electives (12 Credits)

Any non-remedial course not already required/being used on the plan of study.

Supplemental List

[Click here for Engineering Technology Education Supplemental Information.](#)

Grade Requirements

- All Professional Education courses, including Learner (Specialty) Pathway Concentration courses, must have no grade lower than a "C."

GPA Requirements

- *All Professional Education courses, including Learner (Specialty) Pathway Concentration courses, are calculated into the Professional Education GPA ("B" average with no grade lower than a "C").*
- 3.0 ETTE Content GPA required for all courses in the Major Required Courses area.
- 2.5 Graduation GPA required for Bachelor of Science degree.
- 2.5 Overall GPA is required for the Teacher Education Program and Indiana Licensure.
- 3.0 Content GPA, as calculated by the Office of Teacher Education and Licensure, is required for the Teacher Education Program and Indiana Licensure.
- 3.0 Professional GPA is required for the Teacher Education Program and Indiana Licensure.

Pass/No Pass Policy

- ETTE does not allow Pass/No Pass grading for any classes that are required to meet degree requirements. Pass/No Pass grading is allowed for Free Electives only.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- EDCI 20500 - Exploring Teaching As A Career **Credits:** 2.00 to 3.00
- EDST 20010 - Educational Policies And Laws **Credits:** 1.00 to 3.00
- TECH 12000 - Design Thinking In Technology **Credits:** 3.00
- TLI 26200 - Foundations Of Integrated STEM Education **Credits:** 3.00
- MA 15300 - College Algebra **Credits:** 3.00 ♦
- Humanities Selective - Credit Hours: 3.00

15 Credits

Spring 1st Year

- COM 11400 - Fundamentals Of Speech Communication **Credits:** 3.00
- EDCI 28500 - Multiculturalism And Education **Credits:** 2.00 to 3.00 ♦
- EDCI 35000 - Community Issues & Applications For Educators **Credits:** 1.00 to 3.00
- MA 15800 - Precalculus - Functions And Trigonometry **Credits:** 3.00
- TLI 16100 - Prototyping In Engineering/Technology Education **Credits:** 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 2nd Year

- EDCI 37001 - Teaching And Learning English As A New Language **Credits:** 2.00 or 3.00
- EDPS 24000 - Children With Gifts, Creativity, And Talents **Credits:** 1.00
- EDCI 20002 - Special Populations Seminar: English Language Learners And Students With Gifts And Talents **Credits:** 1.00 or
- EDPS 20002 - Special Populations Seminar: English Language Learners And Students With Gifts And Talents **Credits:** 1.00
- EDPS 36201 - Positive Behavioral Supports **Credits:** 2.00 or 3.00

15 Credits

Spring 2nd Year

- EDPS 26501 - The Inclusive Classroom **Credits:** 2.00
- EDPS 24800 - Differentiating Curriculum And Instruction **Credits:** 1.00
- EDCI 20001 - Special Populations Seminar: Focus On Students With Disabilities And Differentiation Approaches **Credits:** 1.00 or
- EDPS 20001 - Special Populations Seminar: Focus On Students With Disabilities And Differentiation Approaches **Credits:** 1.00
- EDPS 23500 - Learning And Motivation **Credits:** 2.00 or 3.00
- TLI 26500 - Teaching The TE Of STEM **Credits:** 3.00
- ♦
- ECET 22400 - Electronic Systems **Credits:** 3.00
- PHYS 22000 - General Physics **Credits:** 4.00

16 Credits

Fall 3rd Year

- EDCI 27000 - Introduction To Educational Technology And Computing **Credits:** 1.00 to 3.00
- EDCI 30900 - Reading In Middle And Secondary Schools: Methods And Problems **Credits:** 1.00 to 3.00
- TLI 36700 - Teaching Design And Innovation I **Credits:** 3.00
- Learner Specialty Pathway Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Science Foundation Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

17 Credits

Spring 3rd Year

- TLI 36100 - Engineering And Technology Education Instructional Planning And Evaluation **Credits:** 3.00
- ♦
- TLI 46000 - Teaching Design And Innovation II **Credits:** 3.00
- Advanced Communication Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- EDPS 32700 - Classroom Assessment **Credits:** 1.00 to 3.00
- EDPS 43010 - Secondary Creating And Managing Learning Environments **Credits:** 1.00 to 3.00
- TLI 46100 - Engineering/Technology Teacher Lab Planning **Credits:** 3.00
- TLI 46200 - Methods Of Teaching Engineering/Technology Education **Credits:** 3.00
- ♦
- Advanced Communication Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- EDCI 49800 - Supervised Teaching **Credits:** 8.00 to 16.00

12 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

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Human Resource Development, BS

About the Program

A new major in Human Resource Development (HRD) offers you unparalleled resources, learning experiences and development opportunities.

When you graduate from this innovative program, you will be prepared to train and develop employees, improve employee engagement and performance, diagnose organizational needs, and assess system effectiveness. In essence, you will help organizations develop all job-related aspects for their employees.

Your personal and professional skill set will grow to include essential behavioral skills such as business acumen, communication, consultation, organization evaluation, ethical practice, global and cultural effectiveness, leadership and navigation, and employee management.

You will be able to recognize how employee behavior, knowledge, and skills enhance organizational effectiveness. When management identifies new opportunities, they will look to your expertise and guidance in developing organizational talent and addressing workplace challenges.

For more information on Human Resource Development click [here](#).

Human Resource Development Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Requirements (60 credits)

Required Major Courses (45 credits)

- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 25500 - Foundations Of Human Resource Development **Credits: 3.00** ♦ *
- TLI 21300 - Project Management **Credits: 3.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
- TLI 31500 - New Product Development **Credits: 3.00**
- TLI 35510 - Training And Talent Development **Credits: 3.00** *
- TLI 35520 - Organization Development And Change **Credits: 3.00** *
- TLI 35530 - Strategic Planning In Human Resources **Credits: 3.00** *
- TLI 35560 - Employment And Labor Law For The Human Resource Professionals **Credits: 3.00** *
- TLI 35570 - Job Analysis And Job Design **Credits: 3.00** *
- TLI 35580 - The Individual And Organizational Performance **Credits: 3.00** *
- TLI 45560 - Professional Internship In Human Resources **Credits: 3.00** * *See HRD Professional Requirement below*
- TLI 45570 - Global Human Resources **Credits: 3.00** *
- TLI 45580 - Human Resource Information Systems And People Analytics **Credits: 3.00** *
- TLI 45590 - Foundations Of Human Resources Capstone **Credits: 3.00** *

Human Resource Management Minor required (15 credits)

The following required courses are integrated into the Plan of Study and will fulfill the Human Resource Management Minor. A "C-" or better is required in all HRM minor courses.

- OBHR 33000 - Introduction To Organizational Behavior **Credits: 3.00** ^ ♦
- MGMT 44301 - Management Of Human Resources **Credits: 3.00** ^ or
- MGMT 44428 - Human Resources Management **Credits: 3.00** ^
- MGMT 44430 - Staffing: Talent Acquisition **Credits: 3.00** ^
- MGMT 44431 - Compensation: Total Rewards **Credits: 3.00** ^
- MGMT 44690 - Negotiation And Decision Making **Credits: 3.00** ^

Other Departmental/Program Course Requirements (50-52 credits)

- EDPS 10101 - Learning In Context-An Introduction To The Learning Sciences **Credits: 3.00** or
- EDPS 23500 - Learning And Motivation **Credits: 2.00** or 3.00 or
- OLS 37800 - Labor And Management Relations **Credits: 3.00**
- ENGL 42000 - Business Writing **Credits: 3.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** (*satisfies Quantitative Reasoning for core*)
- CNIT 13600 - Personal Computing Technology And Applications **Credits: 3.00** or
- MA 16010 - Applied Calculus I **Credits: 3.00**
- MGMT 30400 - Introduction To Financial Management **Credits: 3.00**
- PSY 12000 - Elementary Psychology **Credits: 3.00** (*satisfies Human Cultures: Behavioral/Social Sciences for core*)
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** (*satisfies Oral Communication for core*)
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** (*satisfies both Information Literacy and Science, Technology and Society for core*)
- ECON 21000 - Principles Of Economics **Credits: 3.00** or
- AGECE 21700 - Economics **Credits: 3.00** or
- ECON 25100 - Microeconomics **Credits: 3.00** or
- ECON 25200 - Macroeconomics **Credits: 3.00**
- Written Communication Selective - Credit Hours: 3.00 (*satisfies the Written Communication for core*)
- Humanities Foundation Selective - Credit Hours: 3.00 (*satisfies Human Cultures: Humanities for core*)
- Science Selective - Credit Hours: 3.00 (*satisfies Science for core*)
- Science Selective - Credit Hours: 3.00 (*satisfies Science for core*)
- Advanced Communication Selective - Credit Hours: 3.00
- Sociology/Psychology Selective - Credit Hours: 3.00
- Globalization Experience - Credit Hours: 0.00
- Internship Requirement - Credit Hours: 0.00

Electives (8-10 credits)

Supplemental List

Human Resource Developmental Supplemental Information

Grade Requirements

- "B-" or better is required in all HRD major courses indicated by *.
- "C-" or better is required in all HRM minor courses indicated by ^.
- ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, I AND IF).

GPA Requirements

- 2.0 Graduation GPA required for Bachelor of Science degree.

HRD Professional Requirement

Phase 1: Preliminary Internship Experience (150 hours): Students must first enroll in and successfully complete the TLI 45560 course, attaining a grade of B- or higher. This course accounts for 150 hours of the required minimum 500 internship hours in HR.

The TLI 45560 course emphasizes supervised independent study in HR, laying the groundwork for a comprehensive understanding of HR practices and principles.

Phase 2: Extended Internship Experience (350 hours): Upon successful completion of TLI 45560, students are eligible to embark on the remaining 350-hour internship experience in an HR field. Prior to commencing their internship, students must use the Student Internship Pre-Approval Form to submit their proposed internship for review and obtain approval from the HRD Program. This extended internship phase is pivotal in offering practical HR experience and can include: an internship within a dedicated HR department/unit; an HR work-study assignment; directed HR-related work and research projects; and part-time or full-time employment in an HR role.

Internship Documentation and Reporting: Upon completion of their HR internship, students are required to collaborate with their respective supervisors, managers, or organizations to report and document the completed internship hours.

The Employer Internship Hours Report Form will serve as the official document for supervisors, managers, or organizations to record and validate the internship hours undertaken by the student. This structured approach to professional experience in HR ensures that students not only meet the academic requirements of the program but also gain substantial, real-world experience in the field of Human Resources.

- TLI 45560 - Professional Internship In Human Resources **Credits: 3.00**

Pass/No Pass Policy

- HRD does not allow Pass/No Pass grading for any classes that are required to meet degree requirements. Pass/No Pass grading is allowed for Electives only.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency Website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**
- Written Communication Selective - Credit Hours: 3.00-4.00

15-16 Credits

Spring 1st Year

- PSY 12000 - Elementary Psychology **Credits: 3.00**
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**
- EDPS 10101 - Learning In Context-An Introduction To The Learning Sciences **Credits: 3.00** or
- EDPS 23500 - Learning And Motivation **Credits: 2.00** or **3.00** or
- OLS 37800 - Labor And Management Relations **Credits: 3.00**
- Science Foundation Selective - Credit Hours: 3.00
- Humanities Foundation Selective - Credit Hours: 3.00

14-15 Credits

Fall 2nd Year

- TLI 25500 - Foundations Of Human Resource Development **Credits: 3.00** * ♦

- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
- TLI 31500 - New Product Development **Credits: 3.00**
- CNIT 13600 - Personal Computing Technology And Applications **Credits: 3.00**
or
- MA 16010 - Applied Calculus I **Credits: 3.00**
- Advanced Communication Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- OBHR 33000 - Introduction To Organizational Behavior **Credits: 3.00** ^
- TLI 21300 - Project Management **Credits: 3.00**
- AGECE 21700 - Economics **Credits: 3.00** or
- ECON 21000 - Principles Of Economics **Credits: 3.00** or
- ECON 25100 - Microeconomics **Credits: 3.00** or
- ECON 25200 - Macroeconomics **Credits: 3.00**
- Science Selective - Credit Hours: 3.00
- Sociology/Psychology Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- TLI 35510 - Training And Talent Development **Credits: 3.00** *
- TLI 35560 - Employment And Labor Law For The Human Resource Professionals **Credits: 3.00** *
- TLI 35570 - Job Analysis And Job Design **Credits: 3.00** *
- MGMT 30400 - Introduction To Financial Management **Credits: 3.00**
- MGMT 44428 - Human Resources Management **Credits: 3.00** ^ or
- MGMT 44301 - Management Of Human Resources **Credits: 3.00** ^

15 Credits

Spring 3rd Year

- TLI 35520 - Organization Development And Change **Credits: 3.00** *
- TLI 35530 - Strategic Planning In Human Resources **Credits: 3.00** *
- TLI 35580 - The Individual And Organizational Performance **Credits: 3.00** *
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00**
- MGMT 44690 - Negotiation And Decision Making **Credits: 3.00** ^

15 Credits

Fall 4th Year

- TLI 45560 - Professional Internship In Human Resources **Credits: 3.00** *¹
- TLI 45570 - Global Human Resources **Credits: 3.00** *
- TLI 45580 - Human Resource Information Systems And People Analytics **Credits: 3.00** *
- MGMT 44430 - Staffing: Talent Acquisition **Credits: 3.00** ^
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- TLI 45590 - Foundations Of Human Resources Capstone **Credits: 3.00** *
- ENGL 42000 - Business Writing **Credits: 3.00**
- MGMT 44431 - Compensation: Total Rewards **Credits: 3.00** ^
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

Disclaimer

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Organizational Leadership, BS

About the Program

With a major in organizational leadership, you will focus on leadership and innovation to develop skills as a leader for national and global technology enterprises. The broad curricula will help you learn how to lead in a variety of scenarios, from innovative technology organizations to global teams and organizational change. You will also take courses to understand how policies and law affect technology innovation and influence global technology and organizational leadership.

The Organizational Leadership major is part of the Organizational Leadership program. The Organizational Leadership program is accredited by the Association of Technology, Management, and Applied Engineering Commission of ATMAE, www.atmae.org.

Organizational Leadership Website

Organizational Leadership Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Department/Program Major Courses (57 credits)

- TLI 10000 - Organizational Leadership Career Orientation **Credits: 1.00 ***
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00 *♦**
- TLI 15200 - Business Principles For Organizational Leadership **Credits: 3.00 ***
- TLI 20000 - Organization Leadership Career Exploration **Credits: 1.00 ***
- TLI 21300 - Project Management **Credits: 3.00 ***
- TLI 30000 - Organizational Leadership Career Transition **Credits: 1.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
- TLI 31500 - New Product Development **Credits: 3.00 or**
- TECH 34000 - Prototyping Technology For People **Credits: 3.00**
- TLI 45800 - Leadership For Competitive Advantage **Credits: 3.00**
- OLS 34600 - Critical Thinking And Ethics **Credits: 3.00 ♦**
- OLS 37500 - Training Methods **Credits: 3.00**
- OLS 37800 - Labor And Management Relations **Credits: 3.00**
- OLS 38600 - Leadership For Organizational Change **Credits: 3.00 ***
- OLS 38800 - Leadership Through Teams **Credits: 3.00**
- OLS 45000 - Advanced Project Management **Credits: 3.00**
- OLS 45400 - Gender And Diversity In Management **Credits: 3.00**
- OLS 47700 - Conflict Management **Credits: 3.00**
- OLS 48400 - Leadership Strategies For Quality And Productivity **Credits: 3.00**
- OLS 48700 - Leadership Philosophy **Credits: 3.00**
- OLS 58300 - Coaching And Mentoring In Organizations **Credits: 3.00**
- IET 41400 - Financial Analysis For Technology Systems **Credits: 3.00 or**
- MGMT 30400 - Introduction To Financial Management **Credits: 3.00**
- Globalization Experience - Credit Hours: 0.00

Other Departmental Courses (54-55 credits)

- ENGL 42100 - Technical Writing **Credits: 3.00**
- PSY 12000 - Elementary Psychology **Credits: 3.00** (*satisfies Human Cultures: Behavioral Social Sciences for core*)
- PSY 27200 - Introduction To Industrial-Organizational Psychology **Credits: 3.00**
- STAT 11300 - Statistics And Society **Credits: 3.00**
- STAT 30100 - Elementary Statistical Methods **Credits: 3.00** *
- TECH 12000 - Design Thinking In Technology **Credits: 3.00** (*satisfies both Information Literacy and Science, Technology and Society for core*)
- TECH 22000 - Designing Technology For People **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00** or
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00** (*satisfies Oral Communication for core*)
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00** (*satisfies Quantitative Reasoning for core*)
- MGMT 20000 - Introductory Accounting **Credits: 3.00** or
- MGMT 21200 - Business Accounting **Credits: 3.00**
- ECON 21000 - Principles Of Economics **Credits: 3.00** or
- AGECE 21700 - Economics **Credits: 3.00** or
- ECON 25100 - Microeconomics **Credits: 3.00** or
- ECON 25200 - Macroeconomics **Credits: 3.00**
- Written Communication Selective - Credit Hours: 3.00-4.00 (*satisfies Written Communication for core*)
- Humanities Selective - Credit Hours: 3.00 (*satisfies Human Cultures: Humanities for core*)
- Science Foundation Selective - Credit Hours: 3.00 (*satisfies Science for core*)
- Science Foundation Selective - Credit Hours: 3.00 (*satisfies Science for core*)
- Specialization Selective - Credit Hours: 3.00
- Specialization Selective - Credit Hours: 3.00

Electives (8-9 credits)

Supplemental List

[Click here for Organizational Leadership Supplemental Information.](#)

Grade Requirements

- * A grade of C- or better must be earned to meet prerequisite requirements.
- ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, I AND IF).

GPA Requirements

- 2.0 Graduation GPA required for Bachelor of Science degree.

Pass/No Pass Policy

- OLSV does not allow Pass/No Pass grading for any classes that are required to meet degree requirements. Pass/No Pass grading is allowed for Free Electives only.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the [Provost's Website](#).

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the [Civics Literacy Proficiency website](#).

Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

- Attending six approved civics-related events and completing an assessment for each; or
- Completing 12 podcasts created by the Purdue Center for C-SPAN Scholarship and Engagement that use C-SPAN material and completing an assessment for each; or
- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill *most, if not all*, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- TLI 10000 - Organizational Leadership Career Orientation **Credits: 1.00 ***
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00 ***
- TECH 12000 - Design Thinking In Technology **Credits: 3.00**
- MA 15800 - Precalculus - Functions And Trigonometry **Credits: 3.00**
- Written Communication Selective - Credit Hours: 3.00
- Humanities Selective - Credit Hours: 3.00

16-17 Credits

Spring 1st Year

- PSY 12000 - Elementary Psychology **Credits: 3.00**
- STAT 11300 - Statistics And Society **Credits: 3.00**
- TLI 15200 - Business Principles For Organizational Leadership **Credits: 3.00 ***
- COM 11400 - Fundamentals Of Speech Communication **Credits: 3.00 or**
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits: 3.00**
- Science Foundation Selective - Credit Hours: 3.00

15 Credits

Fall 2nd Year

- STAT 30100 - Elementary Statistical Methods **Credits: 3.00 ***
- PSY 27200 - Introduction To Industrial-Organizational Psychology **Credits: 3.00**
- TECH 22000 - Designing Technology For People **Credits: 3.00**
- Specialization Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- TLI 20000 - Organization Leadership Career Exploration **Credits: 1.00 ***
- OLS 38600 - Leadership For Organizational Change **Credits: 3.00 ***
- TLI 21300 - Project Management **Credits: 3.00 ***
- AGECE 21700 - Economics **Credits: 3.00 or**
- ECON 21000 - Principles Of Economics **Credits: 3.00 or**
- ECON 25100 - Microeconomics **Credits: 3.00 or**
- ECON 25200 - Macroeconomics **Credits: 3.00**
- MGMT 20000 - Introductory Accounting **Credits: 3.00 or**
- MGMT 21200 - Business Accounting **Credits: 3.00**
- Science Foundation Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- TLI 30000 - Organizational Leadership Career Transition **Credits: 1.00**
- OLS 37500 - Training Methods **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
- TLI 31500 - New Product Development **Credits: 3.00** or
- TECH 34000 - Prototyping Technology For People **Credits: 3.00**
- Specialization Selective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

- OLS 34600 - Critical Thinking And Ethics **Credits: 3.00**
- OLS 37800 - Labor And Management Relations **Credits: 3.00**
- OLS 38800 - Leadership Through Teams **Credits: 3.00**
- TLI 45800 - Leadership For Competitive Advantage **Credits: 3.00**
- Elective - Credit Hours: 2.00-3.00

14-15 Credits

Fall 4th Year

- OLS 45400 - Gender And Diversity In Management **Credits: 3.00**
- OLS 47700 - Conflict Management **Credits: 3.00**
- OLS 48700 - Leadership Philosophy **Credits: 3.00**
- OLS 58300 - Coaching And Mentoring In Organizations **Credits: 3.00**
- IET 41400 - Financial Analysis For Technology Systems **Credits: 3.00** or
- MGMT 30400 - Introduction To Financial Management **Credits: 3.00**

15 Credits

Spring 4th Year

- OLS 48400 - Leadership Strategies For Quality And Productivity **Credits: 3.00**
- OLS 45000 - Advanced Project Management **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**
- Elective - Credit Hours: 3.00

12 Credits

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Critical Course

The ♦ course is considered critical.

In alignment with the Degree Map Guidance for Indiana's Public Colleges and Universities, published by the Commission for Higher Education (pursuant to HEA 1348-2013), a Critical Course is identified as "one that a student must be able to pass to persist and succeed in a particular major. Students who want to be nurses, for example, should know that they are expected to be proficient in courses like biology in order to be successful. These would be identified by the institutions for each degree program."

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Certificate

Human Resource Management Certificate (Purdue in Indianapolis and Statewide Only)

Required Courses (18 Credits)

A minimum grade of C is required in all courses.

Phase 1: Foundation (9 Credits)

- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 15200 - Business Principles For Organizational Leadership **Credits: 3.00**
- OLS 37500 - Training Methods **Credits: 3.00**

Phase 2: Broadening (9 Credits)

- OLS 37600 - Human Resource Issues **Credits: 3.00**
- OLS 38600 - Leadership For Organizational Change **Credits: 3.00**
- OLS 37800 - Labor And Management Relations **Credits: 3.00**

Leadership Series Certificate (Purdue in Indianapolis and Statewide Only)

Required Courses (18 Credits)

A minimum grade of C required in all courses.

Phase 1: Foundation (6 Credits)

- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 15200 - Business Principles For Organizational Leadership **Credits: 3.00**

Phase 2: Broadening (6 Credits)

- TLI 21300 - Project Management **Credits: 3.00**
- OLS 38600 - Leadership For Organizational Change **Credits: 3.00**

Phase 3: Specialization (6 Credits)

Choose two of the following:

- IET 21400 - Introduction To Supply Chain Management Technology **Credits: 3.00**
- IET 23500 - Introduction To Systems Thinking And Process Improvement **Credits: 3.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**

Organizational Leadership Certificate (Statewide Only)

Requirements for the Certificate (18 Credits)

Foundation (6 Credits)

- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 15200 - Business Principles For Organizational Leadership **Credits: 3.00**

Broadening (6 Credits)

- TLI 21300 - Project Management **Credits: 3.00**
- OLS 38600 - Leadership For Organizational Change **Credits: 3.00**

Specialization (6 Credits)

Choose two courses:

- IET 21400 - Introduction To Supply Chain Management Technology **Credits: 3.00**
- IET 23500 - Introduction To Systems Thinking And Process Improvement **Credits: 3.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**

Notes

Students must earn a "C" or higher required in all courses.

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Teaching Secondary Education Computational Thinking Certificate

About the Certificate

Undergraduates completing the Certificate in Teaching Secondary Education Computational Thinking will be prepared to take the lead in providing vital instruction to secondary education students. Foundational principles of computational thinking, coupled with pedagogy, curriculum, and hands-on coursework, will enable these students to prepare students in important computational thinking principles.

Requirements for the Certificate (15 credits)

Engineering/Technology Teacher Education Courses (9 credits)

- TLI 16100 - Prototyping In Engineering/Technology Education **Credits:** 3.00
- TLI 26500 - Teaching The TE Of STEM **Credits:** 3.00
- TLI 36100 - Engineering And Technology Education Instructional Planning And Evaluation **Credits:** 3.00 or
- EDPS 32700 - Classroom Assessment **Credits:** 1.00 to 3.00

Computer Science Courses (6 credits)

- CS 10100 - Digital Literacy **Credits:** 3.00 or
- CNIT 13600 - Personal Computing Technology And Applications **Credits:** 3.00
- CS 17700 - Programming With Multimedia Objects **Credits:** 4.00 or
- CNIT 17500 - Visual Programming **Credits:** 3.00 or
- CNIT 10500 - Introduction To C Programming **Credits:** 3.00 or
- CGT 21500 - Computer Graphics Programming I **Credits:** 3.00

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

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Minor

Design and Innovation Minor

About the Program

The Design & Innovation Minor provides all students, regardless of their major, a flexible pathway to:

- Explore the practices of design and innovation through their own passion projects,
- Work with peers from different majors and backgrounds,
- Create solutions to real problems with continued access to Innovation Labs (including 3D Printing, prototyping tools, microcontrollers, etc.),
- Participate in coursework taught by instructors across the Purdue Polytechnic, College of Liberal Arts, and Daniels School of Business,
- Compete in Design & Innovation Challenges each semester, and
- Ultimately develop innovative solutions - going from idea formation to functional prototype - that are designed for people and ready for launching into the world to make an impact.

To learn more, visit our website and look at the former student testimonials and projects:

[Design & Innovation Minor Website](#)

Requirements for the Minor (15 credits)

A. Intro Design & Innovation (3-4 credits)

Other courses focused on design technology or innovation will be considered as substitutions. *Submit here:* [Substitution Request Form](#)

- AD 10500 - Design I **Credits:** 3.00
or
- ANTH 21000 - Technology And Culture **Credits:** 3.00 or
- ENGR 13100 - Transforming Ideas To Innovation I **Credits:** 2.00 and
- ENGR 13200 - Transforming Ideas To Innovation II **Credits:** 2.00
or
- MGMT 22000 - Making The Business Case **Credits:** 3.00 or
- MGMT 31000 - Financial Management **Credits:** 3.00 or
- TECH 12000 - Design Thinking In Technology **Credits:** 3.00 or
- TLI 16100 - Prototyping In Engineering/Technology Education **Credits:** 3.00

Note: Honors versions of the courses above are also accepted (ie. ENGR 16100 and ENGR 16200, etc.)

B. Core Design & Innovation (6 credits)

- TECH 22000 - Designing Technology For People **Credits: 3.00** or
- ANTH 38400 - Designing For People: Anthropological Approaches **Credits: 3.00** or
- TLI 36700 - Teaching Design And Innovation I **Credits: 3.00**
and
- TECH 34000 - Prototyping Technology For People **Credits: 3.00** or
- MGMT 39100 - Strategic Thinking And Decision-Making **Credits: 3.00** or
- TLI 46000 - Teaching Design And Innovation II **Credits: 3.00**

C. Global/Cultural Experience (3 credits)

Other courses focused on global/cultural awareness will be considered as substitutions. *Submit here:* Substitution Request Form

- Study Abroad experience - please submit course(s) to Substitution Request Form.
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- ANTH 21000 - Technology And Culture **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- AD 39500 - History Of Design **Credits: 3.00**

D. Specialization (3 credits)

Specialization coursework should further student expertise toward their innovation interests. Recommendations provided below. *Substitutions can be submitted for the Specialization requirement for approval by the TLI department. Submit here:* Substitution Request Form

- TLI 16100 - Prototyping In Engineering/Technology Education **Credits: 3.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
- TLI 31500 - New Product Development **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- IET 33400 - Economic Analysis For Technology Systems **Credits: 3.00**
- ANTH 21000 - Technology And Culture **Credits: 3.00**
- ANTH 38000 - Using Anthropology In The World **Credits: 3.00**
- MGMT 35200 - Strategic Management **Credits: 3.00**
- MGMT 44810 - Technology Strategy **Credits: 3.00**
- AD 10500 - Design I **Credits: 3.00**
- AD 10600 - Design II **Credits: 3.00**
- AD 11300 - Basic Drawing **Credits: 3.00**
- AD 22600 - History Of Art To 1400 **Credits: 3.00**
- AD 22700 - History Of Art Since 1400 **Credits: 3.00**
- AD 39500 - History Of Design **Credits: 3.00**

Notes

Courses can only be used to fulfill one requirement for the minor.

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Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

Organizational Leadership Minor

Requirements for the Minor (12 credits)

Required Courses (6 credits)

- TLI 11200 - Foundations Of Organizational Leadership **Credits:** 3.00
- TLI 15200 - Business Principles For Organizational Leadership **Credits:** 3.00

Electives (6 credits)

- TLI 21300 - Project Management **Credits:** 3.00
- OLS 34600 - Critical Thinking And Ethics **Credits:** 3.00
- OLS 37500 - Training Methods **Credits:** 3.00
- OLS 37800 - Labor And Management Relations **Credits:** 3.00
- OLS 38600 - Leadership For Organizational Change **Credits:** 3.00
- OLS 45400 - Gender And Diversity In Management **Credits:** 3.00
- OLS 47700 - Conflict Management **Credits:** 3.00
- OLS 48400 - Leadership Strategies For Quality And Productivity **Credits:** 3.00
- OLS 48500 - Leadership For Team Development **Credits:** 3.00
- OLS 48600 - Management Of Change **Credits:** 3.00
- OLS 48800 - Leadership For Lean Enterprise **Credits:** 3.00
- OLS 48900 - Digital Transformation **Credits:** 3.00
- OLS 49200 - Individual Research Problems **Credits:** 1.00 to 3.00

Notes

- All minor courses must have a grade of "C-" or higher.
- All prerequisites must be met for elective option courses.

Pre-Requisite Information

For pre-requisite information, log in to mypurdue.purdue.edu and click here.

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Program Information

Business Intelligence Optional Concentration for Organizational Leadership

Required Courses (12 credits)

- CGT 27000 - Introduction To Data Visualization **Credits: 3.00**
- OLS 38400 - Leadership Process **Credits: 3.00**
- OLS 39901 - Special Topics In Project Management **Credits: 3.00**
- OLS 48800 - Leadership For Lean Enterprise **Credits: 3.00**

Engineering Technology Education Supplemental Information

Humanities Selective (3 Credits)

See approved UCC Humanities list at: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Science Selective (3 Credits)

Any UCC Science course with a lab not already required/being used on the plan of study.
<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Advanced Communication Selective (6 Credits)

- COM 31400 - Advanced Presentational Speaking **Credits: 3.00**
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00**
- COM 31800 - Principles Of Persuasion **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 32400 - Introduction To Organizational Communication **Credits: 3.00**
- COM 32500 - Interviewing: Principles And Practice **Credits: 3.00**
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00**
- ENGL 30400 - Advanced Composition **Credits: 3.00**

- ENGL 30600 - Introduction To Professional Writing **Credits: 3.00**
- ENGL 42000 - Business Writing **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**

Technical Elective (12 Credits)

Any Polytechnic Institute course, except for Organization Leadership (OLS) classes. Engineering, Forestry, and Agricultural Systems courses not already required on the plan of study may also be used. The elective courses may all be in one area or they can come from a variety of areas.

Human Resource Developmental Supplemental Information

Professional Internship in Human Resources (3 credits)

This course is an integral component of the undergraduate Human Resource Developments program, designed to fulfill a portion of the 500-hour professional experience requirement set by SHRM's curriculum guidelines.

Phase 1: Preliminary Internship Experience (150 hours):

Students must first enroll in and successfully complete the TLI 45560 course, attaining a grade of B- or higher. This course accounts for 150 hours of the required minimum 500 internship hours in HR.

The TLI 45560 course emphasizes supervised independent study in HR, laying the groundwork for a comprehensive understanding of HR practices and principles.

Phase 2: Extended Internship Experience (350 hours):

Upon successful completion of TLI 45560, students are eligible to embark on the remaining 350-hour internship experience in an HR field. Prior to commencing their internship, students must use the **Student Internship Pre-Approval Form** to submit their proposed internship for review and obtain approval from the HRD Program. This extended internship phase is pivotal in offering practical HR experience and can include:

- an internship within a dedicated HR department/unit
- an HR work-study assignment
- directed HR-related work and research projects
- part-time or full-time employment in an HR role

Internship Documentation and Reporting:

Upon completion of their HR internship, students are required to collaborate with their respective supervisors, managers, or organizations to report and document the completed internship hours.

The **Employer Internship Hours Report Form** will serve as the official document for supervisors, managers, or organizations to record and validate the internship hours undertaken by the student. This structured approach to professional experience in HR ensures that students not only meet the academic requirements of the program but also gain substantial, real-world experience in the field of Human Resources.

- TLI 45560 - Professional Internship In Human Resources **Credits: 3.00**

Written Communication Selective (3 credits)

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**

- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

Advanced Communication Selective (3 credits)

- COM 21200 - Approaches To The Study Of Interpersonal Communication **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 25000 - Mass Communication And Society **Credits: 3.00**
- COM 25100 - Communication, Information, And Society **Credits: 3.00**
- COM 25200 - Writing For Mass Media **Credits: 3.00**
- COM 25300 - Introduction To Public Relations **Credits: 3.00**
- COM 30300 - Intercultural Communication **Credits: 3.00**
- COM 31400 - Advanced Presentational Speaking **Credits: 3.00**
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00**
- COM 31800 - Principles Of Persuasion **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 32400 - Introduction To Organizational Communication **Credits: 3.00**
- COM 32500 - Interviewing: Principles And Practice **Credits: 3.00**
- COM 32800 - Diversity At Work: A Rhetorical Approach **Credits: 3.00**
- COM 37600 - Communication And Gender **Credits: 3.00**
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00**

Sociology/Psychology Selective (3 credits)

- PSY 20000 - Introduction To Cognitive Psychology **Credits: 3.00**
- PSY 24000 - Introduction To Social Psychology **Credits: 3.00**
- PSY 27200 - Introduction To Industrial-Organizational Psychology **Credits: 3.00**
- PSY 35000 - Abnormal Psychology **Credits: 3.00**
- SOC 22000 - Social Problems **Credits: 3.00**
- SOC 31000 - Race And Ethnicity **Credits: 3.00**
- SOC 33400 - Urban Sociology **Credits: 3.00**
- SOC 33900 - Sociology Of Global Development **Credits: 3.00**
- SOC 43200 - Work In Contemporary America **Credits: 3.00**
- SOC 45000 - Gender Roles In Modern Society **Credits: 3.00**

Humanities Selective (3 credits)

Must be a class from the approved UCC Human Cultures: Humanities list:
<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Science Selective (6 credits)

Must be classes from the approved UCC Science list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Free Elective (9 credits)

Any non-remedial course not already required/being used on the plan of study.

Human Resource Management Minor (15 credits)

Complete the Human Resource Management Minor (HRMM) offered by the Krannert School of Management.

Students must take the following courses in the HRM Minor, which meet SHRM's primary and secondary content areas:

- OBHR 33000 - Introduction To Organizational Behavior **Credits: 3.00**
- MGMT 44301 - Management Of Human Resources **Credits: 3.00** or
- MGMT 44428 - Human Resources Management **Credits: 3.00**
- MGMT 44430 - Staffing: Talent Acquisition **Credits: 3.00**
- MGMT 44431 - Compensation: Total Rewards **Credits: 3.00**
- MGMT 44690 - Negotiation And Decision Making **Credits: 3.00**

Globalization Experience (0 credits)

All students must complete the Technology Leadership & Innovation (Polytechnic) Growth Plan for Global Awareness and Intercultural Competency at the Developmental Level (see below). Students who are interested in further developing their Global Awareness and Intercultural Competency are encouraged to complete the requirement at the Emerging Level or the Proficient Level (see advisor for more information).

Polytechnic Growth Plans for Global Awareness & Intercultural Competency

Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete one (1) of the following global experiences: *

- Participate in a Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in a full semester abroad program, or
- Complete 3 credit hours from the Polytechnic list of recommended Global/Cultural courses.

Step 3: Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pretest).

*Global experiences must take place during the time of enrollment in Polytechnic to complete Step 2.

Experiences taken place prior to a student's initial enrollment will not serve to complete Step 2.

Intercultural competencies gained on experiences prior to Polytechnic enrollment will be captured as baseline data on a student's IDI.

- AAS 27100 - Introduction To African American Studies **Credits: 3.00**
- AAS 37300 - Issues In African American Studies **Credits: 3.00**
- AGR 20100 - Communicating Across Culture **Credits: 3.00**
- ANSC 38100 - Leadership For A Diverse Workplace **Credits: 3.00**
- ANTH 20300 - Biological Bases Of Human Social Behavior **Credits: 3.00**
- ANTH 20500 - Human Cultural Diversity **Credits: 3.00**
- ANTH 21000 - Technology And Culture **Credits: 3.00**
- ANTH 21200 - Culture, Food And Health **Credits: 3.00**
- ANTH 23000 - Gender Across Cultures **Credits: 3.00**
- ANTH 34000 - Global Perspectives On Health **Credits: 3.00**
- ANTH 34100 - Culture And Personality **Credits: 3.00**
- ANTH 37900 - Native American Cultures **Credits: 3.00**
- ARAB 28000 - Arabic Culture **Credits: 3.00**
- ASAM 24000 - Introduction To Asian American Studies **Credits: 3.00**
- AT 23300 - Ethics And Aviation **Credits: 3.00**
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology **Credits: 3.00**
- COM 22400 - Communicating In The Global Workplace **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 41200 - Theories Of Human Interaction **Credits: 3.00**
- COM 42300 - Leadership, Communication And Organizations **Credits: 3.00**
- ECET 29000 - International Experience **Credits: 1.00 to 3.00**
- ECET 38001 - Global Professional Issues In Engineering Technology **Credits: 3.00**
- EDPS 23500 - Learning And Motivation **Credits: 2.00 or 3.00**
- EDPS 30000 - Student Leadership Development **Credits: 1.00 to 3.00**
- EDPS 30100 - Peer Counseling Training **Credits: 1.00 to 3.00**
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits: 3.00**
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings **Credits: 3.00**
- EDPS 31700 - Collaborative Leadership: Mentoring **Credits: 3.00**
- ENGL 41400 - Studies In Literature And Culture **Credits: 3.00**
- HDFS 28000 - Diversity In Individual And Family Life **Credits: 3.00**
- HEBR 38500 - The Holocaust In Modern Hebrew Literature **Credits: 3.00**
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century **Credits: 3.00**
- HIST 33805 - History Of Human Rights **Credits: 3.00**
- HIST 36600 - Hispanic Heritage Of The United States **Credits: 3.00**
- HIST 37700 - History And Culture Of Native America **Credits: 3.00**
- HIST 46900 - Black Civil Rights Movement **Credits: 3.00**
- HTM 37000 - Sustainable Tourism And Responsible Travel **Credits: 3.00**
- HTM 37200 - Global Tourism Geography **Credits: 3.00**
- MSL 20100 - Leadership And Ethics **Credits: 2.00 to 3.00**
- OLS 35000 - Creativity In Business And Industry **Credits: 3.00**
- PHIL 11400 - Global Moral Issues **Credits: 3.00**
- PHIL 43500 - Philosophy Of Mind **Credits: 3.00**
- POL 22200 - Women, Politics, And Public Policy **Credits: 3.00**
- POL 23500 - International Relations Among Rich And Poor Nations **Credits: 3.00**
- POL 32600 - Black Political Participation In America **Credits: 3.00**
- POL 32700 - Global Green Politics **Credits: 3.00**
- POL 36000 - Women And The Law **Credits: 3.00**

- POL 42300 - International Environmental Policy **Credits: 3.00**
- POL 42900 - Contemporary Political Problems **Credits: 3.00** - It's a Complex World
- POL 43300 - International Organization **Credits: 3.00**
- PSY 12000 - Elementary Psychology **Credits: 3.00**
- SOC 10000 - Introductory Sociology **Credits: 3.00**
- SOC 31000 - Race And Ethnicity **Credits: 3.00**
- SOC 33900 - Sociology Of Global Development **Credits: 3.00**
- TECH 33000 - Technology And The Global Society **Credits: 3.00**
- TLI 11200 - Foundations Of Organizational Leadership **Credits: 3.00**
- TLI 31400 - Leading Innovation In Organizations **Credits: 3.00**
- WGSS 28200 - Introduction To LGBTQ Studies **Credits: 3.00**
- WGSS 38000 - Comparative Studies In Gender And Culture **Credits: 3.00**
- WGSS 38300 - Women, Work, And Labor **Credits: 3.00**

Any foreign language 20000 level or higher (20100, 20200, 30100, 30200, 40100, 40200)

Any Purdue approved Study Abroad with a minimum of 3 credit hours that includes reflective learning assignments.

Organizational Design and Transformation Optional Concentration for Organizational Leadership

Required Courses (12 Credits)

- OLS 39901 - Special Topics In Project Management **Credits: 3.00**
- OLS 48600 - Management Of Change **Credits: 3.00**
- OLS 48900 - Digital Transformation **Credits: 3.00**
- TECH 34000 - Prototyping Technology For People **Credits: 3.00**

Organizational Leadership Supplemental Information

Written Communication Selective (3 credits)

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**
- HONR 19903 - Interdisciplinary Approaches In Writing **Credits: 3.00**
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits: 3.00**

Humanities Foundation Selective (3 credits)

Courses must be from the approved UCC Human Cultures: Humanities

list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Science Selective (6 Credits)

Courses must be from the approved UCC Science list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Specialization Selective (6 credits)

Any 200+ level Communication (COM) course **or** 200+ level declared minor course.

Globalization Experience (0 credits)

Minimum requirements:

- Complete the Pre-test Intercultural Development Inventory Assessments (1st year)
- Complete one (1) of the following global experiences:
- Participate in a Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in Faculty-led Study Abroad program, or
- Participate in a full semester abroad program, or
- Complete 3 credit hours from the Polytechnic list of recommended Global/ Cultural courses.
- Complete the Post-test Intercultural Development Inventory Assessments (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to complete their Polytechnic Plan of Study are exempt from Steps 1 & 3 (taking the IDI Pre & Post-tests) but must complete one option from Step 2.

Project Management Optional Concentration for Organizational Leadership

Required Courses (12 Credits)

- OLS 38800 - Leadership Through Teams **Credits: 3.00**
- OLS 39901 - Special Topics In Project Management **Credits: 3.00**
- OLS 48500 - Leadership For Team Development **Credits: 3.00**
- OLS 48600 - Management Of Change **Credits: 3.00**

Tech Teacher Education Supplemental Information

Lab Science Foundation Selective (3 Credits)

Must be a lab from the approved UCC Science list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

- ASTR 26300 - Descriptive Astronomy: The Solar System **Credits: 3.00**
- ASTR 26400 - Descriptive Astronomy: Stars And Galaxies **Credits: 3.00**
- BIOL 11000 - Fundamentals Of Biology I **Credits: 4.00**
- BIOL 11100 - Fundamentals Of Biology II **Credits: 4.00**
- BIOL 12100 - Biology I: Diversity, Ecology, And Behavior **Credits: 2.00**
- BIOL 13100 - Biology II: Development, Structure, And Function Of Organisms **Credits: 3.00**
- BIOL 13500 - First Year Biology Laboratory **Credits: 2.00**
- BIOL 20300 - Human Anatomy And Physiology **Credits: 4.00**
- BIOL 20400 - Human Anatomy And Physiology **Credits: 4.00**
- BTNY 11000 - Introduction To Plant Science **Credits: 4.00**

- CHM 11100 - General Chemistry **Credits: 3.00**
- CHM 11200 - General Chemistry **Credits: 3.00**
- CHM 11500 - General Chemistry **Credits: 4.00**
- CHM 11600 - General Chemistry **Credits: 4.00**
- CHM 12500 - Introduction To Chemistry I **Credits: 5.00**
- CHM 12600 - Introduction To Chemistry II **Credits: 5.00**
- CHM 13600 - General Chemistry Honors **Credits: 4.00**
- CHM 20000 - Fundamentals Of Chemistry **Credits: 2.00**
- EAPS 10900 - The Dynamic Earth **Credits: 3.00**
- EAPS 11100 - Physical Geology **Credits: 3.00**
- EAPS 11200 - Earth Through Time **Credits: 3.00**
- EAPS 24300 - Mineralogy **Credits: 4.00**
- EAPS 24400 - Earth Materials II **Credits: 4.00**
- ENTM 20600 - General Entomology **Credits: 2.00** and
- ENTM 20700 - General Entomology Laboratory **Credits: 1.00**
- HORT 10100 - Fundamentals Of Horticulture **Credits: 3.00**
- PHYS 17200 - Modern Mechanics **Credits: 4.00**
- PHYS 22000 - General Physics **Credits: 4.00**
- PHYS 22100 - General Physics **Credits: 4.00**
- PHYS 24100 - Electricity And Optics **Credits: 3.00**
- PHYS 27200 - Electric And Magnetic Interactions **Credits: 4.00**

Science Foundation Selective (3 Credits)

Any BIOL, CHM, EAPS, PHYS, or UCC Science course not already required/being used on the plan of study

Written Communication Foundation Selective (minimum 3 Credits)

- ENGL 10600 - First Year Composition With Conferences **Credits: 4.00**
- ENGL 10800 - First Year Composition **Credits: 3.00**

Advanced Communication Selective (6 Credits)

- COM 31400 - Advanced Presentational Speaking **Credits: 3.00**
- COM 31500 - Speech Communication Of Technical Information **Credits: 3.00**
- COM 31800 - Principles Of Persuasion **Credits: 3.00**
- COM 32000 - Small Group Communication **Credits: 3.00**
- COM 32400 - Introduction To Organizational Communication **Credits: 3.00**
- COM 32500 - Interviewing: Principles And Practice **Credits: 3.00**
- COM 41500 - Discussion Of Technical Problems **Credits: 3.00**
- ENGL 30400 - Advanced Composition **Credits: 3.00**
- ENGL 30600 - Introduction To Professional Writing **Credits: 3.00**
- ENGL 42000 - Business Writing **Credits: 3.00**
- ENGL 42100 - Technical Writing **Credits: 3.00**

Technical Elective (12 Credits)

Any Polytechnic Institute or Engineering (ENGR or EPCS) course not already required on the plan of study

Teacher Education Requirements

- Basic Skills Competency Academic Assessment
- Engineering and Technology Education Content Tests
- **Gate A:** *Admission to Teacher Education Program (TEP)* EDCI 20500, EDCI 28500, EDPS 23500, EDPS 26500
- **Gate B:** *Retention* -TLI 46100, TLI 46200
- **Criminal History Background Check:** A valid Criminal Background Check must be on file in the Office of Field Experiences (OFE).
- **Student Self-Disclosure Statement:** The Student Self-Disclosure Statement is submitted to OFE at the start of a Foundational course in which you complete a course-related field experience placement, EDCI 20500 or EDPS 23500 or EDPS 26500.

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Polytechnic Statewide

The Purdue Polytechnic Institute Statewide is a unique partnership between education and business, industry and government. Polytechnic Statewide was created to extend Purdue's existing technology programs across the state where highly skilled workers with problem-solving skills are in great demand. Polytechnic Statewide also provides a mechanism for training presently employed people in state-of-the-industry technology.

Polytechnic Statewide represents a direct academic and administrative extension of the Purdue Polytechnic Institute at the West Lafayette campus. Although usually located on the campus of another university, academic, administrative and financial control rests with Purdue.

A technology advisory council, representative of key executives of business, industry, government and education, counsels on the development of the overall program. This partnership assists in the identification of general needs.

Registration. Admitted students are enrolled at each Purdue location.

Fees. Fees are charged per credit hour and vary by location. Fees are either set to match West Lafayette fees or those of the host institution at the location.

Degrees. All course credits apply toward a Purdue University degree and are transferable to other Purdue locations.

Counseling Services. Student counseling services are available at each Purdue program location.

Program Design. The programs are designed to prepare technologists for highly technical positions. Both part-time and full-time students are encouraged to enroll. All programs are of the highest quality and are operated in close cooperation with local business and industrial advisory committees. All programs follow the curricula offered at West Lafayette. Technical courses are similar to those on the West Lafayette campus, follow the same learning outcomes and are taught by Purdue faculty members.

The Statewide Technology program includes locations in Anderson, Columbus, Greensburg, Indianapolis, Kokomo, Lafayette, New Albany, Richmond, South Bend and Vincennes. Other communities in Indiana may be served as needs arise.

In addition to Purdue University's main campus in West Lafayette, Indiana, Purdue Polytechnic offers select degree programs in nine Indiana locations: Anderson, Columbus, Indianapolis, Kokomo, Lafayette, New Albany, Richmond, South Bend, and Vincennes.

Prospective and enrolled students at these locations can contact their advisor or visit polytechnic.purdue.edu/locations to review plans of study.

Degree requirements at these locations are consistent with those at main campus - West Lafayette.

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Polytechnic Institute (Graduate)

Polytechnic Institute (Graduate)

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Polytechnic Institute Administration (Graduate)

Website URL:

<https://polytechnic.purdue.edu/graduate-studies>

Department/School Head:

Kathryne A. Newton

Associate Dean for Graduate Programs

Advanced technologies are redefining every facet of business and industry in a highly competitive, global environment. The doctoral program in the Polytechnic Institute addresses those needs by developing skills in advanced interdisciplinary research as well as in product, service and process creation management for work in technology-dependent enterprises. The Polytechnic also offers MS degrees from all departments, as well as online graduate certificate and MS degrees at a distance. Dr. Technology (DTech) is also offered through Purdue Online - Polytechnic (<https://polytechnic.purdue.edu/degrees/doctor-of-technology>).

Concentrations:

Ph.D Only

- Computational Science
- Information Security
- Interdisciplinary Ecological Science & Engineering
- Microbiology - PULSe
- Organizational Leadership
- UX Design

Master of Science

Technology, MS

Concentrations:

- Advanced Manufacturing

- Aviation Human Performance
- Aviation Leadership
- Building Construction Management
- Chromatic Regulation Gene Expression - PULSe
- Computational Science
- Cyber Forensics
- Engineering Technology
- Information Technology
- Interdisciplinary Ecological Science & Engineering
- Microbiology - PULSe
- Organizational Leadership
- Product Innovation & Development
- Project Management in Information Technology
- Sustainable Engineering
- Technical Communication

Technology, MS (OL/HY)

Doctor of Philosophy

Technology, PHD

Concentrations:

- Computational Science
- Independent Interdisciplinary Graduate Program
- Interdisciplinary Ecological Science & Engineering
- Interdisciplinary Program Information Security, Information Security
- Microbiology - PULSe
- Women's, Gender, and Sexuality Studies

Doctor of Technology

Technology, DTECH

Post-Baccalaureate Certificate

Information Assurance Education, Post Baccalaureate Certificate

Smart Manufacturing Enterprise, Post Baccalaureate Certificate

Smart Manufacturing Enterprise, Post Baccalaureate Certificate (OL)

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School of Aviation and Transportation Technology (Graduate)

Website URL:

<https://polytechnic.purdue.edu/schools/aviation-and-transportation-technology>

Department/School Head:

Brian Dillman, School Head of SATT / SATT Associate Head Purdue Global Programs / Associate Professor Aviation Technology

Academic Programs:

Master's and Ph.D. Programs

Purdue University's School of Aviation and Transportation Technology provides a comprehensive education leading to the Master of Science in Aviation and Aerospace Management and a Ph.D. in Aviation and Technology Management. Coursework options address grand challenges in aviation financial management, aviation/aerospace safety, sustainable aviation operations, and quality management/workforce development. All students are expected to acquire a broad background in aviation management practices and in the design of quantitative and qualitative methods necessary for research in the field. The MSAAM and Ph.D. ATM are offered through the School of Aviation and Aerospace Management. The Ph.D. Technology and Doctor of Technology are offered through the Polytechnic Institute.

- MS in Aviation and Aerospace Management Residential On-Campus (thesis and non-thesis options)
- MS in Aviation and Aerospace Management Online (non-thesis option only)
- Ph.D. in Aviation Technology and Management Residential On-Campus
- Ph.D. in Technology Residential On-Campus (with an Aviation Technology area of interest)
- Doctor of Technology Online

Graduate Certificates:

- Graduate Certificate in Aviation Safety Management Residential On-Campus
- Graduate Certificate in Aviation Safety Management Online
- Graduate Certificate in Aviation Financial Management Residential On-Campus
- Graduate Certificate in Aviation Financial Management Online

Combined Degree Programs: (Undergraduate Degree / Master's Degree)

The School of Aviation & Transportation Technology offers a program to qualifying Purdue BSAT undergraduates who wish to earn both their bachelor's and master's degrees. [Click here for more information](#)

Regular Graduate Faculty by Rank:

Master of Science in Aviation and Aerospace Management

Aviation Technology, MSAAM (Modality: Residential & Online)

Concentrations:

- Computational Science
- Sustainable Aviation Operations

Doctor of Philosophy

Aviation Technology & Management, PHD

Concentration:

- Computational Science

Post-Baccalaureate Certificate

Aviation Financial Management, Post Baccalaureate Certificate (Modality: Residential & Online)

Aviation Safety Management, Post Baccalaureate Certificate (Modality: Residential & Online)

Aviation Sustainability, Post Baccalaureate Certificate (Modality: Residential & Online)

Aviation Sustainability, Post Baccalaureate Certificate (online)

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Department of Computer Graphics Technology (Graduate)

Website URL:

<https://polytechnic.purdue.edu/degrees/ms-computer-graphics-technology>

Department/School Head:

Nathan W. Hartman

Academic Programs:

Master's and Ph.D. Programs

- MS in Computer Graphics Technology

The Department of Computer Graphics Technology touches all aspects of computer graphics, from animation to scientific visualization, and from user experience to game studies. Research projects on these topics push the boundaries of how the medium can be used, while the variety of degree options to prepare students to be practitioners and managers in an array of computer graphics-related careers.

Concentrations:

- Animation and Visual Effects
- Computer Graphics Programming
- Games, Virtual and Augmented Reality
- Information Visualization and Visual Analytics
- User Experience Design (UX)

Combined Degree Programs: (Undergraduate Degree / Master's Degree)

- Five-year combined BS/MS Degree Program in Computer Graphics Technology

Regular Graduate Faculty by Rank:

Professor

Nicoletta Adamo
Nathan Hartman
James Mohler

Associate Professor

Vetria L. Byrd
Yingjie Chen
Esteban Garcia
Ronald Glotzbach
Colin M. Gray
Tim McGraw
Carlos R Morales
Paul Parsons
David M. Whittinghill

Assistant Professor

Nandhini Giri
Jeffery Kesselman
Derek Larson
Austin Toombs
Christos Mousas
Rua Williams

Professor of Practice

*Travis Fuerst
*Raymond Hassan
*Robert Howard
*Nancy J. Rasche
*Dan Triplett
*Nasheet Zaman

*Can not chair or co-chair

Concentration

Artificial Intelligence in Computer Graphics

AI in Computer Graphics

- CGT 52300 - Intelligent Virtual Agents Credits: 3.00

Master of Science

Computer Graphics Technology, MS (Modality: Residential & Online)

Concentrations:

- Artificial Intelligence in CGT
- Computational Science
- Perception & Scientific Visual
- Human- Centered Design Development
- UX Design

Post-Baccalaureate Certificate

Real-time Computer Graphics Technology, Post Baccalaureate Certificate (Modality: Residential & Online)

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Department of Computer and Information Technology (Graduate)

Website URL:

<https://polytechnic.purdue.edu/degrees/ms-computer-and-information-technology>

Department/School Head:

Thomas Hacker, Professor/ Department Head
John Springer, Graduate Program Chair

Academic Programs:

Master's and Ph.D. Programs

The Department of Computer and Information Technology offers programs leading to the Master of Science in Computer and Information Technology degree. Students may continue their studies leading to a Doctor of Philosophy in Technology with an area of concentration in Computer and Information Technology.

The research interests of the faculty include autonomy, intelligence, and robotics; big data and data analytics; bioinformatics and healthcare applications; cyber infrastructure and high performance computing; network design and management, emerging and advanced applications of information technology; information security and privacy; homeland security; cyber learning and computational thinking; systems analysis and design; and project and process management. Additionally, several faculty have an entrepreneurial spirit, having turned their research into products that have helped a variety of industries solve problems and improve their productivity and accuracy.

The regular master's program requires nine three-credit courses plus a six-credit thesis. There are three core courses required of all students. The remaining courses are chosen by the student with the approval of a graduate faculty committee tailored to their research.

Masters in Computer and Information Technology (On-Campus)

Masters in Science Computer Information Technology (Non-Thesis Online (Concentrations in Business Analysis in Information Technology and IT Project Management)

Ph.D. in Technology (On-Campus)

Doctor of Technology (Online)

Certificates:

Applied Data Analytics, Graduate Certificate Online

Managing Information Technology Projects, Graduate Certificate Online

Information Technology Business Analysis, Graduate Certificate Online

Financial Support

For more information on financial support for on-campus students [click here](#).

Areas of Specialization:

Autonomy, intelligence, and robotics big data and analytics bioinformatics and healthcare computing cyber infrastructure and high performance computing emerging and advanced applications of information technology information security, privacy, and homeland security cyber learning and computational thinking systems, project, and process management.

Regular Graduate Faculty by Rank:

Master of Science

Computer Information Technology, MS

Concentration:

- Cyber Forensics

Computer Information Technology, MS (Modality: Residential & Online)

Computer Information Technology Non-Thesis Online

Residential Concentrations:

- Cyber Forensics
- Information Security

Online Concentrations:

- Business Analysis in IT
- Cyber Forensics
- Data Lit Visual & Analysis
- Information Security
- IT Project Management

Cybersecurity & Trusted System, MS

Doctor of Technology

Computer and Information Technology, PHD

Post-Baccalaureate Certificate

Applied Data Analytics in Technology, Post Baccalaureate Certificate (Modality: Online)

Information Technology Business Analysis, Post Baccalaureate Certificate (Modality: Online)

Managing Information Technology Projects, Post Baccalaureate Certificate (Modality: Online)

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School of Construction Management Technology (Graduate)

Website URL:

<https://polytechnic.purdue.edu/degrees/ms-construction-management-technology>

<https://polytechnic.purdue.edu/degrees/ms-construction-management-online>

<https://polytechnic.purdue.edu/degrees/executive-construction-management-graduate-certificate>

Department/School Head:

Yi Jiang, *Interim School Head*

Academic Programs:

Ph.D. Programs

Master's Programs

The Master of Science in The School of Construction Management Technology applies management principles and innovative technologies to effectively lead, organize, and manage the construction projects of residential, commercial, and infrastructure facilities. With the MS in Construction Management Technology, you will be prepared for a leadership position in the construction industry.

- Master's degree in Construction Management Technology (Resident)
- Master's degree in Construction Management Technology (Online)

Graduate Certificates

- Executive Construction Management Graduate Certificate (Online)

Regular Graduate Faculty by Rank:

Professor

Daniel Castro-Lacouture
Emad Elwakil
Bryan Hubbard
Yi Jiang
Zeljko "Z" Torbica

Associate Professor

Cory Clark
Hazar Nicholas Dib
James L. Jenkins
Randy R. Rapp

Assistant Professor

Deniz Besiktepe
Soowon Chang
Yunfeng Chen
Luciana Debs
Shanyue Guan
Kyubyung Kang
Claudio Martani
Anthony Sparking
Chengcheng Tao
Jiansong Zhang

Professor of Practice

Brad Benhart

Associate Professor of Practice

Mark Zimper

Assistant Professor of Practice

Ryan Manuel

Master of Science in Building Construction Management

Construction Management Technology, MSCMT (Modality: Residential & Online)

Concentration:

- Computational Science

Post-Baccalaureate Certificate

Executive Construction Management, Post Baccalaureate Certificate (Modality: Online)

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School of Engineering Technology (Graduate)

Website URL:

<https://polytechnic.purdue.edu/degrees/ms-engineering-technology>

Online Programs:

<https://online.purdue.edu/mset/masters-in-engineering-technology>

Department/School Head:

Dr. Kenneth A. Burbank

Graduate Program Contacts:

Dr. Duane D. Dunlap, Chair

Niedra McLeland, Administrative Assistant, Graduate Program

Academic Programs:

Master's and Ph.D. Programs

The program expands the knowledge of students into areas of established and emerging engineering technologies. The degree prepares students to enter into positions requiring responsibilities in managerial, leadership, engineering, research, and teaching positions. Graduates work in a variety of sectors including business and industry, nonprofit, government, and academia.

- M.S. in Engineering Technology (On Campus)
- M.S. in Engineering Technology (Online)
- Ph.D. in Technology with a focus in Engineering Technology
- Doctor of Technology (Online)

Combined Degree Programs

- B.S. in Electrical Engineering Technology / M.S. in Engineering Technology
- B.S. in Mechanical Engineering Technology / M.S. in Engineering Technology
- B.S. in Robotics Engineering Technology/ M.S. in Engineering Technology

Research Interest Areas (On-campus Students):

Faculty within the School of Engineering Technology (SoET) have significant business and industrial experience. The SoET has had faculty involved with the creation of start-up companies within the Purdue Research Park. A thesis-based MS degree requires 21 credit hours of coursework and minimum of (9) credit hours of thesis research (ECET/IET/MET/MFET 69800). The student's work culminates in a written thesis. Student's pursuing a MS thesis-based are required to complete the following courses in the preferred sequence: ENGT 50100 (Research Seminar), MET 50300 (Applied Optimization), graduate-level Statistics Course, MET 52700 (Tech from a Global Perspective), and TECH 64600 (Research Methods and Writing Selective).

The remaining courses are chosen by the student working with their major professor/advisor and with the approval of the student's graduate faculty committee tailored to their research and/or professional ambitions.

Faculty in the School of Engineering Technology have interests for example in the, Metrology, Die Casting, Mechatronics, Bio-fuels, Manufacturing, Robotics, Facilities and Energy Management, Non-destructive testing, Direct Part Marking, Machine Vision, Computer Vision, Flexible Organic Electronics, Healthcare, Electric Hybrid Vehicles, Analog Circuits and Electronics, Acoustics, Project Management, Digital Enterprise Systems, and Manufacturing.

Financial Support (On-campus Students):

Teaching assistantships (TA's) are available to qualified students entering the School of Engineering Technology. The Graduate School offers fellowships for entering students. Research assistantships (RA's) are available for advanced, qualified students working directly with SoET faculty.

Regular Graduate Faculty by Rank

[Click here](#)

Master of Science

Developmental Testing and Innovation, MS (Modality: Online)

Developmental Testing is the deliberate exercising of virtual or real components or systems, and the evaluation of responses to generate information on capabilities and limitations. The value is in creating credible, reality-based information to inform decisions that enable progress in providing new or enhanced capabilities.

The program will provide the technical/engineering knowledge as well as the tools and skills necessary for the graduate to be successful as a developmental test engineer. Incorporating rigorous coursework from the Polytechnic Institute and the College of Engineering, this program equips graduates with the ability to work in a variety of industries based on the graduate's focus area testing new and innovative technologies.

Engineering Technology, MS (Modality: Residential & Online)

Concentrations:

- Advanced Manufacturing
- Interdisciplinary Ecological Science & Engineering

Engineering Technology, MS (OL)

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Department of Technology Leadership and Innovation (Graduate)

Website URL:

<https://polytechnic.purdue.edu/degrees/ms-technology-leadership-innovation>

Department/School Head:

Todd Kelley, Interim Head of Department of Technology Leadership and Innovation

Academic Programs:

Master's, Certificates, and Ph.D. Programs

The Department of Technology Leadership & Innovation prepares graduate students to lead the development and successful introduction of high-tech solutions in business, industry, and the classroom. From teaching tomorrow's teachers to understanding the nuances in each technological challenge, our graduate programs focus on improving and shaping the future of technology and its uses.

Programs:

- Master's degree in technology leadership & innovation (On-Campus)
- Master's degree in technology leadership & innovation (Online)

On-Campus Areas of Study:

- STEM Leadership/Engineering/Technology Teacher Education
- Organizational Leadership
- Digital Innovation

PhD in Technology (On-Campus)

- PhD in Technology (On-Campus)

Doctor of Technology (Online)

- Doctor of Technology (Online)

Graduate Certificates

- Project Management Certificate (Online)
- Human Resource Development Certificate (Online)

Regular Graduate Faculty by Rank:

Professor

Mesut Akdere
Sabine Brunswicker
Nathalie Duval-Couetil
Todd R. Kelley
Nathan Mentzer

Associate Professor

Paul Asunda
Lisa Bosman
Linda L. Naimi
Greg Strimel

Assistant Professor

Monica Gamez-Djokic
Brandon Grant
Jennifer Linvill

Cho Hyun Park
Regena Scott

Master of Science

Technology Leadership & Innovation, MS

Concentrations:

- Biotech Innov & Regulatory Science

Post-Baccalaureate Certificate

Project Management, Post Baccalaureate Certificate

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