

# **Polytechnic Institute**

## **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 (website)**

### **Admission to Teacher Education**

Teacher Education 2019-2020

### **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](mailto:choosepolytechnic@purdue.edu)

### **Polytechnic Statewide Information**

## **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**

## 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](mailto:choosetechnology@purdue.edu).

## Graduate Information

For Graduate Information please see Polytechnic Administration Graduate Program Information.

## Minor

### Advanced Global Technology 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 (15 credits)

#### Part 1: Coursework and Assessments

- TECH 12000 - Design Thinking In Technology
- Complete the Pre-and Post- Intercultural Development Inventory Assessments (1<sup>st</sup> and 4<sup>th</sup> years)
- Complete the Pre-and Post BEVI (1<sup>st</sup> and 4<sup>th</sup> years)
- Complete a debrief and develop a personalized Intercultural Development Plan (end of 2<sup>nd</sup> year)
- Complete **9 credit hours** of courses from the Polytechnic list of recommended Global/Cultural courses. (At least 6 credits of this course work must be selected based on your IDI profile results in conjunction with your Individual Development Plan-IDP.)

#### Part 2: 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.

OR

- 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.

## Study Abroad Option

- TECH 12000 - Design Thinking In Technology
- Complete the Pre-and Post- Intercultural Development Inventory Assessments (1<sup>st</sup> and 4<sup>th</sup> years)
- Complete the Pre-and Post BEVI (1<sup>st</sup> and 4<sup>th</sup> years)
- Complete a debrief and develop a personalized Intercultural Development Plan (end of 2<sup>nd</sup> 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Program Information

# Advanced Global Technology Minor Supplemental Information

## Polytechnic Minimum Global Requirement

Step 1: Complete the Pre-test Intercultural Development Inventory Assessment (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 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

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 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.

## Purdue University (West Lafayette) courses that meet the global requirement

- AAS 27100 - Introduction To African American Studies
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training

- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HIST 49900 - History Internship
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- POL 36000 - Women And The Law
- POL 41300 - The Human Basis Of Politics
- POL 42300 - International Environmental Policy
- POL 42900 - Contemporary Political Problems (It's a Complex World)
- POL 43300 - International Organization
- PSY 12000 - Elementary Psychology
- PSY 25100 - Health Psychology
- PSY 32200 - Neuroscience Of Motivated Behavior
- SOC 10000 - Introductory Sociology
- SOC 31000 - Racial And Ethnic Diversity
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 31400 - Leading Innovation In Organizations
- WGSS 28200 - Introduction To LGBT Studies
- WGSS 38000 - Gender And Multiculturalism
- WGSS 38300 - Women And Work
- Any foreign language 20000 or higher (20100, 20200, 30100, 30200, 40100, 40200)
- Any Purdue approved Study Abroad that includes reflective learning assignments

## **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](mailto: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.

Aeronautical Engineering Technology Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (63 credits)

### Required Major Courses (63 credits)

- AT 10000 - Introduction To Aviation Technology
- AT 10200 - Aviation Business
- AT 10600 - Basic Aircraft Science ♦
- AT 20300 - Aviation Operations Management
- AT 20501 - Statics For Aerostructures
- AT 20700 - Introduction To Aircraft Systems ♦
- AT 20802 - Aircraft Materials
- AT 26200 - Basic Aircraft Powerplant Technology
- AT 26502 - Aircraft Electrical Systems
- AT 26700 - Fixed And Rotary Wing Assemblies
- AT 27200 - Introduction To Composite Technology
- AT 27800 - Nondestructive Testing For Aircraft
- AT 30702 - Advanced Aircraft Systems
- AT 30802 - Aircraft Materials Processes
- AT 33502 - Avionics Systems
- AT 37002 - Advanced Aircraft Powerplants
- AT 37600 - Aircraft Gas Turbine Engine Technology I
- AT 38500 - Design Support Analysis
- AT 44502 - Aircraft Electronics
- AT 47600 - Aircraft Gas Turbine Engine Technology II
- AT 49600 - Applied Research Proposal
- AT 49700 - Applied Research Project

### Other Departmental /Program Course Requirements (54 credits)

- PHYS 22000 - General Physics (satisfies Science for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity ♦ (satisfies Written Communication for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦ (satisfies Oral Communication for core)
- TECH 12000 - Design Thinking In Technology (*satisfies Information Literacy AND Science, Technology & Society Selective for core*)
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning Selective for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
- STAT 30100 - Elementary Statistical Methods
- CGT 16300 - Graphical Communication And Spatial Analysis ♦
- 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 Foundational 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 (3 credits)

Any Course, any subject. Credit Hours: 3.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

Click here for Aviation Technology Supplemental Information.

## Program Requirements

### Fall 1st Year

- AT 10000 - Introduction To Aviation Technology
- AT 10200 - Aviation Business
- AT 10600 - Basic Aircraft Science ♦
- MA 15800 - Precalculus- Functions And Trigonometry
- TECH 12000 - Design Thinking In Technology
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦ or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦

## 16 Credits

### Spring 1st Year

- AT 20802 - Aircraft Materials
- CGT 16300 - Graphical Communication And Spatial Analysis ♦
- MA 16010 - Applied Calculus I
  
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦ or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity ♦
  
- Cornerstone Level III Humanities Selective- Credit Hours: 3.00

## 14 Credits

### Fall 2nd Year

- AT 20700 - Introduction To Aircraft Systems ♦
- AT 20300 - Aviation Operations Management
- AT 26200 - Basic Aircraft Powerplant Technology
- AT 26700 - Fixed And Rotary Wing Assemblies
- AT 27200 - Introduction To Composite Technology

## 16 Credits

### Spring 2nd Year

- AT 20501 - Statics For Aerostructures
- AT 26502 - Aircraft Electrical Systems
- AT 27800 - Nondestructive Testing For Aircraft
- PHYS 22000 - General Physics

## 13 Credits

### Fall 3rd Year

- AT 30702 - Advanced Aircraft Systems
- STAT 30100 - Elementary Statistical Methods
- Thematic Area Selective (AT 36302 for A&P) - Credit Hours: 3.00
- Behavioral/Social Science Found. Selective - Credit Hours: 3.00
- Science Foundational Selective - Credit Hours: 3.00

## 15 Credits

## Spring 3rd Year

- AT 30802 - Aircraft Materials Processes
- AT 33502 - Avionics Systems
- AT 37600 - Aircraft Gas Turbine Engine Technology I
- AT 38500 - Design Support Analysis
- Cornerstone Level II Selective- Credit Hours: 3.00

15 Credits

## Fall 4th Year

- AT 37002 - Advanced Aircraft Powerplants
- AT 44502 - Aircraft Electronics
- AT 47600 - Aircraft Gas Turbine Engine Technology II
- AT 49600 - Applied Research Proposal
- Economics Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

## Spring 4th Year

- AT 49700 - Applied Research Project
- Thematic Area Selective (AT 37200 for A&P) - Credit Hours: 3.00
- Thematic Area Selective (AT 40200 for A&P) - Credit Hours: 3.00
- Thematic Area Selective (AT 47200 for A&P) - Credit Hours: 3.00
- Cornerstone Level III Selective- Credit Hours: 3.00
- Internship - Credit Hours: 0.00
- Globalization - Credit Hours: 0.00

15 Credits

## Note

2.0 Graduation GPA required for Bachelor of Science degree.

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## 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](#)

### Degree Requirements

## 120 Credits Required

### Departmental/Program Major Courses (59 credits)

#### Required Major Courses (59 credits)

- AT 10000 - Introduction To Aviation Technology
- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- AT 10600 - Basic Aircraft Science
- AT 14400 - Private Pilot Lectures
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 20300 - Aviation Operations Management ♦
- AT 25200 - Aviation Projects
- AT 34001 - Aerospace Business Statistics
- AT 35900 - Airport Management
- AT 36201 - Aviation Operations
- AT 41200 - Aviation Finance
- AT 42101 - Managerial Economics In Aviation
- AT 42201 - Aerospace Risk Management
- AT 47500 - Aviation Law
- AT 48100 - Aviation Safety Problems
- AT 49401 - Capstone Project Proposal
- AT 49501 - Applied Capstone Research Project
- MGMT 20000 - Introductory Accounting
- MGMT 20100 - Management Accounting I ♦
- MGMT 30400 - Introduction To Financial Management

## Other Departmental /Program Course Requirements (52 credits)

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

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

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

## Program Requirements

### Fall 1st Year

- AT 10000 - Introduction To Aviation Technology
- AT 10600 - Basic Aircraft Science
- AT 14400 - Private Pilot Lectures
- MA 15800 - Precalculus- Functions And Trigonometry
  
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦ or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦

### 14 Credits

### Spring 1st Year

- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- TECH 12000 - Design Thinking In Technology
  
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦ or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦

Calculus Selective - Credit Hours: 3.00

### 15 Credits

### Fall 2nd Year

- AT 20300 - Aviation Operations Management ♦
- AT 25200 - Aviation Projects
- MGMT 20000 - Introductory Accounting ♦
- PHYS 22000 - General Physics
- Cornerstone Level III Humanities Selective - Credit Hours 3.00

### 16 Credits

### Spring 2nd Year

- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 36201 - Aviation Operations
- MGMT 20100 - Management Accounting I

- Economics Selective - Credit Hours: 3.00
- Science Foundational Selective - Credit Hours: 3.00

## 15 Credits

### Fall 3rd Year

- AT 34001 - Aerospace Business Statistics
- STAT 30100 - Elementary Statistical Methods
- AT 35900 - Airport Management
- Thematic Area Selective - Credit Hours: 3.00
- Behavioral/Social Science Selective - Credit Hours: 3.00

## 15 Credits

### Spring 3rd Year

- AT 42101 - Managerial Economics In Aviation
- AT 47500 - Aviation Law
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Cornerstone Level II Selective - Credit Hours: 3.00

## 15 Credits

### Fall 4th Year

- AT 41200 - Aviation Finance
- AT 48100 - Aviation Safety Problems
- AT 49401 - Capstone Project Proposal
- MGMT 30400 - Introduction To Financial Management
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 17 Credits

### Spring 4th Year

- AT 42201 - Aerospace Risk Management
- AT 49501 - Applied Capstone Research Project
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Cornerstone Level III Selective - Credit Hours: 3.00

## 13 Credits

## Notes

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.

2.0 Graduation GPA required for Bachelor of Science degree.

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## 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](#)

### Degree Requirements

### 120 Credits Required

#### Departmental/Program Major Courses (59 credits)

#### Required Major Courses (59 credits)

- AT 10000 - Introduction To Aviation Technology
- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems



- AT 10600 - Basic Aircraft Science
- AT 14400 - Private Pilot Lectures
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 20300 - Aviation Operations Management
- AT 25200 - Aviation Projects
- AT 33800 - Airline Management
- AT 36201 - Aviation Operations
- AT 41200 - Aviation Finance
- AT 42101 - Managerial Economics In Aviation
- AT 43800 - Airline Operations
- AT 47500 - Aviation Law
- AT 48100 - Aviation Safety Problems
- AT 49401 - Capstone Project Proposal
- AT 49501 - Applied Capstone Research Project
- MGMT 20000 - Introductory Accounting ♦
- MGMT 20100 - Management Accounting I
- Aviation Management Selectives - Credit Hours: 6.00

## Other Departmental/Program Course Requirements (52 credits)

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

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science

- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

Click here for Aviation Technology Supplemental Information.

## Program Requirements

### Fall 1st Year

- AT 10000 - Introduction To Aviation Technology
- AT 10600 - Basic Aircraft Science
- AT 14400 - Private Pilot Lectures
- MA 15800 - Precalculus- Functions And Trigonometry
  
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦ or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦

### 14 Credits

### Spring 1st Year

- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- TECH 12000 - Design Thinking In Technology
- MA 16010 - Applied Calculus I
  
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦ or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦

### 15 Credits

## Fall 2nd Year

- AT 20300 - Aviation Operations Management
- AT 25200 - Aviation Projects
- MGMT 20000 - Introductory Accounting ♦
- PHYS 22000 - General Physics
- Cornerstone Level III Humanities Selective- Credit Hours: 3.00

16 Credits

## Spring 2nd Year

- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 36201 - Aviation Operations
- MGMT 20100 - Management Accounting I
- Economics Selective - Credit Hours: 3.00
- Science Foundational Selective - Credit Hours: 3.00

15 Credits

## Fall 3rd Year

- AT 33800 - Airline Management
- STAT 30100 - Elementary Statistical Methods
- Aviation Management Selective - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Behavioral / Social Science Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- AT 42101 - Managerial Economics In Aviation
- AT 47500 - Aviation Law
- Thematic Area Selective - Credit Hours: 3.00
- Cornerstone Level II Selective- Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

## Fall 4th Year

- AT 41200 - Aviation Finance
- AT 43800 - Airline Operations
- AT 48100 - Aviation Safety Problems

- AT 49401 - Capstone Project Proposal
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 17 Credits

### Spring 4th Year

- AT 49501 - Applied Capstone Research Project
- Thematic Area Selective - Credit Hours: 3.00
- Aviation Management Selective - Credit Hours: 3.00
- Cornerstone Level III Selective- Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 13 Credits

### Notes

- 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.
- 2.0 Graduation GPA required for Bachelor of Science degree.

### 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## **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
- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- AT 10600 - Basic Aircraft Science
- AT 14400 - Private Pilot Lectures
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 20300 - Aviation Operations Management
- AT 25200 - Aviation Projects
- AT 35900 - Airport Management
- AT 36201 - Aviation Operations
- AT 41200 - Aviation Finance
- AT 42101 - Managerial Economics In Aviation
- AT 45100 - Airport Operations
- AT 45900 - Airport Manager Certification
- AT 47500 - Aviation Law
- AT 48100 - Aviation Safety Problems
- AT 49401 - Capstone Project Proposal
- AT 49501 - Applied Capstone Research Project
- MGMT 20000 - Introductory Accounting ♦
- MGMT 20100 - Management Accounting I
- Aviation Management Selectives - Credit Hours: 3.00

## Other Departmental/Program Course Requirements (52 credits)

- PHYS 22000 - General Physics (satisfies Science for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity ♦ (satisfies Written Communication for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦ (satisfies Oral Communication for core)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective for core)
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning Selective for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)

- STAT 30100 - Elementary Statistical Methods
- 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 (9 credits)

Any Course, any subject. Credit Hours: 9.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

Click here for Aviation Technology Supplemental Information.

## Program Requirements

### Fall 1st Semester

- AT 10000 - Introduction To Aviation Technology
- AT 10600 - Basic Aircraft Science
- AT 14400 - Private Pilot Lectures
- MA 15800 - Precalculus- Functions And Trigonometry

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦ or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦

## 14 Credits

### Spring 1st Year

- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- TECH 12000 - Design Thinking In Technology
- MA 16010 - Applied Calculus I
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦ or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦

## 15 Credits

### Fall 2nd Year

- AT 20300 - Aviation Operations Management
- AT 25200 - Aviation Projects
- MGMT 20000 - Introductory Accounting ♦
- PHYS 22000 - General Physics
- Cornerstone Level III Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00

## 16 Credits

### Spring 2nd Year

- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 36201 - Aviation Operations
- MGMT 20100 - Management Accounting I
- Economics Selective - Credit Hours: 3.00
- Science Foundational Selective - Credit Hours: 3.00

## 15 Credits

### Fall 3rd Year

- AT 35900 - Airport Management
- STAT 30100 - Elementary Statistical Methods
- Aviation Management Selective - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Behavioral / Social Science Selective - Credit Hours: 3.00

## 15 Credits

### Spring 3rd Year

- AT 42101 - Managerial Economics In Aviation
- AT 47500 - Aviation Law
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 15 Credits

### Fall 4th Year

- AT 41200 - Aviation Finance
- AT 45100 - Airport Operations
- AT 48100 - Aviation Safety Problems
- AT 49401 - Capstone Project Proposal
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 17 Credits

### Spring 4th Year

- AT 45900 - Airport Manager Certification
- AT 49501 - Applied Capstone Research Project
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Cornerstone Level III Selective - Credit Hours: 3.00

## 13 Credits

## Notes

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.

2.0 Graduation GPA required for Bachelor of Science degree.

## 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.

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## 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.

Aviation Management Website

### Degree Requirements

## 120 Credits Required

### Departmental/Program Major Courses (59 credits)

#### Required Major Courses (59 credits)

- AT 10000 - Introduction To Aviation Technology
- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- AT 10600 - Basic Aircraft Science
- AT 14400 - Private Pilot Lectures
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 20300 - Aviation Operations Management
- AT 25200 - Aviation Projects
- AT 36201 - Aviation Operations
- AT 41200 - Aviation Finance
- AT 42101 - Managerial Economics In Aviation
- AT 47500 - Aviation Law
- AT 48100 - Aviation Safety Problems
- AT 49401 - Capstone Project Proposal
- AT 49501 - Applied Capstone Research Project
- MGMT 20000 - Introductory Accounting ♦

- MGMT 20100 - Management Accounting I
- Aviation Management Selectives - Credit Hours: 12.00

## Other Departmental /Program Course Requirements (52 credits)

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

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click [here](#).

## Additional Degree Requirements

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

## Program Requirements

### Fall 1st Year

- AT 10000 - Introduction To Aviation Technology
- AT 10600 - Basic Aircraft Science
- AT 14400 - Private Pilot Lectures
- MA 15800 - Precalculus- Functions And Trigonometry
  
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦ or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦

### 14 Credits

### Spring 1st Year

- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- TECH 12000 - Design Thinking In Technology
- MA 16010 - Applied Calculus I
  
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦ or

### 15 Credits

### Fall 2nd Year

- AT 20300 - Aviation Operations Management
- AT 25200 - Aviation Projects
- MGMT 20000 - Introductory Accounting ♦
- PHYS 22000 - General Physics
- Cornerstone Level III Humanities Selective- Credit Hours: 3.00

### 16 Credits

## Spring 2nd Year

- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 36201 - Aviation Operations
- MGMT 20100 - Management Accounting I
- Economics Selective - Credit Hours: 3.00
- Science Foundational Selective - Credit Hours: 3.00

15 Credits

## Fall 3rd Year

- STAT 30100 - Elementary Statistical Methods
- Aviation Management Selective - Credit Hours: 3.00
- Aviation Management Selective - Credit Hours: 3.00
- Behavioral / Social Science Selective - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- AT 42101 - Managerial Economics In Aviation
- AT 47500 - Aviation Law
- Thematic Area Selective - Credit Hours: 3.00
- Cornerstone Level II Selective- Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

## Fall 4th Year

- AT 41200 - Aviation Finance
- AT 48100 - Aviation Safety Problems
- AT 49401 - Capstone Project Proposal
- Aviation Management Selective - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

17 Credits

## Spring 4th Year

- AT 49501 - Applied Capstone Research Project
- Thematic Area Selective - Credit Hours: 3.00

- Cornerstone Level III Selective- Credit Hours: 3.00
- Aviation Management Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 13 Credits

## Note

2.0 Graduation GPA required for Bachelor of Science degree.

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

# Professional Flight Technology, BS

## About the Program

Purdue offers a bachelor's degree in professional flight that provides you with a larger perspective of the aviation industry. Your classes range from how an airplane is built to decision-making in the airline industry. 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 medical and student certificates possible during your time at Purdue.

[Flight \(Professional Flight Technology\) Website](#)

## Degree Requirements

# 120 Credits Required

Departmental/Program Major Courses (60 credits)

Required Major Courses (60 credits)

- AT 10000 - Introduction To Aviation Technology
- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- AT 14400 - Private Pilot Lectures
- AT 14500 - Private Pilot Flight
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 20300 - Aviation Operations Management
- AT 21000 - Ground Trainer I
- AT 21100 - Ground Trainer II
- AT 22300 - Human Factors For Flight Crews
- AT 24302 - Commercial Flight I Under Federal Aviation Regulations Part 141
- AT 24802 - Commercial Flight II Under Federal Aviation Regulations Part 141
- AT 24900 - Instrument Flight Lectures
- AT 25302 - Instrument Flight Under Federal Aviation Regulations Part 141
- AT 25400 - Commercial Flight Lectures
- AT 32501 - Advanced Aviation Meteorology
- AT 32700 - Advanced Transport Flight Operations
- AT 35300 - Multi-Engine Flight
- AT 35400 - Turbine Flight Operations Lecture
- AT 38800 - Large Aircraft Systems
- AT 39500 - Turbine Aircraft Simulation Laboratory
- AT 39600 - Turbine Aircraft Flight Laboratory
- AT 41600 - Airline Indoctrination
- AT 47500 - Aviation Law
- AT 48700 - Transport Aircraft Simulation Laboratory
- AT 49401 - Capstone Project Proposal
- AT 49501 - Applied Capstone Research Project

## Other Departmental /Program Course Requirements (52 credits)

- PHYS 22000 - General Physics (satisfies Science for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦ (satisfies Written Communication for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦  
(satisfies Oral Communication for core)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective for core)
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning Selective for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
- STAT 30100 - Elementary Statistical Methods
- 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 Foundational 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 (8 credits)

Any Course, any subject. Credit Hours: 8.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Click here for Aviation Technology Supplemental Information.

## Program Requirements

### Fall 1st Year

- AT 10000 - Introduction To Aviation Technology
- AT 10200 - Aviation Business
- AT 14400 - Private Pilot Lectures
- AT 14500 - Private Pilot Flight
- MA 15800 - Precalculus- Functions And Trigonometry
  
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦ or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦

16 Credits

## Spring 1st Year

- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- AT 24302 - Commercial Flight I Under Federal Aviation Regulations Part 141
- MA 16010 - Applied Calculus I
- TECH 12000 - Design Thinking In Technology
  
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦ or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦

14 Credits

## Fall 2nd Year

- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 20300 - Aviation Operations Management
- AT 21000 - Ground Trainer I
- AT 22300 - Human Factors For Flight Crews
- AT 24802 - Commercial Flight II Under Federal Aviation Regulations Part 141
- AT 24900 - Instrument Flight Lectures

15 Credits

## Spring 2nd Year

- AT 21100 - Ground Trainer II
- AT 25302 - Instrument Flight Under Federal Aviation Regulations Part 141
- AT 25400 - Commercial Flight Lectures
- PHYS 22000 - General Physics
- Thematic Area Selective - Credit Hours: 3.00
- Behavioral / Social Science Selective - Credit Hours: 3.00

16 Credits

## Fall 3rd Year

- AT 35300 - Multi-Engine Flight
- AT 35400 - Turbine Flight Operations Lecture
- STAT 30100 - Elementary Statistical Methods
- Cornerstone Level III Selective (satisfies Human Culture Humanities for core) - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits



## Spring 3rd Year

- AT 32501 - Advanced Aviation Meteorology
- AT 32700 - Advanced Transport Flight Operations
- AT 38800 - Large Aircraft Systems
- AT 39500 - Turbine Aircraft Simulation Laboratory
- AT 47500 - Aviation Law
- Cornerstone Level II Selective- Credit Hours: 3.00

16 Credits

## Fall 4th Year

- AT 39600 - Turbine Aircraft Flight Laboratory
- AT 49401 - Capstone Project Proposal
- Cornerstone Level III Selective- Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

14 Credits

## Spring 4th Year

- AT 41600 - Airline Indoctrination
- AT 48700 - Transport Aircraft Simulation Laboratory
- AT 49501 - Applied Capstone Research Project
- Science Foundational Selective - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

14 Credits

## Note

2.0 Graduation GPA required for Bachelor of Science degree.

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## 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

### Degree Requirements

## 120 Credits Required

### Departmental/Program Major Courses (59 credits)

#### Required Major Courses (59 credits)

- AT 10000 - Introduction To Aviation Technology
- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- AT 10900 - Unmanned Aerial Systems Design And Construction
- AT 11900 - Unmanned Aerial Systems Inspection And Repair
- AT 14400 - Private Pilot Lectures
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 20300 - Aviation Operations Management
- AT 20900 - Civilian Unmanned Aerial Systems
- AT 21900 - Unmanned Aerial Systems Design, Build, Test
- AT 28600 - National Airspace Systems Operations
- AT 30900 - Unmanned Autonomous Aerial Systems
- AT 31900 - Unmanned Aerial Systems Applications, Data And Documentation
- AT 40900 - Unmanned Aerial Systems Capstone I
- AT 41901 - Unmanned Aerial Systems Capstone II
- UAS Related Selectives - Credit Hours: 15.00

### Other Departmental /Program Course Requirements (52 credits)

- PHYS 22000 - General Physics (satisfies Science for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity ♦ (satisfies Written Communication for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦ (satisfies Oral Communication for core)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective for core)
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning Selective for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
- STAT 30100 - Elementary Statistical Methods
- 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 (9 credits)

Any Course, any subject. Credit Hours: 9.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Click here for Aviation Technology Supplemental Information.

Click here for Unmanned Aerial Systems Supplemental Information.

# Program Requirements

## Fall 1st Year

- AT 10000 - Introduction To Aviation Technology
- AT 10900 - Unmanned Aerial Systems Design And Construction
- AT 14400 - Private Pilot Lectures
- MA 15800 - Precalculus- Functions And Trigonometry
- TECH 12000 - Design Thinking In Technology

## 14 Credits

## Spring 1st Year

- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- AT 11900 - Unmanned Aerial Systems Inspection And Repair
- MA 16010 - Applied Calculus I
  
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦ or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦

## 15 Credits

## Fall 2nd Year

- AT 20300 - Aviation Operations Management
- AT 20900 - Civilian Unmanned Aerial Systems
- PHYS 22000 - General Physics
  
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦ or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦
  
- UAS Related Selective - Credit Hours 3.00

## 16 Credits

## Spring 2nd Year

- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 21900 - Unmanned Aerial Systems Design, Build, Test
- AT 28600 - National Airspace Systems Operations
- Cornerstone Level III Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Science Foundational Selective - Credit Hours: 3.00

15 Credits

### Fall 3rd Year

- AT 30900 - Unmanned Autonomous Aerial Systems
- STAT 30100 - Elementary Statistical Methods
- UAS Related Selective - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Behavioral/Social Science Selective - Credit Hours: 3.00

15 Credits

### Spring 3rd Year

- AT 31900 - Unmanned Aerial Systems Applications, Data And Documentation
- UAS Related Selective - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

### Fall 4th Year

- AT 40900 - Unmanned Aerial Systems Capstone I
- Cornerstone Level II Selective - Credit Hours: 3.00
- UAS Related Selective - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

### Spring 4th Year

- AT 41901 - Unmanned Aerial Systems Capstone II
- Cornerstone Level III Selective - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- UAS Related Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Notes

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.

2.0 Graduation GPA required for Bachelor of Science degree.

## 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.

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## Minor

### **Airframe and Powerplant Maintenance Minor**

#### Requirements for the Minor (12 credits)

##### Core Courses (12 credits)

- AT 36302 - Fundamentals Of Powerplant Systems
- AT 37200 - Aircraft Maintenance Practices
- AT 40200 - Aircraft Airworthiness Assurance
- AT 47200 - Advanced Composite Technology

#### Note:

This minor is available only to students majoring in Aeronautical Engineering Technology.

## Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

### **Unmanned Aerial Systems Minor**

## Requirements for the Minor (15 credits)

### Required Courses (15 credits)

- AT 20900 - Civilian Unmanned Aerial Systems
- AT 21900 - Unmanned Aerial Systems Design, Build, Test
- AT 28600 - National Airspace Systems Operations
- AT 30900 - Unmanned Autonomous Aerial Systems
- AT 31900 - Unmanned Aerial Systems Applications, Data And Documentation

### Note

This minor is available only to students in the School of Aviation and Transportation Technology.

### Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Program Information

## Aviation Technology Supplemental Information

### Behavioral/Social Science Foundational Selective

The following courses are approved to meet Globalization Requirements and satisfies Human Culture Behavioral/Social Science for core.

- AGR 20100 - Communicating Across Culture
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 23000 - Gender Across Cultures
- ANTH 37900 - Native American Cultures
- COM 22400 - Communicating In The Global Workplace
- HDFS 28000 - Diversity In Individual And Family Life
- HTM 37200 - Global Tourism Geography
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- PSY 12000 - Elementary Psychology
- SOC 10000 - Introductory Sociology
- WGSS 38000 - Gender And Multiculturalism

## Globalization

Globalization is a requirement for graduation and is embedded within the plan of study.

## Cornerstone Certificate

Cornerstone Certificate is a requirement for graduation and is embedded within the plan of study.

## Cornerstone Level III: Human Cultures Humanities Selective

Satisfies Human Cultures, Humanities for core.

- CLCS 33900 - Literature And The Law
- ENGL 32200 - Word, Image, Media
- ENGL 36700 - Mystery And Detective Fiction
- ENGL 37300 - Science Fiction And Fantasy
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 31505 - American Beauty
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 35205 - Death, Disease And Medicine In Twentieth Century American History
- HIST 36305 - The History Of Medicine And Public Health
- HIST 38001 - History Of United States Agriculture
- HIST 38400 - History Of Aviation
- HIST 38700 - History Of The Space Age
- HIST 39400 - Environmental History Of The United States
- HIST 47005 - Women And Health In America

## Economics Selectives

- CSR 34200 - Personal Finance
- ECON 21000 - Principles Of Economics
- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics

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

- Any University-approved minor
- 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, IT, MGMT, OBHR, OLS, POL, or TLI
- 12 consecutive credit hours in a foreign language

## Aviation Management



Aviation Management selectives may consist of and 30000, 40000, or 50000 level AT prefixed courses. In addition, AFT 35100 and 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.

## Airframe & Powerplant Certificate

- AENT students are highly encouraged to enroll in the following courses in order to receive the FAA A&P certificate.

These courses can be utilized to meet the Thematic Area graduation requirements.

- AT 36302 - Fundamentals Of Powerplant Systems
- AT 37200 - Aircraft Maintenance Practices
- AT 40200 - Aircraft Airworthiness Assurance
- AT 47200 - Advanced Composite Technology

## Internship

Internship is a requirement for graduation.

## Unmanned Aerial Systems Supplemental Information

### UAS Selectives

- AT 10600 - Basic Aircraft Science
- AT 20501 - Statics For Aerostructures
- AT 20802 - Aircraft Materials
- AT 24900 - Instrument Flight Lectures
- AT 26502 - Aircraft Electrical Systems
- AT 26700 - Fixed And Rotary Wing Assemblies
- AT 27200 - Introduction To Composite Technology
- AT 27800 - Nondestructive Testing For Aircraft
- AT 31000 - Aerospace Enterprise Organization
- AT 33502 - Avionics Systems
- AT 35900 - Airport Management
- AT 36900 - Air Traffic Control
- AT 38100 - Aviation Security
- AT 41001 - Aerospace Innovation
- AT 41200 - Aviation Finance
- AT 42101 - Managerial Economics In Aviation
- AT 45100 - Airport Operations
- AT 46200 - Occupational Certification And Licensure

- AT 47500 - Aviation Law
- AT 47900 - Control Tower Operator

# 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

[School of Construction Management Technology Website](#)

## 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](mailto:cminfo@purdue.edu)

## Graduate Information

For Graduate Information please see [Building Construction Management Graduate Program Information](#).

## Baccalaureate

## 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.

Accredited by the American Council for Construction Education (ACCE)

## Degree Requirements

# 120 Credits Required

### Departmental/Program Major Courses (61 credits)

- CM 10000 - Introduction To Construction Management ♦
- CM 11000 - Construction OSHA Ten-Hour Certification ♦
- CM 15000 - Construction Management Fundamentals ♦
- CM 20000 - Intermediate Pre-Construction Management ♦
- CM 21000 - Construction Management Portfolio I ♦
- CM 25000 - Intermediate Construction Management ♦
- CM 30000 - Advanced Pre-Construction Management ♦
- CM 35000 - Advanced Construction Management ♦
- CM 39000 - Construction Work Experience I ♦
- CM 40000 - Construction Capstone I ♦
- CM 41000 - Construction Management Portfolio II
- CM 45000 - Construction Capstone II ♦
- CM 49000 - Construction Work Experience II ♦

### Departmental/Program Other Course Requirements (54 credits)

- CGT 16400 - Graphics For Civil Engineering And Construction ♦
- ECON 21000 - Principles Of Economics (satisfies Human Cultures Behavioral/Social Science selective for core) or
- AGECE 21700 - Economics (satisfies Human Cultures Behavioral/Social Science selective for core)
- HIST 39400 - Environmental History Of The United States (satisfies Human Cultures Humanities for core)
- MA 15800 - Precalculus- Functions And Trigonometry ♦ (satisfies Quantitative Reasoning Selective for core)
- MA 16010 - Applied Calculus I ♦ (satisfies Quantitative Reasoning Selective for core)
- MGMT 20010 - Business Accounting ♦
- MGMT 45500 - Legal Background For Business I ♦
- PHIL 29000 - Environmental Ethics (satisfies Human Cultures Humanities for core)
  
- PHYS 22000 - General Physics (satisfies Science for core)
- POL 32700 - Global Green Politics (satisfies Human Cultures Behavioral/Social Science selective for core and meets part of Intercultural Requirement)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective as well as the Science, Technology and Society Selective for core)

- ENGL 42000 - Business Writing or
- ENGL 42100 - Technical Writing
  
- PHIL 41100 - Modern Ethical Theories or
- PHIL 42400 - Recent Ethical Theory
  
- Business Selective - Credit Hours: 3.00 (see CM list)
- Communication Foundation Selective (satisfies Oral Communication for core) - Credit Hours: 3.00
- English First Year Composition Selective (satisfies Written Communication for core) - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00 (see CM list)
- Science Lab Selective (satisfies second Science Selective for core) - Credit Hours: 3.00
- Intercultural Requirement - Credit Hours: 0.00

## Electives (5 credits)

Any course, any subject

## Additional Degree Requirements

Construction Management Supplemental Information.

## Concentration Requirement

Students will be required to choose an area of concentration prior to taking CM 30000.

Within the CM 20000 course, all students will be exposed to each of the concentration areas to gain insight before selecting their concentration (though students are permitted to select a concentration area any time prior to CM 30000). Students will receive specialized instruction relating to their concentration within the CM 30000 course. The student's capstone project in CM 40000 and CM 45000 will then focus on the student's area of concentration.

Students are only allowed to select ONE concentration area:

- Commercial Construction Management
- Demolition & Restoration Management in the Built Environment
- Healthcare Construction Management
- Mechanical & Electrical Construction Management
- Residential Construction Management

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society

- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click [here](#).

## Program Requirements

### Fall 1st Year

- CM 10000 - Introduction To Construction Management ♦
- CGT 16400 - Graphics For Civil Engineering And Construction ♦
- MA 15800 - Precalculus- Functions And Trigonometry ♦
- TECH 12000 - Design Thinking In Technology
- English First Year Composition or Communication Foundation Selective - Credit Hours: 3.00

14 Credits

### Spring 1st Year

- CM 15000 - Construction Management Fundamentals ♦
- CM 11000 - Construction OSHA Ten-Hour Certification ♦
- MA 16010 - Applied Calculus I ♦
- Communication Foundation or English First Year Composition Selective - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00

16 Credits

## Fall 2nd Year

- CM 20000 - Intermediate Pre-Construction Management ♦
- MGMT 20010 - Business Accounting ♦
- PHYS 22000 - General Physics

16 Credits

## Spring 2nd Year

- CM 25000 - Intermediate Construction Management ♦
- CM 21000 - Construction Management Portfolio I ♦
- PHIL 29000 - Environmental Ethics
- Laboratory Science selective - Credit Hours: 3.00

15.5 Credits

## Fall 3rd Year

- CM 30000 - Advanced Pre-Construction Management ♦
- HIST 39400 - Environmental History Of The United States  
Business Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- CM 35000 - Advanced Construction Management ♦
- CM 39000 - Construction Work Experience I ♦
- MGMT 45500 - Legal Background For Business I ♦
- POL 32700 - Global Green Politics

16 Credits

## Fall 4th Year

- CM 40000 - Construction Capstone I ♦
- ECON 21000 - Principles Of Economics or
- AGECE 21700 - Economics
- ENGL 42000 - Business Writing or
- ENGL 42100 - Technical Writing
- Elective - Credit Hours: 3.00

15 Credits

## Spring 4th Year

- CM 45000 - Construction Capstone II ♦
- CM 49000 - Construction Work Experience II ♦
- CM 41000 - Construction Management Portfolio II

- PHIL 41100 - Modern Ethical Theories or
- PHIL 42400 - Recent Ethical Theory
  
- Elective - Credits: 2.00

## 12.5 Credits

## Notes

- "C-" or better is required in all CM courses.
- 2.0 Graduation GPA required for Bachelor of Science degree.
- Any course taken at Purdue can be attempted no more than three times (inclusive of W, WF, WN, 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Minor

### **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 11000 - Construction OSHA Ten-Hour Certification



- CM 15000 - Construction Management Fundamentals
- CM 20000 - Intermediate Pre-Construction Management

## Notes

- All CM courses require a C- or higher.
- Course registration will be controlled by the School of Construction Management.
- Some CM minor courses may require an override from a CM advisor.
- Most CM core courses are only open to CM majors.
- All Non-CM majors can enroll in CM 10000, although this course is not required for the minor.
- 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.

## Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Program Information

### Construction Management Supplemental Information

#### English Composition First Year Selective

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity
- ENGL 10600 - First-Year Composition
- ENGL 10800 - Accelerated First-Year Composition

#### Communication Foundation Selective

- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World
- COM 11400 - Fundamentals Of Speech Communication
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

#### Lab Science Selective

- CHM 11100 - General Chemistry
- CHM 11200 - General Chemistry
- CHM 11500 - General Chemistry
- CHM 11600 - General Chemistry

- CHM 12500 - Introduction To Chemistry I
- CHM 12600 - Introduction To Chemistry II
- CHM 13600 - General Chemistry Honors
- CHM 20000 - Fundamentals Of Chemistry
- EAPS 11100 - Physical Geology
- EAPS 11200 - Earth Through Time
- PHYS 22100 - General Physics
- PHYS 27200 - Electric And Magnetic Interactions

## Management Selective

- MGMT 44301 - Management Of Human Resources
- OBHR 33000 - Introduction To Organizational Behavior
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 15200 - Business Principles For Organizational Leadership
- TLI 21300 - Project Management
- TLI 25300 - Principles Of Technology Strategy
- TLI 25400 - Leading Change In Technology Organizations

## Business Selective

- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- MGMT 20100 - Management Accounting I
- MGMT 32300 - Principles Of Marketing
- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods
- TLI 31600 - Statistical Quality Control

## Concentration Requirement

Students will be required to choose an area of concentration prior to taking CM 30000. Within the CM 20000 course, all students will be exposed to each of the concentration areas to gain insight before selecting their concentration (though students are permitted to select a concentration area any time prior to CM 30000). Students will receive specialized instruction relating to their concentration within the CM 30000 course. The student's capstone project in CM 40000 and CM 45000 will then focus on the student's area of concentration. Students are only allowed to select ONE concentration area. The five concentrations are:

COMMERCIAL CONSTRUCTION MANAGEMENT

DEMOLITION & RESTORATION MANAGEMENT IN THE BUILT ENVIRONMENT

HEALTHCARE CONSTRUCTION MANAGEMENT

MECHANICAL & ELECTRICAL CONSTRUCTION MANAGEMENT

RESIDENTIAL CONSTRUCTION MANAGEMENT

## 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.

## Construction Work Experience

A minimum of 800 hours of post high school construction work experience is required for graduation with a baccalaureate degree. Summer construction jobs, CM internships, or CM Co-op programs may be used to satisfy this requirement. To document your work hours, go to the CM website and look for Work Experience Form. Once forms have been completed and hours have been verified, students will be allowed to register for CM 39000 or CM 49000 depending on the number of work hours completed. Both CM 39000 and CM 49000 are required.

## Progression Policy

Students must meet the following requirements to progress in the CM major. Failure to meet these standards will require the student to CODO out of the School of Construction Management. CM 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.

### Appeal

Students that are not allowed to continue with CM courses due to the Progression Policy may make a written appeal to the Head of the School of Construction Management Technology if they believe there are extenuating circumstances that caused them to be dropped from the school.

### Departmental Policy

It is the responsibility of each student to assure that he or she fulfills the necessary pre-requisites and courses to meet graduation requirements. Questions may be directed to a CM advisor.

# 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**

Knoy 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](http://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](#)

## Degree Requirements

## 120 Credits Required

### Departmental/Program Major Courses (51 credits)

### Computer and Information Technology Required Major Courses (33 credits)

- CNIT 15501 - Introduction To Software Development Concepts ♦
- CNIT 17600 - Information Technology Architectures (satisfies Informational Literacy for core) ♦
- CNIT 18000 - Introduction To Systems Development ♦ (Gateway to CIT)
- CNIT 24200 - System Administration

- CNIT 25501 - Object-Oriented Programming Introduction ♦
- CNIT 27000 - Cybersecurity Fundamentals
- CNIT 27200 - Database Fundamentals ♦
- CNIT 28000 - Systems Analysis And Design Methods ♦
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- CNIT 48000 - Managing Information Technology Projects
- CNIT 37200 - Database Programming or
- CNIT 39200 - Enterprise Data Management

### Programming Selective (3 credits)

- CNIT 31500 - Systems Programming or
- CNIT 32500 - Object-Oriented Application Development

### Information Technology Selectives (15 credits)

**At least nine credits must be CNIT courses.**

- Any non-required CNIT 30000 level or higher courses or
- CGT 30000 level or higher courses or
- EPCS (3 credits) approved by CIT faculty

### Other Departmental /Program Course Requirements (66 credits)

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
<sup>1</sup>(satisfies Written Communication for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World  
<sup>2</sup>(satisfies Oral Communication for core)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy & Science, Technology & Society for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II (satisfies Quantitative Reasoning for core)
- TLI 11200 - Foundations Of Organizational Leadership
- Communications Selective<sup>5</sup> - Credit Hours: 3.00
- Economics Selective<sup>4</sup> - Credit Hours: 3.00
- Science Selective<sup>13</sup> - Credit Hours: 3.00 (satisfies Science for core)
- Lab Science Selective<sup>14</sup> - Credit Hours: 3.00 (satisfies Science for core)
- Accounting Selective<sup>3</sup> - Credit Hours: 3.00
- Statistics Selective<sup>7</sup> - Credit Hours: 3.00
- Professional Speaking Selective<sup>6</sup> - Credit Hours: 3.00
- Professional Writing Selective<sup>8</sup> - Credit Hours: 3.00
- Interdisciplinary Selective<sup>15</sup> - Credit Hours: 15.00
- General Business Selective<sup>9</sup> - Credit Hours: 3.00
- Humanities Selective<sup>10</sup> - Credit Hours: 3.00 (satisfies Human Cultures: Humanities for core)
- Behavioral/Social Science Foundational Selective<sup>11</sup> - Credit Hours: 3.00 (satisfies Human Culture Behavioral/Social Science for core)
- IT Professional Experience Requirement<sup>17</sup> - Credit Hours: 0.00

- Globalization Requirement<sup>18</sup> - Credit Hours: 0.00

## Additional Degree Requirements

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

## Elective (3 credits)

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

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, [click here](#).

## Program Requirements

### Fall 1st Year

- CNIT 18000 - Introduction To Systems Development ♦
- MA 16010 - Applied Calculus I
- TECH 12000 - Design Thinking In Technology
- TLI 11200 - Foundations Of Organizational Leadership
  
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

15 Credits

### Spring 1st Year

- CNIT 15501 - Introduction To Software Development Concepts ♦
- CNIT 17600 - Information Technology Architectures ♦
- MA 16020 - Applied Calculus II
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World
- Business Selective<sup>9</sup> - Credit Hours: 3.00

15 Credits

## Fall 2nd Year

- CNIT 27200 - Database Fundamentals ♦
- CNIT 28000 - Systems Analysis And Design Methods ♦
- Communications Selective<sup>5</sup> - Credit Hours: 3.00
- Economics Selective<sup>4</sup> - Credit Hours: 3.00
- Science Selective<sup>13</sup> - Credit Hours: 3.00

15 Credits

## Spring 2nd Year

- CNIT 24200 - System Administration
- CNIT 25501 - Object-Oriented Programming Introduction ♦
- CNIT 27000 - Cybersecurity Fundamentals
- Statistics Selective<sup>7</sup> - Credit Hours: 3.00
- Lab Science Selective<sup>14</sup> - Credit Hours: 3.00 (must take at least 3 credits of Science Selective with a Lab Component)

15 Credits

## Fall 3rd Year

- CNIT 31500 - Systems Programming or
- CNIT 32500 - Object-Oriented Application Development
- Information Technology Selective<sup>12</sup> - Credit Hours: 3.00
- Accounting Selective<sup>3</sup> - Credit Hours: 3.00
- Professional Speaking Selective<sup>6</sup> - Credit Hours: 3.00
- Interdisciplinary Selective<sup>15</sup> - Credit Hours: 3.00

## 15 Credits

### Spring 3rd Year

- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- CNIT 37200 - Database Programming or
- CNIT 39200 - Enterprise Data Management
- Information Technology Selective <sup>12</sup> - Credit Hours: 3.00
- Professional Writing Selective <sup>8</sup> - Credit Hours: 3.00
- Interdisciplinary Selective <sup>15</sup> - Credit Hours: 3.00

## 15 Credits

### Fall 4th Year

- CNIT 48000 - Managing Information Technology Projects
- Interdisciplinary Selective <sup>15</sup> - Credit Hours: 3.00
- Information Technology Selective <sup>12</sup> - Credit Hours: 3.00
- Information Technology Selective <sup>12</sup> - Credit Hours: 3.00
- Humanities Foundational Selective <sup>10</sup> - Credit Hours: 3.00

## 15 Credits

### Spring 4th Year

- Elective<sup>16</sup> - Credit Hours: 3.00
- Information Technology Selective <sup>12</sup> - Credit Hours: 3.00
- Interdisciplinary Selective<sup>15</sup> - Credit Hours: 3.00
- Interdisciplinary Selective<sup>15</sup> - Credit Hours: 3.00
- Behavioral/Social Sciences Foundational Selective<sup>11</sup> - Credit Hours: 3.00

## 15 Credits

### Notes

- <sup>1-18</sup> Students must select courses from Computer and Information Technology Supplemental Information.
- Students must earn a C- or better in all CNIT courses that are a prerequisite to another CNIT course
- 120 semester credits listed above are required for the Bachelor of Science degree
- 2.0 Graduation GPA required for Bachelor of Science degree
- 2.0 Graduation GPA in all CNIT courses required for Bachelor of Science degree
- ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, WN, I, and IF)
- Co-Curricular Requirements include the following:
  - Professional IT Experience
  - Globalization requirement



## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## 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](http://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](#)

## Degree Requirements

### 120 Credits Required

Departmental/Program Major Courses (66 credits)

## Computer and Information Technology Required Major Courses (60 credits)

- CNIT 15501 - Introduction To Software Development Concepts ♦
- CNIT 17600 - Information Technology Architectures ♦
- CNIT 18000 - Introduction To Systems Development (Gateway to CIT) ♦
- CNIT 24200 - System Administration ♦
- CNIT 25501 - Object-Oriented Programming Introduction
- CNIT 27000 - Cybersecurity Fundamentals ♦
- CNIT 27200 - Database Fundamentals
- CNIT 28000 - Systems Analysis And Design Methods
- CNIT 31500 - Systems Programming
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- CNIT 32200 - Research Methodology And Design
- CNIT 34010 - UNIX Fundamentals ♦
- CNIT 34220 - Network Administration ♦
- CNIT 34400 - Network Engineering Fundamentals ♦
- CNIT 37000 - Introduction To Cryptography ♦
- CNIT 42000 - Basic Cyber Forensics
- CNIT 42200 - Cyber Criminology
- CNIT 45500 - Network Security ♦
- CNIT 47000 - Incident Response Management ♦
- CNIT 47100 - Vulnerability Analysis And Testing
- CNIT 48000 - Managing Information Technology Projects ♦

## Cybersecurity Selectives (6 credits)

- CNIT 41500 - Advanced Coding Security
- CNIT 42100 - Small Scale Digital Device Forensics
- CNIT 45600 - Wireless Security And Management
- CNIT 51100 - Foundations In Homeland Security Studies
- CNIT 51200 - Managing Resources And Applications For Homeland Security (Cyber Conflict & Transnational Crime, Malware Forensics, Social Engineering Info Tech, Large Event Mgmt & Plan)

## Other Departmental /Program Course Requirements (54 credits)

- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II (satisfies Quantitative Reasoning for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity<sup>1</sup>(satisfies Written Communication for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World<sup>2</sup>(satisfies Oral Communication for core)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy and Science, Technology, & Society Selectives for core)
- TLI 11200 - Foundations Of Organizational Leadership
- Communications Selective<sup>5</sup> - Credit Hours: 3.00
- Economics Selective<sup>4</sup> - Credit Hours: 3.00

- Science Selective<sup>13</sup> - Credit Hours: 3.00
- Lab Science Selective<sup>14</sup> - Credit Hours: 3.00
- Accounting Selective<sup>3</sup> - Credit Hours: 3.00
- Statistics Selective<sup>7</sup> - Credit Hours: 3.00
- Professional Speaking Selective<sup>6</sup> - Credit Hours: 3.00
- Professional Writing Selective<sup>8</sup> - Credit Hours: 3.00
- Interdisciplinary Selective<sup>15</sup> - Credit Hours: 6.00
- Humanities Selective<sup>10</sup> (satisfies Human Cultures: Humanities for core) - Credit Hours: 3.00
- Behavioral/Social Science Foundational Selective<sup>11</sup> (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- IT Professional Experience Requirement<sup>17</sup> - Credit Hours: 0.00
- Globalization Requirement<sup>18</sup> - Credit Hours: 0.00

## Additional Degree Requirements

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

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the [Provost's Website](#).

## Prerequisite Information:

For current pre-requisites for courses, [click here](#).

## Program Requirements

### Fall 1st Year

- CNIT 18000 - Introduction To Systems Development ♦
- TLI 11200 - Foundations Of Organizational Leadership
- MA 16010 - Applied Calculus I
- TECH 12000 - Design Thinking In Technology
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or

- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

15 Credits

### Spring 1st Year

- CNIT 15501 - Introduction To Software Development Concepts ♦
- CNIT 17600 - Information Technology Architectures ♦
- MA 16020 - Applied Calculus II
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World
- Accounting Selective<sup>3</sup> - Credit Hours: 3.00

15 Credits

### Fall 2nd Year

- CNIT 24200 - System Administration ♦
- CNIT 27000 - Cybersecurity Fundamentals ♦
- CNIT 25501 - Object-Oriented Programming Introduction
- Economics Selective<sup>4</sup> - Credit Hours: 3.00
- Science Selective<sup>13</sup> - Credit Hours: 3.00

15 Credits

### Spring 2nd Year

- CNIT 27200 - Database Fundamentals
- CNIT 28000 - Systems Analysis And Design Methods
- Humanities Foundational Selective<sup>10</sup> - Credit Hours: 3.00
- Statistics Selective<sup>7</sup> - Credit Hours: 3.00
- Lab Science Selective<sup>14</sup> - Credit Hours: 3.00

15 Credits

### Fall 3rd Year

- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- CNIT 32200 - Research Methodology And Design
- CNIT 34010 - UNIX Fundamentals ♦
- CNIT 37000 - Introduction To Cryptography ♦
- Professional Speaking Selective<sup>6</sup> - Credit Hours: 3.00
- Interdisciplinary Selective<sup>15</sup> - Credit Hours: 3.00

## 16 Credits

### Spring 3rd Year

- CNIT 31500 - Systems Programming
- CNIT 34220 - Network Administration ♦
- CNIT 34400 - Network Engineering Fundamentals ♦
- Professional Writing Selective<sup>8</sup> - Credit Hours: 3.00
- Interdisciplinary Selective<sup>15</sup> - Credit Hours: 3.00

## 14 Credits

### Fall 4th Year

- CNIT 45500 - Network Security ♦
- CNIT 47000 - Incident Response Management ♦
- Cybersecurity Selective<sup>16</sup> - Credit Hours: 3.00
- Cybersecurity Selective<sup>16</sup> - Credit Hours: 3.00
- Communications Selective<sup>5</sup> - Credit Hours: 3.00

## 15 Credits

### Spring 4th Year

- CNIT 42000 - Basic Cyber Forensics
- CNIT 42200 - Cyber Criminology
- CNIT 47100 - Vulnerability Analysis And Testing
- CNIT 48000 - Managing Information Technology Projects ♦
- Behavioral/Social Sciences Foundational Selective<sup>11</sup> - Credit Hours: 3.00

## 15 Credits

## Notes

- <sup>1-18</sup> Students must select courses from Computer Engineering Technology Supplemental Information.
- Students must earn a C- or better in all CNIT courses that are a prerequisite to another CNIT course
- 120 semester credits listed above are required for the Bachelor of Science degree
- 2.0 Graduation GPA required for Bachelor of Science degree
- 2.0 Graduation GPA in all CNIT courses required for Bachelor of Science degree
- ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, WN, I, and IF)
- Co-Curricular Requirements include the following:
  - Professional IT Experience
  - Globalization requirement

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## 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, [www.abet.org](http://www.abet.org).

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

### Degree Requirements

## 120 Credits Required

### Departmental/Program Major Courses (60 credits)

### Computer and Information Technology Major Courses (54 credits)

- CNIT 15501 - Introduction To Software Development Concepts ♦
- CNIT 17600 - Information Technology Architectures ♦
- CNIT 18000 - Introduction To Systems Development (Gateway to CIT) ♦
- CNIT 24000 - Data Communications And Networking ♦
- CNIT 24200 - System Administration ♦
- CNIT 25501 - Object-Oriented Programming Introduction ♦
- CNIT 27000 - Cybersecurity Fundamentals
- CNIT 27200 - Database Fundamentals

- CNIT 28000 - Systems Analysis And Design Methods
- CNIT 31500 - Systems Programming
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- CNIT 34000 - UNIX Administration ♦
- CNIT 34210 - Storage Area Networking ♦
- CNIT 34220 - Network Administration ♦
- CNIT 34500 - Internetwork Design And Implementation ♦
- CNIT 34600 - Wireless Networks ♦
- CNIT 45500 - Network Security ♦
- CNIT 48000 - Managing Information Technology Projects

## Information Technology Selectives (6 credits)

**At least three credits must be CNIT courses.**

- Any non-required CNIT 30000 level or higher courses, or
- CGT 30000 level or higher courses, or
- EPCS (3 credits) approved by CIT faculty

## Other Departmental /Program Course Requirements (60 credits)

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
<sup>1</sup>(satisfies Written Communication for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World  
<sup>2</sup>(satisfies Oral Communication for core)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy, Science, Technology, & Society Selectives for core)
- PHYS 22000 - General Physics (satisfies Science for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- PHYS 22100 - General Physics (satisfies Science for core)
- MA 16020 - Applied Calculus II (satisfies Quantitative Reasoning for core)
- TLI 11200 - Foundations Of Organizational Leadership
- Communications Selective<sup>5</sup> - Credit Hours: 3.00
- Economics Selective<sup>4</sup> - Credit Hours: 3.00
- Accounting Selective<sup>3</sup> - Credit Hours: 3.00
- Statistics Selective<sup>7</sup> - Credit Hours: 3.00
- Professional Speaking Selective<sup>6</sup> - Credit Hours: 3.00
- Professional Writing Selective<sup>8</sup> - Credit Hours: 3.00
- Interdisciplinary Selective<sup>15</sup> - Credit Hours: 7.00
- General Business Selective<sup>9</sup> - Credit Hours: 3.00
- Humanities Selective<sup>10</sup> - Credit Hours: 3.00
- Behavioral/Social Science Foundational Selective<sup>11</sup> - Credit Hours: 3.00 (satisfies Human Culture Behavioral/Social Science for core)
- IT Professional Experience Requirement<sup>17</sup> - Credit Hours: 0.00
- Globalization Requirement<sup>18</sup> - Credit Hours: 0.00

## Additional Degree Requirements

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

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, [click here](#).

## Program Requirements

### Fall 1st Year

- CNIT 18000 - Introduction To Systems Development ♦
- MA 16010 - Applied Calculus I
- TECH 12000 - Design Thinking In Technology
- TLI 11200 - Foundations Of Organizational Leadership
  
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

### 15 Credits

### Spring 1st Year

- CNIT 15501 - Introduction To Software Development Concepts ♦
- CNIT 17600 - Information Technology Architectures ♦
- MA 16020 - Applied Calculus II
  
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity
  
- Business Selective<sup>9</sup> - Credit Hours: 3.00



## 15 Credits

### Fall 2nd Year

- CNIT 24000 - Data Communications And Networking ♦
- CNIT 27200 - Database Fundamentals
- CNIT 28000 - Systems Analysis And Design Methods
- PHYS 22000 - General Physics
- Accounting Selective<sup>3</sup> - Credit Hours: 3.00

## 16 Credits

### Spring 2nd Year

- CNIT 24200 - System Administration ♦
- CNIT 25501 - Object-Oriented Programming Introduction ♦
- CNIT 27000 - Cybersecurity Fundamentals
- PHYS 22100 - General Physics
- Statistics Selective<sup>7</sup> - Credit Hours: 3.00

## 16 Credits

### Fall 3rd Year

- CNIT 34000 - UNIX Administration ♦
- CNIT 34500 - Internetwork Design And Implementation ♦
- Interdisciplinary Selective<sup>15</sup> - Credit Hours: 3.00
- Professional Speaking Selective<sup>6</sup> - Credit Hours: 3.00
- Economics Selective<sup>4</sup> - Credit Hours: 3.00

## 16 Credits

### Spring 3rd Year

- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- CNIT 34210 - Storage Area Networking ♦
- CNIT 34220 - Network Administration ♦
- CNIT 34600 - Wireless Networks ♦
- Professional Writing Selective<sup>8</sup> - Credit Hours: 3.00

## 14 Credits

### Fall 4th Year

- CNIT 45500 - Network Security ♦

- CNIT 48000 - Managing Information Technology Projects
- Interdisciplinary Selective<sup>15</sup> - Credit Hours: 3.00
- Communications Selective<sup>5</sup> - Credit Hours: 3.00
- Humanities Foundational Selective<sup>10</sup> - Credit Hours: 3.00

## 14 Credits

### Spring 4th Year

- CNIT 31500 - Systems Programming
- Information Technology Selective<sup>12</sup> - Credit Hours: 3.00
- Information Technology Selective<sup>12</sup> - Credit Hours: 3.00
- Interdisciplinary Selective<sup>15</sup> - Credit Hours: 2.00
- Behavioral/Social Sciences Foundational Selective<sup>11</sup> - Credit Hours: 3.00

## 14 Credits

### Notes

- <sup>1-18</sup> See Network Engineering Technology Supplemental Information for courses.
- Students must earn a C- or better in all CNIT courses that are a prerequisite to another CNIT course
- 120 semester credits listed above are required for the Bachelor of Science degree
- 2.0 Graduation GPA required for Bachelor of Science degree
- 2.0 Graduation GPA in all CNIT courses required for Bachelor of Science degree
- ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, WN, I, and IF)
- Co-Curricular Requirements include the following:
  - Professional IT Experience
  - Globalization requirement

### 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Systems Analysis and Design, BS

# About the Program

The 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, [www.abet.org](http://www.abet.org).

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.

Systems Analysis and Design Website

## Degree Requirements

### 120 Credits Required

#### Departmental/Program Major Courses (51 credits)

#### Computer and Information Technology Required Major Courses (39 credits)

- CNIT 15501 - Introduction To Software Development Concepts ♦
- CNIT 17600 - Information Technology Architectures ♦
- CNIT 18000 - Introduction To Systems Development (Gateway to CIT) ♦
- CNIT 24200 - System Administration
- CNIT 25501 - Object-Oriented Programming Introduction ♦
- CNIT 27000 - Cybersecurity Fundamentals
- CNIT 27200 - Database Fundamentals ♦
- CNIT 28000 - Systems Analysis And Design Methods ♦
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- CNIT 38000 - Advanced Analysis And Design ♦
- CNIT 39200 - Enterprise Data Management
- CNIT 48000 - Managing Information Technology Projects
- CGT 25600 - Principles Of User Experience Design

#### Programming Selective (3 credits)

- CNIT 31500 - Systems Programming or
- CNIT 32500 - Object-Oriented Application Development

#### Information Technology Selective (3 credits)

- Any non-required CNIT 30000 level or higher courses

## SAAD Selectives (6 credits)

- CNIT 38301 - Packaged Application Software Solutions
- CNIT 38501 - Advanced Systems Design And Integration
- CNIT 40500 - Software Development Methodologies

## Other Departmental /Program Course Requirements (69 credits)

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity (satisfies Written Communication for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World (satisfies Oral Communication for core)
- PHIL 15000 - Principles Of Logic
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective & Science, Technology, and Society Selectives for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
- MA 16020 - Applied Calculus II (satisfies Quantitative Reasoning Selective for core)
- TLI 11200 - Foundations Of Organizational Leadership
- Communications Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Science Selective (satisfies Science for core) - Credit Hours: 3.00
- Lab Science Selective (satisfies Science for core) - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Professional Speaking Selective - Credit Hours: 3.00
- Professional Writing Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 15.00
- General Business Selective - Credit Hours: 3.00
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- IT Professional Experience Requirement - Credit Hours: 0.00
- Globalization Requirement - Credit Hours: 0.00
- Accounting Selective - Credit Hours: 3.00
- Humanities Selective (satisfies Human Cultures: Humanities for core) - Credit Hours: 3.00

## Additional Degree Requirements

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

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society

- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Program Requirements

### Fall 1st Year

- CNIT 18000 - Introduction To Systems Development ♦
- MA 16010 - Applied Calculus I
- TECH 12000 - Design Thinking In Technology
- TLI 11200 - Foundations Of Organizational Leadership
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

### 15 Credits

### Spring 1st Year

- CNIT 15501 - Introduction To Software Development Concepts ♦
- CNIT 17600 - Information Technology Architectures ♦
- MA 16020 - Applied Calculus II
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World
- Business Selective - Credit Hours: 3.00

### 15 Credits

### Fall 2nd Year

- CNIT 24200 - System Administration
- CNIT 25501 - Object-Oriented Programming Introduction ♦
- CNIT 27000 - Cybersecurity Fundamentals
- PHIL 15000 - Principles Of Logic
- Science Selective - Credit Hours: 3.00 \*

15 Credits

### Spring 2nd Year

- CNIT 27200 - Database Fundamentals ♦
- CNIT 28000 - Systems Analysis And Design Methods ♦
- Statistics Selective - Credit Hours: 3.00
- Communications Selective - Credit Hours: 3.00
- Lab Science Selective - Credit Hours: 3.00

15 Credits

### Fall 3rd Year

- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- CNIT 38000 - Advanced Analysis And Design ♦
- CNIT 31500 - Systems Programming or
- CNIT 32500 - Object-Oriented Application Development
  
- Accounting Selective - Credit Hours: 3.00
- Professional Speaking Selective - Credit Hours: 3.00

15 Credits

### Spring 3rd Year

- CGT 25600 - Principles Of User Experience Design
- CNIT 39200 - Enterprise Data Management
- SAAD Selective - Credit Hours: 3.00
- Professional Writing Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 3.00

15 Credits

### Fall 4th Year

- Interdisciplinary Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 3.00
- SAAD Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Humanities Foundational Selective - Credit Hours: 3.00

15 Credits

### Spring 4th Year

- CNIT 48000 - Managing Information Technology Projects
- Information Technology Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 3.00
- Behavioral/Social Sciences Foundational Selective - Credit Hours: 3.00

## 15 Credits

## Notes

- Students must earn a C- or better in all CNIT courses that are a prerequisite to another CNIT course
- 120 semester credits listed above are required for the Bachelor of Science degree
- 2.0 Graduation GPA required for Bachelor of Science degree
- 2.0 Graduation GPA in all CNIT courses required for Bachelor of Science degree
- ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, WN, I, and IF)
- Courses with the ♦ are essential for the CIT degree critical path to graduation
- Co-Curricular Requirements include the following:
  - Professional IT Experience
  - Globalization requirement

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Certificate

### Applications in Data Science Certificate

The "Applications in Data Science" Undergraduate Certificate program will ensure all Purdue students have foundational knowledge of Data Science that they utilize "in situ" within their chosen contexts. Students who earn this certificate will have a foundation in Statistical Methods and Computation as well as Data Literacy, Management, and Analytics and will apply their foundational skills in related courses in their areas of interest.

### Requirements for the Certificate (16 credits)

## Core Courses (10 credits)

### Foundation in Statistical Methods - Choose One (3 credits)

- BIOL 39500 - Experimental Design and Quantitative Analysis in the Life Science
- BIOL 58210 - Ecological Statistics
- BIOL 59500 - Experimental Design and Quantitative Analysis in the Life Science
- ECE 30200 - Probabilistic Methods In Electrical And Computer Engineering
- ECON 36000 - Econometrics
- EAPS 31000 - Introductory Statistics For Geosciences
- IE 49000 - Special Topics In Industrial Engineering
- MGMT 30500 - Business Statistics
- MGMT 30600 - Management Science
- PSY 20100 - Introduction To Statistics In Psychology
- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods
- STAT 35000 - Introduction To Statistics
- STAT 35500 - Statistics For Data Science
- STAT 50100 - Experimental Statistics I
- STAT 50300 - Statistical Methods For Biology
- STAT 51100 - Statistical Methods

### Foundation in Computation - Choose One (3 credits)

- ASM 10500 - Agricultural Systems Computations And Communication
- CNIT 13600 - Personal Computing Technology And Applications
- CNIT 17600 - Information Technology Architectures
- CS 10100 - Digital Literacy
- CS 15800 - C Programming
- CS 15900 - C Programming
- CS 17700 - Programming With Multimedia Objects
- CS 18000 - Problem Solving And Object-Oriented Programming
- ECE 46900 - Operating Systems Engineering
- ECE 47300 - Introduction To Artificial Intelligence
- IE 33200 - Computing In Industrial Engineering
- MGMT 28800 - Programming For Business Applications

### Foundation in Data Literacy, Management, and Analytics - Choose One (3 credits)

- BIOL 59500 - High Performance Computing for Life Science
- CNIT 48800 - Data Warehousing
- CNIT 57000 - IT Data Analytics
- CS 24200 - Introduction To Data Science
- ECE 29595 - Selected Topics In Electrical And Computer Engineering
- ECE 30010 - Introduction To Machine Learning And Pattern Recognition



- ECE 36800 - Data Structures
- ECE 47300 - Introduction To Artificial Intelligence
- ENTM 24200 - Data Science
- MGMT 38200 - Management Information Systems
- MGMT 54400 - Database Management Systems
- PSY 30500 - Understanding And Analyzing Psychological Data
- STAT 24200 - Introduction To Data Science

### Foundation in Data Ethics and Digital Citizenship - Choose One (1-4 credits)

- CS 29000 - Topics In Computer Sciences
- ILS 29500 - Special Topics In Information And Data Science
- PHIL 20700 - Ethics For Technology, Engineering, And Design
- PHIL 20800 - Ethics Of Data Science
- PHIL 29000 - Environmental Ethics
- PHIL 29300 - Selected Topics In Philosophy

### Application Focus (6 credits)

Students need to complete six (6) credit hours in courses concentrated on applications of data science related knowledge.

### Agriculture

- AGEC 30500 - Agricultural Prices
- AGEC 32100 - Principles Of Commodity Marketing
- AGEC 35200 - Quantitative Techniques For Firm Decision Making
- AGEC 42100 - Advanced Commodity Marketing
- AGEC 45100 - Applied Econometrics
- AGEC 50600 - Agricultural Marketing And Price Analysis
- AGEC 51600 - Mathematical Tools For Agricultural And Applied Economics
- AGEC 55200 - Introduction To Mathematical Programming
- AGRY 32000 - Genetics
- AGRY 44400 - Weather Analysis And Forecasting
- AGRY 53000 - Advanced Plant Genetics
- AGRY 54500 - Remote Sensing Of Land Resources
- AGRY 59800 - Special Problems
- ANSC 31100 - Animal Breeding
- ANSC 51100 - Population Genetics
- ASM 42200 - Advanced Machine Technology For Agricultural Crop Production
- ASM 54000 - Geographic Information System Application
- ASM 59100 - Special Topics
- BCHM 49500 - Special Assignments
- BTNY 30200 - Plant Ecology
- BTNY 53500 - Plant Disease Management
- ENTM 30100 - Experimentation And Analysis
- ENTM 41000 - Applied Insect Biology

- ENTM 41001 - Insects Of Urban Landscapes
- ENTM 41002 - Insects Of Agricultural Crops
- ENTM 51000 - Insect Pest Management
- FNR 21000 - Natural Resource Information Management
- FNR 34800 - Wildlife Investigational Techniques
- FNR 35500 - Quantitative Methods For Resource Management
- FNR 35700 - Fundamental Remote Sensing
- FNR 35900 - Spatial Ecology And GIS
- FNR 38400 - Statistics For Natural Resources
- FNR 48800 - Global Environmental Issues
- FNR 55000 - Fisheries Stock Assessment And Modeling
- FNR 55800 - Remote Sensing Analysis And Applications
- FS 44400 - Statistical Process Control
- FS 44600 - Food Process Automation
- HORT 55100 - Plant Responses To The Environment
- HORT 59000 - Special Studies In Horticulture

## Education

- EDCI 27000 - Introduction To Educational Technology And Computing
- EDCI 52800 - Human Performance Technology
- EDCI 55700 - Assessment Of Culturally And Linguistically Diverse Students
- EDCI 56400 - Integration And Management Of Technology For Learning
- EDCI 57700 - Strategic Assessment And Evaluation
- EDPS 32700 - Classroom Assessment
- EDPS 53100 - Introduction To Measurement And Instrument Design
- EDPS 53300 - Introduction To Educational Research I: Methodology
- EDPS 53400 - Introduction To Educational Research II: Measurement Consideration
- EDPS 55600 - Introduction To Quantitative Data Analysis Methods In Education I
- EDPS 55700 - Introduction To Quantitative Data Analysis Methods In Education II

## Engineering

- AAE 36100 - Introduction To Random Variables In Engineering
- ABE 20500 - Computations For Engineering Systems
- ABE 30100 - Numerical And Computational Modeling In Biological Engineering
- ABE 31400 - Design Of Electronic Systems
- ABE 45000 - Finite Element Method In Design And Optimization
- ABE 46000 - Sensors And Process Control
- ABE 52700 - Computer Models In Environmental And Natural Resources Engineering
- ABE 53100 - Instrumentation And Data Acquisition
- BME 40100 - Mathematical & Computational Analysis Of Complex System Dynamics In Biology, Medicine, & Healthcare
- CE 40800 - Geographic Information Systems In Engineering
- CHE 32000 - Statistical Modeling And Quality Enhancement
- CHE 45000 - Design And Analysis Of Processing Systems
- ECE 30200 - Probabilistic Methods In Electrical And Computer Engineering

- ECE 30834 - Fundamentals Of Computer Graphics
- ECE 43800 - Digital Signal Processing With Applications
- ECE 44000 - Transmission Of Information
- ECE 47300 - Introduction To Artificial Intelligence
- ECE 57700 - Engineering Aspects Of Remote Sensing
- IDE 36000 - Multidisciplinary Engineering Statistics
- IE 33000 - Probability And Statistics In Engineering II
- IE 33200 - Computing In Industrial Engineering
- IE 33500 - Operations Research - Optimization
- IE 33600 - Operations Research - Stochastic Models
- ME 36500 - Measurement And Control Systems I

## Health and Human Sciences

- CSR 54400 - Informatics For Healthcare Leaders
- CSR 54500 - Health Economics
- CSR 54600 - Operations Management For Healthcare Administration
- HK 44500 - Principles Of Epidemiology
- HK 51000 - Introduction To The Quantitative Methods Of Public Health
- HK 56700 - Epidemiology For Public Health Practice
- HTM 50200 - Management Information Systems For The Hospitality Industry
- HTM 50300 - Business Statistics And Quantitative Analysis In Hospitality
- PSY 20200 - Introduction To Quantitative Topics In Psychology
- PSY 39200 - Special Topics In Psychology
- PSY 51400 - Introduction To Mathematical Psychology
- PSY 59100 - Topics In Psychology
- PSY 62901 - fMRI Design And Analysis

## Management

- ECON 25200 - Macroeconomics
- ECON 32500 - Economics Of Sports
- ECON 35200 - Intermediate Macroeconomics
- ECON 36000 - Econometrics
- ECON 47100 - Behavioral Economics
- ECON 48500 - Economics Of Racial And Gender Discrimination
- ECON 49900 - Senior Honors Thesis
- ECON 51000 - Game Theory
- ECON 51200 - Intermediate Economics II
- ECON 56200 - Econometrics I
- ECON 57300 - Financial Econometrics
- ECON 57400 - Microeconometrics
- ECON 58500 - Behavioral Economics
- ECON 59000 - Problems In Economics
- MGMT 30500 - Business Statistics
- MGMT 30600 - Management Science
- MGMT 38200 - Management Information Systems

- MGMT 40500 - Six Sigma And Quality Analytics
- MGMT 42110 - Marketing Analytics
- MGMT 46300 - Supply Chain Analytics
- MGMT 47200 - Advanced Spreadsheet Modeling And Simulation
- MGMT 47900 - Data Visualization
- MGMT 48800 - Data-Driven Decisions In Digital Markets
- MGMT 52500 - Marketing Analytics
- MGMT 54400 - Database Management Systems
- MGMT 59000 - Directed Readings In Management
- MGMT 47300 - Data Mining
- MGMT 47400 - Predictive Analytics

## Polytechnic

- AT 31900 - Unmanned Aerial Systems Applications, Data And Documentation
- CGT 31301 - The Business Of Managing Digital Product Data
- CGT 35600 - Web Programming, Development And Data Integration
- CGT 45600 - Advanced Web Programming, Development And Data Integration
- CGT 46000 - Building Information Modeling For Commercial Construction
- CGT 37000 - Interactive Data Visualization
- CGT 37700 - Scientific Visualization
- CGT 47000 - Data Visualization Studio
- CGT 51200 - Foundational Readings Of User Experience Design
- CGT 67000 - Applications In Visual Analytics
- CGT 58100 - Workshop In Computer Graphics Technology
- CGT 52000 - Computer Graphics Programming
- CGT 52100 - Advanced Real-Time Computer Graphics
- CNIT 37200 - Database Programming
- CNIT 39200 - Enterprise Data Management
- CNIT 48101 - Topics In Computer Information Technology IV
- CNIT 48700 - Database Administration
- CNIT 55900 - Data Warehousing
- CNIT 57000 - IT Data Analytics
- CNIT 58100 - Workshop In Computer Technology
- CNIT 62300 - Contemporary Computer Technology Problems
- ECET 32700 - Instrumentation And Data Acquisition Design
- ECET 35901 - Computer Based Data Acquisition Applications
- IT 44500 - Problem-Solving With Automatic Data Collection
- TECH 53300 - Design Theory And Technology

## Science

- AGRY 60000 - Genomics
- BIOL 31200 - Great Issues Genomics And Society
- BIOL 39500 - Special Assignments
- BIOL 44207 - Exploration Of Protein Structure
- BIOL 44400 - Human Genetics

- BIOL 47800 - Introduction to Bioinformatics
- BIOL 56310 - Protein Bioinformatics
- BIOL 58210 - Ecological Statistics
- BIOL 59500 - Special Assignments
- BIOL 61100 - Crystallography Of Macromolecules
- CS 30700 - Software Engineering I
- CS 34800 - Information Systems
- CS 37300 - Data Mining And Machine Learning
- CS 47300 - Web Information Search And Management
- CS 49000 - Topics In Computer Sciences For Undergraduates
- CS 59000 - Topics In Computer Sciences
- EAPS 30900 - Computer-Aided Analysis For Geosciences
- EAPS 32000 - Physics Of Climate
- EAPS 42000 - Global Change Modeling
- EAPS 50700 - Introduction To Analysis And Computing With Geoscience Data
- EAPS 50900 - Data Analysis Techniques In Earth And Atmospheric Sciences
- EAPS 51000 - Climate Time Series Analysis
- EAPS 52300 - Radar Meteorology
- EAPS 53000 - Extreme Weather And Climate: Science And Risk
- EAPS 54000 - Introduction To Geodesy
- EAPS 54100 - Geodetic Data And Applications
- EAPS 55700 - Introduction To Seismology
- EAPS 55900 - Topics In Seismology
- EAPS 59100 - Advanced Topics In Earth And Atmospheric Sciences

## Note

A minimum of 6 credits must be in coursework outside the student's program.

## Minor

### **Computer and Information Technology Minor**

#### Requirements for the Minor (15 credits)

#### Required Courses (15 credits)

- CNIT 18000 - Introduction To Systems Development
- 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 required course (Click here for Computer and Information Technology, BS )
- 2.0 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:
  1. CNIT 10500, or CNIT 17500 (does not count as substitution)
  2. CS 17700, CS 18000, CGT 21500 or any 3.00 credit programming course at Purdue (counts as a substitution)
- CNIT 13600 cannot be used to fulfill the minor requirements
- Course requisites (pre-requisites, concurrent pre-requisites, and restrictions) must be met
- 30000 level courses require permission from CIT Advisor
- Minors will be accommodated during open registration periods.
- The CIT minor can be attached to any Purdue University major that will accommodate or allow it.

## Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Program Information

### CIT Supplemental Information

All Pre-requisites must be met

#### 1 Composition Selective

- ENGL 10600 - First-Year Composition
- ENGL 10800 - Accelerated First-Year Composition

#### 2 Oral Communications Selective

- COM 11400 - Fundamentals Of Speech Communication

#### 3 Accounting Selective

- MGMT 20000 - Introductory Accounting (Required for MGMT Minor)
- MGMT 20010 - Business Accounting

#### 4 Economics Selective

- AGECE 21700 - Economics  
or

- ECON 21000 - Principles Of Economics (Credit cannot be earned for both AGEC 21700 and ECON 21000)
- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics

## 5 Communications Selective

- COM 21000 - Debating Public Issues
- COM 21200 - Approaches To The Study Of Interpersonal Communication
- COM 30300 - Intercultural Communication
- COM 31400 - Advanced Presentational Speaking
- COM 31500 - Speech Communication Of Technical Information
- COM 31800 - Principles Of Persuasion
- COM 32000 - Small Group Communication
- COM 32400 - Introduction To Organizational Communication

## 6 Professional Speaking Selective

- COM 31500 - Speech Communication Of Technical Information
- COM 32000 - Small Group Communication
- COM 32400 - Introduction To Organizational Communication
- COM 41500 - Discussion Of Technical Problems

## 7 Statistics Selective

- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods
- STAT 51100 - Statistical Methods

## 8 Professional Writing Selective

- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

## Humanities Foundational Selective

See <http://www.purdue.edu/provost/initiatives/curriculum/course.html> (**Human Cultures: Humanities (H)**)

## Behavioral/Social Sciences Foundational Selective

See <http://www.purdue.edu/provost/initiatives/curriculum/course.html> (**Human Cultures: Behavioral/Social Sciences (BSS)**)

## Science Selective

See approved list at: <http://www.purdue.edu/provost/initiatives/curriculum/course.html> (Science(S))

## Lab Science Selective

**(must take at least 3 credits of Science Selective with a Lab Component)**

See <http://www.purdue.edu/provost/initiatives/curriculum/course.html> (Science (S)). **Verify the course has a lab component in myPurdue Schedule of Classes.**

The following courses are typically offered with a lab component:

- ASTR 26300 - Descriptive Astronomy: The Solar System
- ASTR 26400 - Descriptive Astronomy: Stars And Galaxies
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II
- BIOL 13500 - First Year Biology Laboratory
- BIOL 14501 - First Year Biology Laboratory With Neuro Research Project
- BIOL 14600 - Introduction To Biology
- BIOL 20300 - Human Anatomy And Physiology
- BIOL 20400 - Human Anatomy And Physiology
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry
- CHM 11200 - General Chemistry
- CHM 11500 - General Chemistry
- CHM 11600 - General Chemistry
- CHM 12500 - Introduction To Chemistry I
- CHM 12600 - Introduction To Chemistry II
- CHM 12901 - General Chemistry With A Biological Focus
- CHM 13600 - General Chemistry Honors
- CHM 20000 - Fundamentals Of Chemistry
- EAPS 10200 - Earth Science For Elementary Teachers
- EAPS 10900 - The Dynamic Earth
- EAPS 11100 - Physical Geology
- EAPS 11200 - Earth Through Time
- EAPS 24300 - Earth Materials I
- EAPS 24400 - Earth Materials II
- ENTM 22810 - Forensic Investigation
- ENTM 22820 - Forensic Analysis
- HORT 10100 - Fundamentals Of Horticulture
- PHYS 17200 - Modern Mechanics
- PHYS 21500 - Physics For Elementary Education
- PHYS 22000 - General Physics
- PHYS 22100 - General Physics
- PHYS 27200 - Electric And Magnetic Interactions
- SLHS 30600 - Introduction To Phonetics

## Interdisciplinary Selectives (6 credits)



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

## Cybersecurity Selectives (6 credits)

- CNIT 41500 - Advanced Coding Security
- CNIT 42100 - Small Scale Digital Device Forensics
- CNIT 45600 - Wireless Security And Management
- CNIT 51100 - Foundations In Homeland Security Studies
- CNIT 58100 - Workshop In Computer Technology Malware Forensics
- CNIT 58100 - Workshop In Computer Technology Cyber Conflict & Transnational Crime

## Professional IT Experience Requirement

(Complete one of the following options)

- Professional IT internship (six week minimum duration)
- 240 hours of IT employment
- 240 hours of documented volunteer IT work
- Service Learning Course (EPCS, CNIT 39000, or Equivalent) with responsibility for an IT component (3 credit hours minimum)

\*A three page reflection paper on what you learned from your experience is required for all options - submit to CIT-Prof-IT@purdue.edu

## Globalization Requirement

(Complete one of the following options)

- Complete any university-sponsored study abroad program lasting at least 7 days\*
- Complete an internship or approved international research project that involves at least 7 days of international travel\*
- Provide documentation of having lived/traveled outside home country for at least 15 days after a student's 12th birthday\*

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

- Earn credit in Level I and II courses (6 credit hours) in any one foreign language

- Earn six credit hours in foreign culture study:
- AGECE 34000 - International Economic Development
- AGR 20100 - Communicating Across Culture
- ANTH 20500 - Human Cultural Diversity
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- CLCS 18100 - Classical World Civilizations
- COM 30400 - Quantitative Methods For Communication Research
- HIST 24300 - South Asian History And Civilizations
- HIST 24500 - Introduction To The Middle East History And Culture
- HIST 25000 - United States Relations With The Middle East And North Africa
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 34000 - Modern China
- HIST 34400 - History Of Modern Japan
- HTM 37200 - Global Tourism Geography
- POL 23100 - Introduction To United States Foreign Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 23700 - Modern Weapons And International Relations
- POL 32700 - Global Green Politics
- POL 34500 - West European Democracies In The Post-Industrial Era
- SOC 33800 - Global Social Movements
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- WGSS 38000 - Gender And Multiculturalism

## **Computer and Information Technology Supplemental Information**

All Pre-requisites must be met

### **1 Composition Selective**

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

### **2 Oral Communications Selective**

- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

### **3 Accounting Selective**

- MGMT 20000 - Introductory Accounting (Required for MGMT Minor)
- MGMT 20010 - Business Accounting

## 4 Economics Selective

- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics
  
- AGECE 21700 - Economics or
- ECON 21000 - Principles Of Economics (Credit cannot be earned for both AGECE 21700 and ECON 21000)

## 5 Communications Selective

- COM 22400 - Communicating In The Global Workplace
- COM 25100 - Communication, Information, And Society

## 6 Professional Speaking Selective

- COM 31500 - Speech Communication Of Technical Information
- COM 41500 - Discussion Of Technical Problems

## 7 Statistics Selective

- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods
- STAT 50100 - Experimental Statistics I
- STAT 51100 - Statistical Methods

## 8 Professional Writing Selective

- ENGL 41900 - Multimedia Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

## 9 Business Selective

- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems
- TLI 15200 - Business Principles For Organizational Leadership

## 10 Humanities Foundational Selective

**Three credits required from following list:**

See <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

**Human Cultures: Humanities (HUM)**

## 11 Behavioral/Social Sciences Foundational Selective

Three credits required from following list:

See <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

**Human Cultures: Behavioral/Social Sciences (BSS)**

## 12 Information Technology Selectives (15 credits)

- 15 Credits Required
- Any non-required CNIT 30000 level or higher courses, or
- CGT 30000 level or higher courses, or
- EPCS (3 credits) approved by CIT faculty

**At least nine credits must be CNIT courses.**

## 13 Science Selective

See approved list at: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

**Science(SCI)**

## 14 Lab Science Selective

**(must take at least 3 credits of Science Selective with a Lab Component)**

See <http://www.purdue.edu/provost/initiatives/curriculum/course.html> (Science (SCI)). **Verify the course has a lab component in myPurdue Schedule of Classes.**

The following courses are **typically** offered with a lab component:

- ASTR 26300 - Descriptive Astronomy: The Solar System
- ASTR 26400 - Descriptive Astronomy: Stars And Galaxies
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II
- BIOL 13500 - First Year Biology Laboratory
- BIOL 14501 - First Year Biology Laboratory With Neuro Research Project
- BIOL 14600 - Introduction To Biology
- BIOL 20300 - Human Anatomy And Physiology
- BIOL 20400 - Human Anatomy And Physiology
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry
- CHM 11200 - General Chemistry
- CHM 11500 - General Chemistry
- CHM 11600 - General Chemistry
- CHM 12500 - Introduction To Chemistry I

- CHM 12600 - Introduction To Chemistry II
- CHM 12901 - General Chemistry With A Biological Focus
- CHM 13600 - General Chemistry Honors
- CHM 20000 - Fundamentals Of Chemistry
- EAPS 10200 - Earth Science For Elementary Teachers
- EAPS 10900 - The Dynamic Earth
- EAPS 11100 - Physical Geology
- EAPS 11200 - Earth Through Time
- EAPS 24300 - Earth Materials I
- EAPS 24400 - Earth Materials II
- ENTM 22810 - Forensic Investigation
- ENTM 22820 - Forensic Analysis
- HORT 10100 - Fundamentals Of Horticulture
- PHYS 17200 - Modern Mechanics
- PHYS 21500 - Physics For Elementary Education
- PHYS 22000 - General Physics
- PHYS 22100 - General Physics
- PHYS 27200 - Electric And Magnetic Interactions
- SLHS 30600 - Introduction To Phonetics

## 15 Interdisciplinary Selectives

### **Interdisciplinary Selectives (15 credits)**

*Any University recognized non-computing minor with at least 15 credits or a department approved set of related courses in which Information Technology can be applied.*

see <http://www.admissions.purdue.edu/majors/minors.php>

## 16 Elective

Any non-remedial course: see <https://polytechnic.purdue.edu/sites/default/files/files/NoCreditCourses.pdf>

## 17 Professional IT Experience Requirement

(Complete one of the following options)

- Professional IT internship (six week minimum duration)
- 240 hours of IT employment
- 240 hours of documented volunteer IT work

\*A three page reflection paper on what you learned from your experience is required for all options - submit to CIT-Prof-IT@purdue.edu

- CNIT 39000 - Supervised Practicum
- Service Learning Course (EPCS, CNIT 39000, or Equivalent) with responsibility for an IT component (3 credit hours minimum)

## 18 Globalization Requirement

[Click here for Globalization Requirement CIT.](#)

## **Cybersecurity Supplemental Information**

All Pre-requisites must be met

### **1 Composition Selective**

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

### **2 Oral Communications Selective**

- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

### **3 Accounting Selective**

- MGMT 20000 - Introductory Accounting (Required for MGMT Minor)
- MGMT 20010 - Business Accounting

### **4 Economics Selective**

- AGECE 21700 - Economics  
or
- ECON 21000 - Principles Of Economics (Credit cannot be earned for both AGECE 21700 and ECON 21000)
- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics

### **5 Communications Selective**

- COM 22400 - Communicating In The Global Workplace
- COM 25100 - Communication, Information, And Society

### **6 Professional Speaking Selective**

- COM 31500 - Speech Communication Of Technical Information
- COM 41500 - Discussion Of Technical Problems

### **7 Statistics Selective**

- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods
- STAT 50100 - Experimental Statistics I
- STAT 51100 - Statistical Methods

## 8 Professional Writing Selective

- ENGL 41900 - Multimedia Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

## 10 Humanities Foundational Selective

**Three credits required from following list:**

See <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

**Human Cultures: Humanities (HUM)**

## 11 Behavioral/Social Sciences Foundational Selective

**Three credits required from following list:**

See <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

**Human Cultures: Behavioral/Social Sciences (BSS)**

## 13 Science Selective

See approved list at: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

**Science(SCI)**

## 14 Lab Science Selective

**(must take at least 3 credits of Science Selective with a Lab Component)**

See <http://www.purdue.edu/provost/initiatives/curriculum/course.html> **Science (SCI). Verify the course has a lab component in myPurdue Schedule of Classes.**

The following courses are **typically** offered with a lab component:

- ASTR 26300 - Descriptive Astronomy: The Solar System
- ASTR 26400 - Descriptive Astronomy: Stars And Galaxies
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II
- BIOL 13500 - First Year Biology Laboratory
- BIOL 14501 - First Year Biology Laboratory With Neuro Research Project
- BIOL 14600 - Introduction To Biology
- BIOL 20300 - Human Anatomy And Physiology
- BIOL 20400 - Human Anatomy And Physiology
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry

- CHM 11200 - General Chemistry
- CHM 11500 - General Chemistry
- CHM 11600 - General Chemistry
- CHM 12500 - Introduction To Chemistry I
- CHM 12600 - Introduction To Chemistry II
- CHM 12901 - General Chemistry With A Biological Focus
- CHM 13600 - General Chemistry Honors
- CHM 20000 - Fundamentals Of Chemistry
- EAPS 10200 - Earth Science For Elementary Teachers
- EAPS 10900 - The Dynamic Earth
- EAPS 11100 - Physical Geology
- EAPS 11200 - Earth Through Time
- EAPS 24300 - Earth Materials I
- EAPS 24400 - Earth Materials II
- ENTM 22810 - Forensic Investigation
- ENTM 22820 - Forensic Analysis
- HORT 10100 - Fundamentals Of Horticulture
- PHYS 17200 - Modern Mechanics
- PHYS 21500 - Physics For Elementary Education
- PHYS 22000 - General Physics
- PHYS 22100 - General Physics
- PHYS 27200 - Electric And Magnetic Interactions
- SLHS 30600 - Introduction To Phonetics

## 15 Interdisciplinary Selectives (6 credits)

### Interdisciplinary Selectives (6 credits)

*Any University recognized non-computing minor with at least 6 credits or a department approved set of related courses in which Information Technology can be applied.*

see <http://www.admissions.purdue.edu/majors/minors.php>

*Suggested minors include:*

- *Forensic Science*
- *Law & Society*
- *Psychology*
- ECET 35901 - Computer Based Data Acquisition Applications
- ENTM 22810 - Forensic Investigation
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- MGMT 25400 - Legal Foundations Of Business I
- MGMT 45500 - Legal Background For Business I
- PSY 27200 - Introduction To Industrial-Organizational Psychology
- PSY 31000 - Sensory And Perceptual Processes
- PSY 34200 - Introduction To Psychology Of Personality
- PSY 35000 - Abnormal Psychology
- SOC 32400 - Criminology
- SOC 32700 - Crime, Deviance And Mass Media



- SOC 32800 - Criminal Justice
- SOC 33800 - Global Social Movements

## 16 Cybersecurity Selectives (6 credits)

- CNIT 41500 - Advanced Coding Security
- CNIT 42100 - Small Scale Digital Device Forensics
- CNIT 45600 - Wireless Security And Management
- CNIT 51100 - Foundations In Homeland Security Studies
- CNIT 51200 - Managing Resources And Applications For Homeland Security
- CNIT 58100 - Malware Forensics
- CNIT 58100 - Workshop In Computer Technology
- CNIT 58100 - Cyber Conflict & Transnational Crime
- CNIT 58100 - Social Engineering Info Tech
- CNIT 58100 - Large Event Mgmt & Plan HLS

## 17 Professional IT Experience Requirement

- Professional IT internship (six week minimum duration)
- 240 hours of IT employment
- 240 hours of documented volunteer IT work

\*A three page reflection paper on what you learned from your experience is required for all options - submit to CIT-Prof-IT@purdue.edu

- CNIT 39000 - Supervised Practicum
- Service Learning Course (EPCS, CNIT 39000, or Equivalent) with responsibility for an IT component (3 credit hours minimum)

## 18 Globalization Requirement

[Click here for Globalization Requirement CIT.](#)

## **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 12<sup>th</sup> 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
- AAS 37300 - Issues In African American Studies
- AGECE 34000 - International Economic Development
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CLCS 18100 - Classical World Civilizations
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 36800 - Sociolinguistic Study Of African American English
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 24300 - South Asian History And Civilizations
- HIST 24500 - Introduction To The Middle East History And Culture
- HIST 25000 - United States Relations With The Middle East And North Africa
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33400 - Science And Society In Western Civilization II
- HIST 33805 - History Of Human Rights
- HIST 34000 - Modern China
- HIST 34400 - History Of Modern Japan

- HIST 35000 - Science And Society In The Twentieth Century World
  - HIST 36600 - Hispanic Heritage Of The United States
  - HIST 37700 - History And Culture Of Native America
  - HIST 46900 - Black Civil Rights Movement
  - HIST 49900 - History Internship
  - HTM 37000 - Sustainable Tourism And Responsible Travel
  - HTM 37200 - Global Tourism Geography
  - MSL 20100 - Individual Leadership Studies
  - OLS 35000 - Creativity In Business And Industry
  - PHIL 11400 - Global Moral Issues
  - PHIL 43500 - Philosophy Of Mind
  - POL 22200 - Women, Politics, And Public Policy
  - POL 23100 - Introduction To United States Foreign Policy
  - POL 23500 - International Relations Among Rich And Poor Nations
  - POL 23700 - Modern Weapons And International Relations
  - POL 32600 - Black Political Participation In America
  - POL 32700 - Global Green Politics
  - POL 34500 - West European Democracies In The Post-Industrial Era
  - POL 36000 - Women And The Law
  - POL 41300 - The Human Basis Of Politics
  - POL 42300 - International Environmental Policy
  - POL 42900 - Contemporary Political Problems
  - POL 43300 - International Organization
  - PSY 12000 - Elementary Psychology
  - PSY 25100 - Health Psychology
  - PSY 32200 - Neuroscience Of Motivated Behavior
  - SOC 10000 - Introductory Sociology
  - SOC 31000 - Racial And Ethnic Diversity
  - SOC 33800 - Global Social Movements
  - SOC 33900 - Introduction To The Sociology Of Developing Nations
  - TECH 33000 - Technology And The Global Society
  - TLI 11200 - Foundations Of Organizational Leadership
  - TLI 31400 - Leading Innovation In Organizations
  - WGSS 28200 - Introduction To LGBT Studies
  - WGSS 38000 - Gender And Multiculturalism
  - WGSS 38300 - Women And Work
- 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
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics

- POL 36000 - Women And The Law
  - POL 41300 - The Human Basis Of Politics
  - POL 42300 - International Environmental Policy
  - POL 42900 - Contemporary Political Problems
  - POL 43300 - International Organization
  - SOC 10000 - Introductory Sociology
  - SOC 31000 - Racial And Ethnic Diversity
  - SOC 33900 - Introduction To The Sociology Of Developing Nations
  - TECH 33000 - Technology And The Global Society
  - WGSS 28200 - Introduction To LGBT Studies
  - WGSS 38000 - Gender And Multiculturalism
  - WGSS 38300 - Women And Work
- Any foreign language 20000 level or higher (20100, 20200, 30100, 30200, 40100, 40200)

## **Network Engineering Technology Supplemental Information**

All Pre-requisites must be met

### **1 Composition Selective**

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

### **2 Oral Communications Selective**

- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

### **3 Accounting Selective**

- MGMT 20000 - Introductory Accounting (Required for MGMT Minor)
- MGMT 20010 - Business Accounting

### **4 Economics Selective**

- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics
- AGEC 21700 - Economics or
- ECON 21000 - Principles Of Economics (Credit cannot be earned for both AGEC 21700 and ECON 21000)

### **5 Communications Selective**

- COM 22400 - Communicating In The Global Workplace
- COM 25100 - Communication, Information, And Society

## 6 Professional Speaking Selective

- COM 31500 - Speech Communication Of Technical Information
- COM 41500 - Discussion Of Technical Problems

## 7 Statistics Selective

- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods
- STAT 50100 - Experimental Statistics I
- STAT 51100 - Statistical Methods

## 8 Professional Writing Selective

- ENGL 41900 - Multimedia Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

## 9 Business Selective

- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems
- TLI 15200 - Business Principles For Organizational Leadership

## 10 Humanities Foundational Selective

**Three credits required from following list:**

See <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

**Human Cultures: Humanities (HUM)**

## 11 Behavioral/Social Sciences Foundational Selective

**Three credits required from following list:**

See <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

**Human Cultures: Behavioral/Social Sciences (BSS)**

## 12 Information Technology Selective (6 Credits)

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

**At least three credit hours must be CNIT courses**

## 15 Interdisciplinary Selectives (7 credits)

### **Interdisciplinary Selectives (7 credits)**

*Any University recognized non-computing minor with at least 7 credits or a department approved set of related courses in which Information Technology can be applied.*

see <http://www.admissions.purdue.edu/majors/minors.php>

## 17 Professional IT Experience Requirement

(Complete one of the following options)

- Professional IT internship (six week minimum duration)
- 240 hours of IT employment
- 240 hours of documented volunteer IT work

\*A three page reflection paper on what you learned from your experience is required for all options - submit to CIT-Prof-IT@purdue.edu

- CNIT 39000 - Supervised Practicum
- Service Learning Course (EPCS, CNIT 39000, or Equivalent) with responsibility for an IT component (3 credit hours minimum)

## 18 Globalization Requirement

[Click here for Globalization Requirement CIT.](#)

## **Systems Analysis and Design Supplemental Information**

All Pre-requisites must be met

### 1 Composition Selective

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

### 2 Oral Communications Selective

- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

### 3 Accounting Selective

- MGMT 20000 - Introductory Accounting (Required for MGMT Minor)
- MGMT 20010 - Business Accounting

### 4 Economics Selective

- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics
- AGECE 21700 - Economics  
or
- ECON 21000 - Principles Of Economics (Credit cannot be earned for both AGECE 21700 and ECON 21000)

## 5 Communications Selective

- COM 22400 - Communicating In The Global Workplace
- COM 25100 - Communication, Information, And Society

## 6 Professional Speaking Selective

- COM 31500 - Speech Communication Of Technical Information
- COM 41500 - Discussion Of Technical Problems

## 7 Statistics Selective

- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods
- STAT 50100 - Experimental Statistics I
- STAT 51100 - Statistical Methods

## 8 Professional Writing Selective

- ENGL 41900 - Multimedia Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

## 9 Business Selective

- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems
- TLI 15200 - Business Principles For Organizational Leadership

## 10 Humanities Foundational Selective

**Three credits required from the following list:**

See <http://www.purdue.edu/provost/initiatives/curriculum/course.html> **Human Cultures: Humanities (HUM)**

## 11 Behavioral/Social Sciences Foundational Selective

**Three credits required from the following list:**



See <http://www.purdue.edu/provost/initiatives/curriculum/course.html> **Human Cultures: Behavioral/Social Sciences (BSS)**

## 12 Information Technology Selective (15 credits)

- 15 Credits Required
- Any other CNIT 30000 level or higher courses, or
- CGT 30000 level or higher courses, or
- EPCS (3 credits) approved by CIT faculty

**At least nine credits must be CNIT courses.**

## 13 Science Selective

See approved list at: <http://www.purdue.edu/provost/initiatives/curriculum/course.html> **Science (SCI)**

## 14 Lab Science Selective

**(must take at least 3 credits of Science Selective with a Lab Component)**

See <http://www.purdue.edu/provost/initiatives/curriculum/course.html> **Science (SCI). Verify the course has a lab component in myPurdue Schedule of Classes.**

The following courses are **typically** offered with a lab component:

- ASTR 26300 - Descriptive Astronomy: The Solar System
- ASTR 26400 - Descriptive Astronomy: Stars And Galaxies
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II
- BIOL 13500 - First Year Biology Laboratory
- BIOL 14501 - First Year Biology Laboratory With Neuro Research Project
- BIOL 14600 - Introduction To Biology
- BIOL 20300 - Human Anatomy And Physiology
- BIOL 20400 - Human Anatomy And Physiology
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry
- CHM 11200 - General Chemistry
- CHM 11500 - General Chemistry
- CHM 11600 - General Chemistry
- CHM 12500 - Introduction To Chemistry I
- CHM 12600 - Introduction To Chemistry II
- CHM 12901 - General Chemistry With A Biological Focus
- CHM 13600 - General Chemistry Honors
- CHM 20000 - Fundamentals Of Chemistry
- EAPS 10200 - Earth Science For Elementary Teachers
- EAPS 10900 - The Dynamic Earth

- EAPS 11100 - Physical Geology
- EAPS 11200 - Earth Through Time
- EAPS 24300 - Earth Materials I
- EAPS 24400 - Earth Materials II
- ENTM 22810 - Forensic Investigation
- ENTM 22820 - Forensic Analysis
- HORT 10100 - Fundamentals Of Horticulture
- PHYS 17200 - Modern Mechanics
- PHYS 21500 - Physics For Elementary Education
- PHYS 22000 - General Physics
- PHYS 22100 - General Physics
- PHYS 27200 - Electric And Magnetic Interactions
- SLHS 30600 - Introduction To Phonetics

## 15 Interdisciplinary Selectives (15 credits)

### Interdisciplinary Selectives (15 credits)

**Any University recognized non-computing minor with at least 15 credits or a department approved set of related courses in which Information Technology can be applied.**

see <http://www.admissions.purdue.edu/majors/minors.php>

## 16 SAAD Selectives (6 credits)

- CNIT 38301 - Packaged Application Software Solutions
- CNIT 38501 - Advanced Systems Design And Integration
- CNIT 40500 - Software Development Methodologies

## 17 Professional IT Experience Requirement

(Complete one of the following options)

- Professional IT internship (six week minimum duration)
- 240 hours of IT employment
- 240 hours of documented volunteer IT work

\*A three page reflection paper on what you learned from your experience is required for all options - submit to CIT-Prof-IT@purdue.edu

- CNIT 39000 - Supervised Practicum
- Service Learning Course (EPCS, CNIT 39000, or Equivalent) with responsibility for an IT component (3 credit hours minimum)

## 18 Globalization Requirement

Click here for Globalization Requirement CIT.

# 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, 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

## Degree Requirements

# 120 Credits Required

### Departmental/Program Major Courses (41 credits)

#### Required Major Courses (32 credits)

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 14100 - Internet Foundations Technologies And Development ♦
- CGT 21500 - Computer Graphics Programming I ♦
- CGT 24100 - Introduction to Computer Animation
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34100 - Motion for Computer Animation
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 44200 - Production for Computer Animation
- CGT 45001 - Computer Graphics Professional Practices II
- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

#### Major Selectives\* - Select 3 (9 credits)

- CGT Selective - Credit Hours: 3.00
- CGT Selective - Credit Hours: 3.00
- CGT Selective - 30000 Level or higher - Credit Hours: 3.00

#### Other Departmental/Program Course Requirements (64 credits)

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
*(satisfies Written Communication for core & a Cornerstone Area A)*
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World  
*(satisfies Oral Communication for core & a Cornerstone Area A)*
- ECON 21000 - Principles Of Economics *(satisfies Human Culture Behavior/Social Science for core)*
- MA 15800 - Precalculus- Functions And Trigonometry *(satisfies Quantitative Reasoning Selective for core)*
- MA 16010 - Applied Calculus I ♦ *(satisfies Quantitative Reasoning Selective for core)*
- MGMT 45500 - Legal Background For Business I
- PHYS 22000 - General Physics *(satisfies Science for core)*
- PSY 12000 - Elementary Psychology *(satisfies Human Culture Behavioral/Social Science for core)*

- TECH 12000 - Design Thinking In Technology (*satisfies Information Literacy AND Science, Technology & Society Selective for core*)
- Human Cultures (satisfies Humanities for Core & a Cornerstone Selective) - Credit Hours: 3.00
- Humanities Elective (possible Cornerstone Selective) - Credit Hours: 6.00
- Science Selective (satisfies Science Selective for core) - Credit Hours: 3.00
- Advanced English Selective (possible Cornerstone Selective) - Credit Hours: 3.00
- Statistics Selective - 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 (15 Credits)

Any Course, any subject. Credit Hours: 15.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

Click here for Animation Supplemental Course Information.

Cornerstone Certificate Required. Click here for Cornerstone Certificate.

## Program Requirements

### Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology

- CGT 11800 - Fundamentals Of Imaging Technology
- TECH 12000 - Design Thinking In Technology
- MA 15800 - Precalculus- Functions And Trigonometry
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

14 Credits

### Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 14100 - Internet Foundations Technologies And Development ♦
- PHYS 22000 - General Physics
- MA 16010 - Applied Calculus I ♦
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

16 Credits

### Fall 2nd Year

- CGT 21500 - Computer Graphics Programming I ♦
- PSY 12000 - Elementary Psychology
- Human Cultures: Humanities Core - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

### Spring 2nd Year

- CGT 24100 - Introduction to Computer Animation
- CGT 25001 - Computer Graphics Professional Practices I
- ECON 21000 - Principles Of Economics
- CGT Selective - Credit Hours: 3.00
- Science Foundational Selective Core - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

### Fall 3rd Year

- CGT 34000 - Digital Lighting And Rendering for Computer Animation

- CGT Selective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 15 Credits

### Spring 3rd Year

- CGT 34100 - Motion for Computer Animation
- CGT Selective - Credit Hours: 3.00
- CGT Globalization Selective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00

## 15 Credits

### Fall 4th Year

- CGT 44200 - Production for Computer Animation
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- MGMT 45500 - Legal Background For Business I
- Humanities Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

## 17 Credits

### Spring 4th Year

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

## 12 Credits

### Notes

- Students must earn a "C-" or better in all CGT courses.
- 120 semester credits & 2.00 Graduation GPA required for Bachelor of Science degree.
- 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
- 32 credit hours of 30000 or 40000 level Purdue courses for graduation.

- Cornerstone Certificate required with this major.

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

# 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.

[Building Information Modeling Website](#)

## Degree Requirements

# 120 Credits Required

Departmental/Program Major Courses (41 credits)

Required Major Courses (32 credits)

- CGT 10101 - Foundations Of Computer Graphics Technology



- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 14100 - Internet Foundations Technologies And Development
- CGT 21500 - Computer Graphics Programming I
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 26200 - Introduction To Construction Graphics
- CGT 36000 - Applications Of Construction Documentation I
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- CGT 46000 - Building Information Modeling For Commercial Construction
- CGT 46200 - Applications Of Construction Documentation II
- 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 (64 credits)

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity (*satisfies Written Communication for core & a Cornerstone Area A*)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World (*satisfies Oral Communication for core & a Cornerstone Area A*)
- ECON 21000 - Principles Of Economics (*satisfies Human Culture Behavior/Social Science for core*)
- MA 15800 - Precalculus- Functions And Trigonometry (*satisfies Quantitative Reasoning Selective for core*)
- MA 16010 - Applied Calculus I (*satisfies Quantitative Reasoning Selective for core*)
- MGMT 45500 - Legal Background For Business I
- PHYS 22000 - General Physics (*satisfies Science for core*)
- PSY 12000 - Elementary Psychology (*satisfies Human Culture Behavioral/Social Science for core*)
- TECH 12000 - Design Thinking In Technology (*satisfies Information Literacy AND Science, Technology & Society Selective for core*)
- Human Cultures Selective (*satisfies Humanities for Core & a Cornerstone Selective*) - Credit Hours: 3.00
- Humanities Elective (possible Cornerstone Selective) - Credit Hours: 6.00
- Science Selective (*satisfies Science Selective for core*) - Credit Hours: 3.00
- Advanced English Selective (possible Cornerstone Selective) - Credit Hours: 3.00
- Statistics Selective - 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 (15 credits)

Any course, any subject. Credit Hours: 15.00

## Additional Degree Requirements

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

Cornerstone Certificate required. [Click here for Cornerstone Certificate.](#)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the [Provost's Website](#).

## Prerequisite Information:

For current pre-requisites for courses, [click here](#).

## Program Requirements

### Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- MA 15800 - Precalculus- Functions And Trigonometry
- TECH 12000 - Design Thinking In Technology
  
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

14 Credits

### Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 14100 - Internet Foundations Technologies And Development ♦
- MA 16010 - Applied Calculus I ♦
- PHYS 22000 - General Physics
  
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

16 Credits

### Fall 2nd Year

- CGT 21500 - Computer Graphics Programming I ♦
- CGT 26200 - Introduction To Construction Graphics
- PSY 12000 - Elementary Psychology
- Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

### Spring 2nd Year

- CGT 36000 - Applications Of Construction Documentation I
- CGT 25001 - Computer Graphics Professional Practices I
- ECON 21000 - Principles Of Economics
- Human Cultures: Humanities Core - Credit Hours: 3.00
- Science Foundational Selective Core - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

### Fall 3rd Year

- CGT 46200 - Applications Of Construction Documentation II
- CGT Selective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

### Spring 3rd Year

- CGT 46000 - Building Information Modeling For Commercial Construction
- CGT Selective - Credit Hours: 3.00

- CGT Globalization Selective - Credit Hours: 3.00
- Statistics 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
- MGMT 45500 - Legal Background For Business I
- CGT Selective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

## 17 Credits

### Spring 4th Year

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

## 12 Credits

## Notes

- Students must earn a "C-" or better in all CGT courses.
- 120 semester credit hours & 2.0 Graduation GPA required for Bachelor of Science degree.
- 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.32 Credit Hours of 30000 or 40000 level Purdue courses for graduation.
- Cornerstone Certificate is required with this major.

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## 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
- DTVS Website: <https://polytechnic.purdue.edu/degrees/data-visualization>

### Degree Requirements

## 120 Credits Required

### Departmental/Program Major Courses (41 credits)

## Required Major Courses (35 credits)

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11600 - Geometric Modeling For Visualization And Communication ♦
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 14100 - Internet Foundations Technologies And Development ♦
- CGT 21500 - Computer Graphics Programming I
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 25600 - Principles Of User Experience Design
- CGT 27000 - Introduction To Data Visualization
- CGT 37000 - Interactive Data Visualization
- CGT 37700 - Scientific Visualization
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- CGT 47000 - Data Visualization Studio
- 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 - Credit Hours: 3.00

## Other Departmental/Program Course Requirements (64 credits)

- AD 10500 - Design I
- ECON 21000 - Principles Of Economics (*satisfies Human Culture Behavior/Social Science for core*)
- MA 15800 - Precalculus- Functions And Trigonometry (*satisfies Quantitative Reasoning Selective for core*)
- MA 16010 - Applied Calculus I ♦ (*satisfies Quantitative Reasoning Selective for core*)
- MGMT 45500 - Legal Background For Business I
- PHYS 22000 - General Physics (*satisfies Science for core*)
- PSY 12000 - Elementary Psychology (*satisfies Human Culture Behavioral/Social Science for Core*)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity (*satisfies Written Communication for core & a Cornerstone Area A*)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World (*satisfies Oral Communication for core & a Cornerstone Area A*)
- STAT 30100 - Elementary Statistical Methods (*satisfies Human Culture Behavioral/Social Science for core*)
- TECH 12000 - Design Thinking In Technology (*satisfies Information Literacy AND Science, Technology & Society for core*)
- Human Cultures Selective (*satisfies Humanities for Core & a Cornerstone Selective*) - Credit Hours: 3.00
- Humanities Elective (possible Cornerstone Selective) - Credit Hours: 3.00
- Science Selective - Credit Hours: 3.00
- CGT Global Selective (possible Cornerstone Selective) - Credit Hours: 3.00

- Advanced English 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 (15 credits)

Any course, any subject. Credit Hours: 15.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

Click here for Data Visualization Supplemental Course Information.

Cornerstone Certificate requirements. Click here for Cornerstone Certificate.

## Program Requirements

### Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- MA 15800 - Precalculus- Functions And Trigonometry
- TECH 12000 - Design Thinking In Technology
  
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

## 14 Credits

### Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication ♦
- CGT 14100 - Internet Foundations Technologies And Development ♦
- MA 16010 - Applied Calculus I ♦
- PSY 12000 - Elementary Psychology
  
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

## 15 Credits

### Fall 2nd Year

- AD 10500 - Design I
- CGT 21500 - Computer Graphics Programming I
- PHYS 22000 - General Physics
- Human Cultures: Humanities Core - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

## 16 Credits

### Spring 2nd Year

- CGT 25600 - Principles Of User Experience Design
- CGT 27000 - Introduction To Data Visualization
- CGT 25001 - Computer Graphics Professional Practices I
- ECON 21000 - Principles Of Economics
- Science Foundational Selective Core - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 16 Credits

### Fall 3rd Year

- CGT 37700 - Scientific Visualization
- STAT 30100 - Elementary Statistical Methods
- CGT Selective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 15 Credits



## Spring 3rd Year

- CGT 37000 - Interactive Data Visualization
- 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
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- MGMT 45500 - Legal Background For Business I
- Humanities Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 14 Credits

## Spring 4th Year

- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- 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

## Notes

- Students must earn C- or better in CGT Courses
- 120 semester credit hours & 2.00 Graduation GPA required for Bachelor of Science degree
- 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
- 32 hours of 30000 or 40000 level Purdue courses for graduation
- Cornerstone Certificate is required with this major.

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Game Development and Design, 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 studies 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. See examples at [www.gamesinnovation.org](http://www.gamesinnovation.org).

Game Studies Website

### Degree Requirements

### 120 Credits Required

#### Departmental/Program Major Courses (41 credits)

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 14100 - Internet Foundations Technologies And Development ♦
- CGT 20500 - Portfolio Review
- CGT 21500 - Computer Graphics Programming I ♦
- CGT 24100 - Introduction to Computer Animation
- CGT 24500 - Game Development I: Core Skills And Technologies
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 25500 - Game Development II: Design And Psychology
- CGT 25600 - Principles Of User Experience Design
- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34500 - Game Development III: Environment Modeling For Games
- CGT 40500 - Senior Portfolio Review
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I

- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 44500 - Game Development IV: Procedural Asset Creation For Games
- CGT 45001 - Computer Graphics Professional Practices II
- Intercultural Requirements - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

## Other Departmental/Program Course Requirements (64 credits)

- ECON 21000 - Principles Of Economics (*satisfies Human Culture Behavior/Social Science for core*)
- MA 15800 - Precalculus- Functions And Trigonometry (*satisfies Quantitative Reasoning Selective for core*)
- MA 16010 - Applied Calculus I ♦ (*satisfies Quantitative Reasoning Selective for core*)
- MGMT 45500 - Legal Background For Business I
- PHYS 22000 - General Physics (*satisfies Science for core*)
- PSY 12000 - Elementary Psychology (*satisfies Human Culture Behavioral/Social Science for core*)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity (*satisfies Written Communication for core & a Cornerstone Area A*)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World (*satisfies Oral Communication for core & a Cornerstone Area A*)
- TECH 12000 - Design Thinking In Technology (*satisfies Information Literacy AND Science, Technology & Society Selective for core*)
- Human Cultures (*satisfies Humanities for Core & a Cornerstone Selective*)- Credit Hours: 3.00
- Humanities Elective (possible Cornerstone Selective) - Credit Hours: 6.00
- Science Selective (*satisfies Science Selective for core*) - Credit Hours: 3.00
- Advanced English Selective (possible Cornerstone Selective) - Credit Hours: 3.00
- Statistics Selective - 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 (15 credits)

- Any course, any subject - Credit Hours: 15.00

## Additional Degree Requirements

[Click here for Game Development and Design Supplemental Information.](#)

Cornerstone Certificate requirements. [Click here for Cornerstone Certificate.](#)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science

- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Program Requirements

### Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- MA 15800 - Precalculus- Functions And Trigonometry
- TECH 12000 - Design Thinking In Technology
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

14 Credits

### Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 14100 - Internet Foundations Technologies And Development ♦
- MA 16010 - Applied Calculus I ♦
- PHYS 22000 - General Physics
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

16 Credits

### Fall 2nd Year

- CGT 21500 - Computer Graphics Programming I ♦

- CGT 24500 - Game Development I: Core Skills And Technologies
- PSY 12000 - Elementary Psychology
- Human Culture: Humanities Core - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

### Spring 2nd Year

- CGT 20500 - Portfolio Review
- CGT 24100 - Introduction to Computer Animation
- CGT 25500 - Game Development II: Design And Psychology
- CGT 25001 - Computer Graphics Professional Practices I
- ECON 21000 - Principles Of Economics
- Science Foundational Selective Core - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

### Fall 3rd Year

- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34500 - Game Development III: Environment Modeling For Games
- Humanities Elective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

### Spring 3rd Year

- CGT 40500 - Senior Portfolio Review
- CGT 44500 - Game Development IV: Procedural Asset Creation For Games
- CGT 25600 - Principles Of User Experience Design
- CGT Globalization Selective - Credit Hours: 3.00
- Statistics 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
- MGMT 45500 - Legal Background For Business I
- Humanities Elective - Credit Hours: 3.00

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

## 17 Credits

### Spring 4th Year

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

## 12 Credits

### Notes

- Students must earn a "C-" or better in all CGT courses.
- 120 semester credits & 2.00 Graduation GPA required for Bachelor of Science degree.
- 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 IF32 credit hours of 30000 or 40000 level Purdue courses for graduation.
- Cornerstone Certificate is required with this major.

### 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## 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.

Human Centered Design and Development Website

## Degree Requirements

# 120 Credits Required

### Departmental/Program Major Courses (41 credits)

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 17207 - User Experience Design Experience Studio I
- CGT 17208 - User Experience Design Studio I: Fundamentals
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 27108 - User Experience Design Studio II: Screen ♦
- CGT 27207 - User Experience Design Experience Studio II (must be taken twice) Credit Hours: 6.00
- CGT 27208 - User Experience Design Studio III: Cross-Channel
- CGT 37108 - User Experience Design Studio IV: Strategy
- CGT 37207 - User Experience Design Experience Studio III (must be taken twice) Credit Hours: 6.00
- CGT 37208 - User Experience Design Studio V: Specialization
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

### Other Departmental/Program Course Requirements (69 credits)

- PSY 12000 - Elementary Psychology (*satisfies Human Culture Behavioral/Social Science for core*)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity (*satisfies Written Communication for core*)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World (*satisfies Oral Communication for core*)
- TECH 12000 - Design Thinking In Technology (*satisfies Information Literacy AND Science, Technology & Society Selective for core*)
- Science 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
- Humanities Electives - Credit Hours: 3.00
- Written/Oral Communication Selectives - Credit Hours: 9.00
- Math Selective - Credit Hours: 3.00
- Technical Electives - Credit Hours: 9.00

## Electives (10 credits)

Any course, any subject. Credit Hours: 10.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Click here for UX Design Supplemental Course Information.

## Program Requirements

### Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- TECH 12000 - Design Thinking In Technology
  
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World
  
- Math Selective - Credit Hours: 3.00 \*

### 14 Credits

### Spring 1st Year

- CGT 17207 - User Experience Design Experience Studio I



- CGT 17208 - User Experience Design Studio I: Fundamentals
- PSY 12000 - Elementary Psychology
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World
- Technical Elective - Credit Hours: 3.00

## 15 Credits

### Fall 2nd Year

- CGT 27207 - User Experience Design Experience Studio II
- CGT 27108 - User Experience Design Studio II: Screen ♦
- 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
- CGT 27208 - User Experience Design Studio III: Cross-Channel
- CGT 25001 - Computer Graphics Professional Practices I
- Science Foundational Selective Core - Credit Hours: 3.00
- Human Cultures: Humanities 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
- CGT 37207 - User Experience Design Experience Studio III
- 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
- CGT 37208 - User Experience Design Studio V: Specialization

- 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
- Written or Oral Communication - Credit Hours: 3.00
- CGT Globalization Selective - Credit Hours: 3.00
- Science Foundational Selective Core - Credit Hours: 3.00
- Elective - Credit Hours: 4.00

## 15 Credits

### Spring 4th Year

- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- 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

## Notes

- Students must earn a "C-" or better in all CGT courses.
- 120 semester credits & 2.00 Graduation GPA required for Bachelor of Science degree.
- 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
- 32 credit Hours of 30000 or 40000 level Purdue courses for graduation

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## **Virtual Product Integration, 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 Virtual Product Integration (VPI), you will use the latest tools to effectively communicate and support each step in the product's lifecycle. In your classes, you will define, build, and visualize 3D 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), and Product Data Management (PDM).

Virtual Product Integration Website

### **Degree Requirements**

## **120 Credits Required**

### **Departmental/Program Major Courses (41 credits)**

#### **Required Major Courses (41 credits)**

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 10301 - Geometric Modeling Applications
- CGT 11301 - Product Data Management
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 14100 - Internet Foundations Technologies And Development ♦
- CGT 20301 - Model-Based Definition
- CGT 21301 - Simulation And Visualization Applications
- CGT 21500 - Computer Graphics Programming I ♦
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 30301 - Digital Manufacturing
- CGT 31301 - The Business Of Managing Digital Product Data
- CGT 35600 - Web Programming, Development And Data Integration
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- CGT 45600 - Advanced Web Programming, Development And Data Integration
- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

## Other Departmental/Program Course Requirements (64 credits)

- ECON 21000 - Principles Of Economics (*satisfies Human Cultures Behavior/Social Science for core*)
- MA 15800 - Precalculus- Functions And Trigonometry (*satisfies Quantitative Reasoning Selective for core*)
- MA 16010 - Applied Calculus I ♦ (*satisfies Quantitative Reasoning Selective for core*)
- MGMT 45500 - Legal Background For Business I
- PHYS 22000 - General Physics (*satisfies Science for core*)
- PSY 12000 - Elementary Psychology (*satisfies Human Culture Behavioral/Social Science for core*)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity (*satisfies Written Communication for core & a Cornerstone Area A*)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World (*satisfies Oral Communication for core & a Cornerstone Area A*)
- TECH 12000 - Design Thinking In Technology (*satisfies Information Literacy AND Science, Technology & Society Selective for core*)
- Human Cultures Selective (*satisfies Humanities for Core & a Cornerstone Selective*) - Credit Hours: 3.00\*
- Science Selective for Core - Credit Hours: 3.00\*
- Humanities Elective (possible Cornerstone Selective) - Credit Hours: 6.00
- Technical Elective - Credit Hours: 9.00
- Advanced English Selective (possible Cornerstone Selective) - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Management Elective - Credit Hours: 3.00
- Communication Selective (possible Cornerstone Selective) - Credit Hours: 3.00
- CGT Global Selective (possible Cornerstone Selective) - Credit Hours: 3.00

## Electives (15 credits)

Any course, any subject. Credit Hours: 15.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click [here](#).

## Additional Requirements

[Click here for Virtual Product Integration Supplemental Information.](#)

Cornerstone Certificate required. [Click here for Cornerstone Certificate.](#)

## Program Requirements

### Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- TECH 12000 - Design Thinking In Technology
- MA 15800 - Precalculus- Functions And Trigonometry
  
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

14 Credits

### Spring 1st Year

- CGT 10301 - Geometric Modeling Applications
- CGT 14100 - Internet Foundations Technologies And Development ♦
- PHYS 22000 - General Physics
- MA 16010 - Applied Calculus I ♦
  
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

16 Credits

### Fall 2nd Year

- CGT 21500 - Computer Graphics Programming I ♦
- CGT 11301 - Product Data Management
- PSY 12000 - Elementary Psychology
- Human Culture: Humanities Core - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

### Spring 2nd Year

- CGT 20301 - Model-Based Definition

- CGT 25001 - Computer Graphics Professional Practices I
- ECON 21000 - Principles Of Economics
- Science Foundational Selective Core - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- CGT 21301 - Simulation And Visualization Applications
- CGT 35600 - Web Programming, Development And Data Integration
- Humanities Elective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- CGT 30301 - Digital Manufacturing
- CGT 45600 - Advanced Web Programming, Development And Data Integration
- Statistics Selective - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00
- CGT Globalization Selective - Credit Hour: 3.00

15 Credits

Fall 4th Year

- CGT 31301 - The Business Of Managing Digital Product Data
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- MGMT 45500 - Legal Background For Business I
- Humanities Elective - Credit Hours: 3.00
- Elective - Credit Hours: 6.00

17 Credits

Spring 4th Year

- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II

- Communication Selective - Credit Hour: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hour: 3.00

## 12 Credits

## Notes

- Students must earn a "C-" or better in all CGT courses.
- 120 semester credits & 2.00 Graduation GPA required for Bachelor of Science degree.
- 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
- 32 credit hours of 30000 or 40000 level Purdue courses for graduation
- Cornerstone Certificate is required with this major.

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Visual Effects Compositing, BS

### About the Program

No movie today is completed without the use of digital enhancements. A compositor is responsible for layering all digital effects in the final movie, including color correction, integration of rendered 3-D models, object removal, and set extensions. The visual effects compositing major gives you experience creating effects for video in both live action and computer-generated integration.

Visual Effects Compositing Website

## Degree Requirements

## 120 Credits Required

## Departmental/Program Major Courses (41 credits)

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11600 - Geometric Modeling For Visualization And Communication ♦
- CGT 11800 - Fundamentals Of Imaging Technology ♦
- CGT 14100 - Internet Foundations Technologies And Development
- CGT 14700 - Visual Effects Introduction
- CGT 21500 - Computer Graphics Programming I ♦
- CGT 24100 - Introduction to Computer Animation
- CGT 24600 - Compositing I ♦
- CGT 24700 - Visual Effects - Particles And Procedural Effects ♦
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34600 - Digital Video And Audio ♦
- CGT 34800 - Photorealistic Shaders
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

## Other Departmental /Program Course Requirements (64 credits)

- ECON 21000 - Principles Of Economics
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning Selective for Core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
- MGMT 45500 - Legal Background For Business I
- PHYS 22000 - General Physics (satisfies Science for core)
- PSY 12000 - Elementary Psychology (satisfies Human Culture Behavioral/Social Science for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity (satisfies Written Communication for core & a Cornerstone Area A)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World (satisfies Oral Communication for core & a Cornerstone Area A)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy AND Science, Technology & Society Selective for core)
- Human Cultures (satisfies Humanities for core) - Credit Hours: 3.00
- Humanities Elective (possible Cornerstone Selective) - Credit Hours: 6.00
- Science Selective (satisfies Science for core) - Credit Hours: 3.00
- Advanced English (possible Cornerstone Selective) - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Management Elective - Credit Hours: 3.00
- Communication Selective (Possible Cornerstone) - Credit Hours: 3.00
- Technical Electives - Credit Hours: 9.00
- CGT Global Selective - Credit Hours: 3.00



## Electives (15 credits)

Any course, any subject. Credit Hours: 15.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Click here for Visual Effects Compositing Supplemental Information.

Cornerstone Certificate required. Click here for Cornerstone Certificate.

## Program Requirements

### Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology ♦
- TECH 12000 - Design Thinking In Technology
- MA 15800 - Precalculus- Functions And Trigonometry
  
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

14 Credits

### Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication ♦
- CGT 14100 - Internet Foundations Technologies And Development
- MA 16010 - Applied Calculus I
- PHYS 22000 - General Physics
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

16 Credits

### Fall 2nd Year

- CGT 21500 - Computer Graphics Programming I ♦
- PSY 12000 - Elementary Psychology
- Human Culture: Humanities Core \* - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

### Spring 2nd Year

- CGT 14700 - Visual Effects Introduction
- CGT 24100 - Introduction to Computer Animation
- CGT 25001 - Computer Graphics Professional Practices I
- ECON 21000 - Principles Of Economics
- Science Foundational Selective Core - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

### Fall 3rd Year

- CGT 24700 - Visual Effects - Particles And Procedural Effects ♦
- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- Humanities Elective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

### Spring 3rd Year

- CGT 24600 - Compositing I ♦
- CGT 34800 - Photorealistic Shaders

- CGT Global Selective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00

## 15 Credits

### Fall 4th Year

- CGT 34600 - Digital Video And Audio ♦
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- MGMT 45500 - Legal Background For Business I
- Technical Elective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 17 Credits

### Spring 4th Year

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

## 12 Credits

## Notes

- Students must earn a "C-" or better in all CGT courses.
- 120 semester credits & 2.00 Graduation GPA required for Bachelor of Science degree.
- 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
- 32 credit hours of 30000 or 40000 level Purdue courses for graduation
- Cornerstone Certificate is required with this major

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## 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.

Web Programming and Design Website

### Degree Requirements

## 120 Credits Required

### Departmental/Program Major Courses (41 credits)

#### Required Major Courses (32 credits)

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 14100 - Internet Foundations Technologies And Development ♦
- CGT 21500 - Computer Graphics Programming I ♦
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 25600 - Principles Of User Experience Design
- CGT 35300 - Principles Of Interactive And Dynamic Media
- CGT 35600 - Web Programming, Development And Data Integration
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- CGT 45600 - Advanced Web Programming, Development And Data Integration

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

## Major Selectives\* - Choose three 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 (64 credits)

- ECON 21000 - Principles Of Economics (*satisfies Human Culture Behavioral/Social Science for core*)
- MA 15800 - Precalculus- Functions And Trigonometry (*satisfies Quantitative Reasoning Selective for core*)
- MA 16010 - Applied Calculus I ♦ (*satisfies Quantitative Reasoning Selective for core*)
- MGMT 45500 - Legal Background For Business I
- PHYS 22000 - General Physics (*satisfies Science for core*)
- PSY 12000 - Elementary Psychology (*satisfies Human Culture Behavioral/Social Science for core*)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity (*satisfies Written Communication for core & Cornerstone Area A*)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World (*satisfies Oral Communication for core & a Cornerstone Area A*)
- TECH 12000 - Design Thinking In Technology (*satisfies Information Literacy AND Science, Technology & Society Selective for core*)
- Human Cultures Selective (*satisfies Humanities for core & a Cornerstone Selective*)- Credit Hours: 3.00
- Humanities Elective (possible Cornerstone Selective) - Credit Hours: 6.00
- Science Selective (*satisfies Science Selective for core*) - Credit Hours: 3.00
- Advanced English Selective (possible Cornerstone Selective) - Credit Hours: 3.00
- Statistics Selective - 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 (15 credits)

Any course, any subject. Credit Hours: 15.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2

- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Click here for Web Programming & Design Supplemental Information.

Cornerstone Certificate required. Click here for Cornerstone Certificate.

## Program Requirements

### Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- TECH 12000 - Design Thinking In Technology
- MA 15800 - Precalculus- Functions And Trigonometry
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

### 14 Credits

### Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 14100 - Internet Foundations Technologies And Development ♦
- MA 16010 - Applied Calculus I ♦
- PHYS 22000 - General Physics
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

### 16 Credits

### Fall 2nd Year

- CGT 21500 - Computer Graphics Programming I ♦
- PSY 12000 - Elementary Psychology
- Human Cultures: Humanities Core - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

## 15 Credits

### Spring 2nd Year

- CGT 25600 - Principles Of User Experience Design
- CGT 25001 - Computer Graphics Professional Practices I
- ECON 21000 - Principles Of Economics
- CGT Selective - Credit Hours: 3.00
- Science Foundational Selective Core - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 16 Credits

### Fall 3rd Year

- CGT 35600 - Web Programming, Development And Data Integration
- CGT Selective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 15 Credits

### Spring 3rd Year

- CGT 45600 - Advanced Web Programming, Development And Data Integration
- CGT Selective - Credit Hours: 3.00
- CGT Globalization Selective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00

## 15 Credits

### Fall 4th Year

- CGT 35300 - Principles Of Interactive And Dynamic Media
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- MGMT 45500 - Legal Background For Business I
- Humanities Elective - Credit Hours: 3.00

- Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

## 17 Credits

### Spring 4th Year

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

## 12 Credits

### Notes

- Students must earn a "C-" or better in all CGT courses.
- 120 semester credits & 2.00 Graduation GPA required for Bachelor of Science degree.
- 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
- 32 Credit Hours of 30000 or 40000 level Purdue courses for graduation.
- Cornerstone Certificate is required with this major.

### 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.

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## Minor

### Construction Graphics 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 (12 credits)

### Required Courses (12 credits)

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

### 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.

### Disclaimer

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The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## 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)

- CGT 11000 - Technical Graphics Communications or
- CGT 16300 - Graphical Communication And Spatial Analysis or
- An approved substitution

### Required Courses (6 credits)

- CGT 11301 - Product Data Management
- CGT 20301 - Model-Based Definition

## Selective - Choose Two (6 credits)

- CGT 21301 - Simulation And Visualization Applications
- CGT 30301 - Digital Manufacturing
- CGT 31301 - The Business Of Managing Digital Product Data

## 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.

## Prerequisite Information:

For current pre-requisites for courses, [click here](#).

## Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Program Information

### Animation Supplemental Course Information

#### CGT Selectives:

#### Building Information Modeling

- CGT 26200 - Introduction To Construction Graphics
- CGT 36000 - Applications Of Construction Documentation I
- CGT 46000 - Building Information Modeling For Commercial Construction
- CGT 46200 - Applications Of Construction Documentation II

#### Data Visualization

- CGT 27000 - Introduction To Data Visualization
- CGT 37000 - Interactive Data Visualization
- CGT 37700 - Scientific Visualization
- CGT 47000 - Data Visualization Studio

## Virtual Product Integration

- CGT 10301 - Geometric Modeling Applications
- CGT 11301 - Product Data Management
- CGT 20301 - Model-Based Definition
- CGT 21301 - Simulation And Visualization Applications
- CGT 30301 - Digital Manufacturing
- CGT 31301 - The Business Of Managing Digital Product Data

## Visual Effects

- CGT 14700 - Visual Effects Introduction
- CGT 24600 - Compositing I
- CGT 24700 - Visual Effects - Particles And Procedural Effects
- CGT 34600 - Digital Video And Audio
- CGT 34800 - Photorealistic Shaders

## Web Programming & Design

- CGT 25600 - Principles Of User Experience Design
- CGT 35300 - Principles Of Interactive And Dynamic Media
- CGT 35600 - Web Programming, Development And Data Integration
- CGT 45600 - Advanced Web Programming, Development And Data Integration

## Other CGT Selective Options

- CGT 39000 - Computer Graphics
- CGT 49000 - Computer Graphics
- CGT 49100 - Special Topics in Computer Graphics

## Advanced English Selective

Possible Cornerstone Selective - See Cornerstone Certificate

- ENGL 20500 - Introduction To Creative Writing
- ENGL 30400 - Advanced Composition
- ENGL 41900 - Multimedia Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

## 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).

## Statistics Selective

- PSY 20100 - Introduction To Statistics In Psychology
- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods
- STAT 35000 - Introduction To Statistics
- TLI 31600 - Statistical Quality Control

## Technical Elective

- Any course within the Purdue Polytechnic Institute, Engineering, Management, or Science.

## Humanities Elective

Possible Cornerstone Selective. See Cornerstone Certificate.

Any course within the Purdue College of Liberal Arts.

## Human Cultures Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- CLCS 33900 - Literature And The Law
- ENGL 22500 - Literature, Inequality, And Injustice
- ENGL 32200 - Word, Image, Media
- ENGL 36700 - Mystery And Detective Fiction
- ENGL 37300 - Science Fiction And Fantasy
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 31505 - American Beauty
- HIST 33805 - History Of Human Rights
- HIST 36305 - The History Of Medicine And Public Health
- HIST 38001 - History Of United States Agriculture
- HIST 38200 - American Constitutional History
- HIST 38300 - Recent American Constitutional History
- HIST 38400 - History Of Aviation
- HIST 38700 - History Of The Space Age
- HIST 39400 - Environmental History Of The United States
- HIST 47005 - Women And Health In America

- ITAL 28100 - The Italian Renaissance And Its Scientific And Cultural Impact On Western Civilization
- PHIL 24000 - Social And Political Philosophy
- PHIL 28000 - Ethics And Animals
- PHIL 29000 - Environmental Ethics

## Science Foundational Selective Core

Approved Science Core Courses

## CGT Globalization Selective

Possible Cornerstone Selective - See Cornerstone Certificate

- AAS 27100 - Introduction To African American Studies
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 38000 Sociolinguistic Study of African Amer. English
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 23300 Stress & Human Health

- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- POL 36000 - Women And The Law
- POL 41300 - The Human Basis Of Politics
- POL 42300 - International Environmental Policy
- POL 42900 - Contemporary Political Problems
- POL 43300 - International Organization
- PSY 25000 Psychology of Adjustment
- PSY 25100 - Health Psychology
- PSY 32200 - Neuroscience Of Motivated Behavior
- SOC 10000 - Introductory Sociology
- SOC 31000 - Racial And Ethnic Diversity
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 31400 - Leading Innovation In Organizations
- WGSS 28200 - Introduction To LGBT Studies
- WGSS 38000 - Gender And Multiculturalism
- WGSS 38300 - Women And Work
- Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

## Other Requirements:

### **Intercultural Requirement:**

1. Complete Intercultural Development Inventory (IDI) Pre-test (CGT10101) and Post-Test (CGT45001)
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre-test (CGT10101) and Post Test (CGT45001)
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

## **Building Information Modeling Supplemental Course Information**

### **CGT Selectives:**

#### **Animation**

- CGT 24100 - Introduction to Computer Animation
- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34100 - Motion for Computer Animation
- CGT 44200 - Production for Computer Animation

#### **Data Visualization**

- CGT 27000 - Introduction To Data Visualization
- CGT 37000 - Interactive Data Visualization
- CGT 37700 - Scientific Visualization
- CGT 47000 - Data Visualization Studio

#### **Virtual Product Integration**

- CGT 10301 - Geometric Modeling Applications
- CGT 11301 - Product Data Management
- CGT 20301 - Model-Based Definition
- CGT 21301 - Simulation And Visualization Applications
- CGT 30301 - Digital Manufacturing
- CGT 31301 - The Business Of Managing Digital Product Data

## Visual Effects

- CGT 14700 - Visual Effects Introduction
- CGT 24600 - Compositing I
- CGT 24700 - Visual Effects - Particles And Procedural Effects
- CGT 34600 - Digital Video And Audio
- CGT 34800 - Photorealistic Shaders

## Web Programming & Design

- CGT 25600 - Principles Of User Experience Design
- CGT 35300 - Principles Of Interactive And Dynamic Media
- CGT 35600 - Web Programming, Development And Data Integration
- CGT 45600 - Advanced Web Programming, Development And Data Integration

## Other CGT Selective Options

- CGT 39000 - Computer Graphics
- CGT 49000 - Computer Graphics
- CGT 49100 - Special Topics in Computer Graphics

## Advanced English Selective

Possible Cornerstone Selective - See Cornerstone Certificate

- ENGL 20500 - Introduction To Creative Writing
- ENGL 30400 - Advanced Composition
- ENGL 41900 - Multimedia Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

## 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).

## Statistics Selective

- PSY 20100 - Introduction To Statistics In Psychology
- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods
- STAT 35000 - Introduction To Statistics
- TLI 31600 - Statistical Quality Control

## Technical Elective

- Any course within the Purdue Polytechnic Institute, Engineering, Management, or Science.

## Humanities Elective

Possible Cornerstone Selective - See Cornerstone Certificate.

Any course within the Purdue College of Liberal Arts.

## Human Cultures Selective

Possible Cornerstone Selective - See Cornerstone Certificate.

- CLCS 33900 - Literature And The Law
- ENGL 22500 - Literature, Inequality, And Injustice
- ENGL 32200 - Word, Image, Media
- ENGL 36700 - Mystery And Detective Fiction
- ENGL 37300 - Science Fiction And Fantasy
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 31505 - American Beauty
- HIST 33805 - History Of Human Rights
- HIST 36305 - The History Of Medicine And Public Health
- HIST 38001 - History Of United States Agriculture
- HIST 38200 - American Constitutional History
- HIST 38300 - Recent American Constitutional History
- HIST 38400 - History Of Aviation
- HIST 38700 - History Of The Space Age
- HIST 39400 - Environmental History Of The United States
- HIST 47005 - Women And Health In America
- ITAL 28100 - The Italian Renaissance And Its Scientific And Cultural Impact On Western Civilization
- PHIL 24000 - Social And Political Philosophy

- PHIL 28000 - Ethics And Animals
  - PHIL 29000 - Environmental Ethics
- Courses above strongly recommended for Cornerstone Certificate requirement. Any Human Cultures Humanities allowed.*

## Science Foundational Selective Core

Approved Science Core Courses

## CGT Globalization Selective

Possible Cornerstone Selective - See Cornerstone Certificate.

- AAS 27100 - Introduction To African American Studies
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 38000 Sociolinguistic Study of African Amer. English
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 23300 Stress & Human Health
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families

- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- POL 36000 - Women And The Law
- POL 41300 - The Human Basis Of Politics
- POL 42300 - International Environmental Policy
- POL 42900 - Contemporary Political Problems
- POL 43300 - International Organization
- PSY 25000 Psychology of Adjustment
- PSY 25100 - Health Psychology
- PSY 32200 - Neuroscience Of Motivated Behavior
- SOC 10000 - Introductory Sociology
- SOC 31000 - Racial And Ethnic Diversity
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 31400 - Leading Innovation In Organizations
- WGSS 28200 - Introduction To LGBT Studies
- WGSS 38000 - Gender And Multiculturalism
- WGSS 38300 - Women And Work
- Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

## Other Requirements:

### **Intercultural Requirement:**

1. Complete Intercultural Development Inventory (IDI) Pre-test (CGT 10101) and Post Test (CGT 45001)
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre-test (CGT 10101) and Post Test (CGT 45001)
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
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20500 - Human Cultural Diversity
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 41200 - Theories Of Human Interaction
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 30100 - Peer Counseling Training

- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 33805 - History Of Human Rights
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HIST 49900 - History Internship
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 36000 - Women And The Law
- POL 42900 - Contemporary Political Problems
- PSY 12000 - Elementary Psychology
- PSY 25100 - Health Psychology
- SOC 10000 - Introductory Sociology
- SOC 31000 - Racial And Ethnic Diversity
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- TLI 31400 - Leading Innovation In Organizations
- WGSS 28200 - Introduction To LGBT Studies
- WGSS 38000 - Gender And Multiculturalism
- WGSS 38300 - Women And Work
- Any Foreign Language course 20100,20200,30100,30200,40100,4020

## **CGT Supplemental Selectives**

### **CGT Selectives:**

#### **Animation**

- CGT 24100 - Introduction to Computer Animation
- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34100 - Motion for Computer Animation
- CGT 44200 - Production for Computer Animation

#### **Building Information Modeling**

- CGT 26200 - Introduction To Construction Graphics
- CGT 36000 - Applications Of Construction Documentation I
- CGT 46000 - Building Information Modeling For Commercial Construction
- CGT 46200 - Applications Of Construction Documentation II

## Effects Technical Direction

- CGT 14700 - Visual Effects Introduction
- CGT 24600 - Compositing I
- CGT 24700 - Visual Effects - Particles And Procedural Effects
- CGT 24800 - Visual Effects - Pyrotechnics And Destruction Effects
- CGT 24900 - Visual Effects - Programming
- CGT 34800 - Photorealistic Shaders

## Game Development & Design

- CGT 24500 - Game Development I: Core Skills And Technologies
- CGT 25500 - Game Development II: Design And Psychology
- CGT 34500 - Game Development III: Environment Modeling For Games
- CGT 44500 - Game Development IV: Procedural Asset Creation For Games

## Visual Effects Compositing

- CGT 24600 - Compositing I
- CGT 34600 - Digital Video And Audio
- CGT 44600 - Post-Production And Special Effects For Computer Animation
- CGT 44800 - Visual Effects - Capstone I

## Virtual Product Integration

- CGT 10301 - Geometric Modeling Applications
- CGT 11301 - Product Data Management
- CGT 20301 - Model-Based Definition
- CGT 21301 - Simulation And Visualization Applications
- CGT 30301 - Digital Manufacturing
- COURSE MISSING>>>

## Web Programming & Design

- CGT 25600 - Principles Of User Experience Design
- CGT 35300 - Principles Of Interactive And Dynamic Media
- CGT 35600 - Web Programming, Development And Data Integration
- CGT 45600 - Advanced Web Programming, Development And Data Integration

## Advanced English Selective

- ENGL 20500 - Introduction To Creative Writing
- ENGL 30400 - Advanced Composition
- ENGL 41900 - Multimedia Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

## 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
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20500 - Human Cultural Diversity
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 32000 - Small Group Communication
- COM 30300 - Intercultural Communication
- COM 22400 - Communicating In The Global Workplace

- COM 41200 - Theories Of Human Interaction
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 33805 - History Of Human Rights
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 36000 - Women And The Law
- POL 42900 - Contemporary Political Problems
- PSY 12000 - Elementary Psychology
- PSY 25100 - Health Psychology
- SOC 10000 - Introductory Sociology
- SOC 31000 - Racial And Ethnic Diversity
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- TLI 31400 - Leading Innovation In Organizations
- WGSS 28200 - Introduction To LGBT Studies
- WGSS 38000 - Gender And Multiculturalism
- WGSS 38300 - Women And Work
- 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

## **Data Visualization Supplemental Course Information**

### **CGT Selectives:**

#### **Animation**

- CGT 24100 - Introduction to Computer Animation
- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34100 - Motion for Computer Animation
- CGT 44200 - Production for Computer Animation

#### **Building Information Modeling**

- CGT 26200 - Introduction To Construction Graphics
- CGT 36000 - Applications Of Construction Documentation I
- CGT 46000 - Building Information Modeling For Commercial Construction
- CGT 46200 - Applications Of Construction Documentation II

#### **Virtual Product Integration**

- CGT 10301 - Geometric Modeling Applications
- CGT 11301 - Product Data Management

- CGT 20301 - Model-Based Definition
- CGT 21301 - Simulation And Visualization Applications
- CGT 30301 - Digital Manufacturing
- CGT 31301 - The Business Of Managing Digital Product Data

## Visual Effects

- CGT 14700 - Visual Effects Introduction
- CGT 24600 - Compositing I
- CGT 24700 - Visual Effects - Particles And Procedural Effects
- CGT 34600 - Digital Video And Audio
- CGT 34800 - Photorealistic Shaders

## Web Programming & Design

- CGT 25600 - Principles Of User Experience Design
- CGT 35300 - Principles Of Interactive And Dynamic Media
- CGT 35600 - Web Programming, Development And Data Integration
- CGT 45600 - Advanced Web Programming, Development And Data Integration

## Other CGT Selective Options

- CGT 39000 - Computer Graphics
- CGT 49000 - Computer Graphics
- CGT 49100 - Special Topics in Computer Graphics

## Advanced English Selective

Possible Cornerstone Selective - See Cornerstone Certificate

- ENGL 20500 - Introduction To Creative Writing
- ENGL 30400 - Advanced Composition
- ENGL 41900 - Multimedia Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

## 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).

## Technical Elective

- Any course within the Purdue Polytechnic Institute, Engineering, Management, or Science.

## Humanities Elective

Possible Cornerstone Selective - See Cornerstone Certificate

Any course within Purdue College of Liberal Arts.

## Human Cultures Selective

Possible Cornerstone Selective - See Cornerstone Certificate

- CLCS 33900 - Literature And The Law
- ENGL 22500 - Literature, Inequality, And Injustice
- ENGL 32200 - Word, Image, Media
- ENGL 36700 - Mystery And Detective Fiction
- ENGL 37300 - Science Fiction And Fantasy
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 36305 - The History Of Medicine And Public Health
- HIST 38001 - History Of United States Agriculture
- HIST 38200 - American Constitutional History
- HIST 38300 - Recent American Constitutional History
- HIST 38400 - History Of Aviation
- HIST 38700 - History Of The Space Age
- HIST 39400 - Environmental History Of The United States
- HIST 47005 - Women And Health In America
- ITAL 28100 - The Italian Renaissance And Its Scientific And Cultural Impact On Western Civilization
- PHIL 24000 - Social And Political Philosophy
- PHIL 28000 - Ethics And Animals
- PHIL 29000 - Environmental Ethics

## Science Foundational Selective Core

Approved Science Core Courses

## CGT Globalization Selective

Possible Cornerstone Selective - See Cornerstone Certificate

- AAS 27100 - Introduction To African American Studies
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 31505 - American Beauty
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind

- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- POL 36000 - Women And The Law
- POL 41300 - The Human Basis Of Politics
- POL 42300 - International Environmental Policy
- POL 42900 - Contemporary Political Problems
- POL 43300 - International Organization
- PSY 25100 - Health Psychology
- PSY 32200 - Neuroscience Of Motivated Behavior
- SOC 10000 - Introductory Sociology
- SOC 31000 - Racial And Ethnic Diversity
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 31400 - Leading Innovation In Organizations
- WGSS 28200 - Introduction To LGBT Studies
- WGSS 38000 - Gender And Multiculturalism
- WGSS 38300 - Women And Work
- Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

## Other Requirements:

### **Intercultural Requirement:**

1. Complete Intercultural Development Inventory (IDI) Pre-test (CGT10101) and Post-Test (CGT45001)
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre-test (CGT10101) and Post Test (CGT45001)
3. Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project
- 4.

### **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

## **Game Development and Design Supplemental Information**

### **Advanced English Selective**

Possible Cornerstone Selective - See Cornerstone Certificate

- ENGL 20500 - Introduction To Creative Writing
- ENGL 30400 - Advanced Composition
- ENGL 41900 - Multimedia Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

### **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).

### **Statistics Selective**

- PSY 20100 - Introduction To Statistics In Psychology
- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods
- STAT 35000 - Introduction To Statistics
- TLI 31600 - Statistical Quality Control

### **Technical Elective**

- Any course within the Purdue Polytechnic Institute, Engineering, Management, or Science.

## Humanities Elective

- Possible Cornerstone Selective - See Cornerstone Certificate
- Any course within the Purdue College of Liberal Arts.

## Human Cultures Selective

Possible Cornerstone Selective - See Cornerstone Certificate

- CLCS 33900 - Literature And The Law
- ENGL 22500 - Literature, Inequality, And Injustice
- ENGL 32200 - Word, Image, Media
- ENGL 36700 - Mystery And Detective Fiction
- ENGL 37300 - Science Fiction And Fantasy
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 31505 - American Beauty
- HIST 33805 - History Of Human Rights
- HIST 36305 - The History Of Medicine And Public Health
- HIST 38001 - History Of United States Agriculture
- HIST 38200 - American Constitutional History
- HIST 38300 - Recent American Constitutional History
- HIST 38400 - History Of Aviation
- HIST 38700 - History Of The Space Age
- HIST 39400 - Environmental History Of The United States
- HIST 47005 - Women And Health In America
- ITAL 28100 - The Italian Renaissance And Its Scientific And Cultural Impact On Western Civilization
- PHIL 24000 - Social And Political Philosophy
- PHIL 28000 - Ethics And Animals
- PHIL 29000 - Environmental Ethics

## Science Foundational Selective Core

Approved Science Core Courses

## CGT Globalization Selective

Possible Cornerstone Selective - See Cornerstone Certificate

- AAS 27100 - Introduction To African American Studies
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health

- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- POL 36000 - Women And The Law
- POL 41300 - The Human Basis Of Politics
- POL 42300 - International Environmental Policy
- POL 42900 - Contemporary Political Problems
- POL 43300 - International Organization



- PSY 25100 - Health Psychology
- PSY 32200 - Neuroscience Of Motivated Behavior
- SOC 10000 - Introductory Sociology
- SOC 31000 - Racial And Ethnic Diversity
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 31400 - Leading Innovation In Organizations
- WGSS 28200 - Introduction To LGBT Studies
- WGSS 38000 - Gender And Multiculturalism
- WGSS 38300 - Women And Work
- Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

## Other Requirements:

### **Intercultural Requirement:**

1. Complete Intercultural Development Inventory (IDI) Pre-test (CGT10101) and Post Test (CGT45001)
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre-test (CGT10101) and Post Test (CGT45001)
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

## UX Design Supplemental Course Information

### Written or Oral Communication

- AD 31800 - Fundamentals of Interactive Multimedia Design
- AD 31900 - Web Design for Visual Communication
- COM 10200 - Introduction To Communication Theory
- COM 20400 - Critical Perspectives On Communication
- COM 21000 - Debating Public Issues
- COM 21700 - Science Writing And Presentation

- COM 22400 - Communicating In The Global Workplace
- COM 25000 - Mass Communication And Society
- COM 25100 - Communication, Information, And Society
- COM 25200 - Writing For Mass Media
- COM 25300 - Introduction To Public Relations
- COM 25600 - Introduction To Advertising
- COM 25700 - Public Relations Techniques
- COM 26100 - Introduction To Digital Video Production
- COM 30300 - Intercultural Communication
- COM 31200 - Rhetoric In The Western World
- COM 31400 - Advanced Presentational Speaking
- COM 31500 - Speech Communication Of Technical Information
- COM 31800 - Principles Of Persuasion
- COM 32000 - Small Group Communication
- COM 32400 - Introduction To Organizational Communication
- COM 32500 - Interviewing: Principles And Practice
- COM 32800 - Diversity At Work: A Rhetorical Approach
- COM 33000 - Theories Of Mass Communication
- COM 33600 - Advertising In The Electronic Mass Media
- COM 35100 - Mass Communication Ethics
- COM 37200 - Communication In Relationships
- COM 37300 - Self-Presentation And Social Image
- COM 37500 - Conflict And Negotiation
- COM 37600 - Communication And Gender
- COM 38100 - Gender And Feminist Studies In Communication
- COM 40700 - Introduction To New Media/Social Media Production
- COM 41100 - Communication And Social Networks
- COM 41200 - Theories Of Human Interaction
- COM 41500 - Discussion Of Technical Problems
- COM 41600 - United States Politics And The Media
- COM 41700 - Training And Development In Organizations
- COM 41900 - Judgment And Decision Making
- COM 42700 - Careers, Communication Issues And Strategies
- COM 43500 - Communication And Emerging Technologies
- COM 50700 - Introduction To Semiotics
- EDCI 27000 - Introduction To Educational Technology And Computing
- ENGL 20500 - Introduction To Creative Writing
- ENGL 23100 - Introduction To Literature
- ENGL 30600 - Introduction To Professional Writing
- ENGL 41900 - Multimedia Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing
- ENGL 42400 - Writing For High Technology Industries

## Psychology & Human Behavior Selective

- ANTH 20300 - Biological Bases Of Human Social Behavior

- ANTH 20400 - Introduction To Biological Anthropology And Human Evolution
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 28200 - Introduction To LGBT Studies
- ANTH 33600 - Human Variation
- ANTH 34000 - Global Perspectives On Health
- ANTH 38400 - Designing For People: Anthropological Approaches
- ANTH 38500 - Community Engagement In Anthropology
- ANTH 40500 - Ethnographic Methods
- EDPS 23500 - Learning And Motivation
- HDFS 20100 - Introduction To Family Processes
- HDFS 28000 - Diversity In Individual And Family Life
- PSY 20000 - Introduction To Cognitive Psychology
- PSY 23500 - Child Psychology
- PSY 24000 - Introduction To Social Psychology
- PSY 24400 - Introduction To Human Sexuality
- PSY 27200 - Introduction To Industrial-Organizational Psychology
- PSY 31000 - Sensory And Perceptual Processes
- PSY 31100 - Human Memory
- PSY 31400 - Introduction To Learning
- PSY 32400 - Introduction Cognitive Neuroscience
- PSY 33500 - Stereotyping And Prejudice
- PSY 33700 - Social Cognition
- PSY 34200 - Introduction To Psychology Of Personality
- PSY 35000 - Abnormal Psychology
- PSY 38000 - Behavior Change Methods
- PSY 47500 - Work Motivation And Job Satisfaction

## CGT Leadership Selective

- COM 32000 - Small Group Communication
- COM 32400 - Introduction To Organizational Communication
- COM 32800 - Diversity At Work: A Rhetorical Approach
- COM 37500 - Conflict And Negotiation
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- ENTR 31000 - Marketing And Management For New Ventures
- ENTR 31500 - Business Planning For Social Entrepreneurship
- ENTR 48200 - Venture Planning Capstone
- OLS 28400 - Leadership Principles
- OLS 35000 - Creativity In Business And Industry
- TLI 21300 - Project Management
- TLI 25400 - Leading Change In Technology Organizations

- MGMT any course

## Math Selective

- MA 15910 or higher

## Technical Elective

- Any course from Computer Graphics Technology (CGT), Computer Information Technology (CNIT), or Computer Science (CS). Programming courses are highly recommended.
- PHIL 20700 - Ethics For Technology, Engineering, And Design

## 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
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology

- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- POL 36000 - Women And The Law
- POL 41300 - The Human Basis Of Politics
- POL 42300 - International Environmental Policy
- POL 42900 - Contemporary Political Problems
- POL 43300 - International Organization
- PSY 25100 - Health Psychology
- PSY 32200 - Neuroscience Of Motivated Behavior
- SOC 10000 - Introductory Sociology
- SOC 31000 - Racial And Ethnic Diversity
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 31400 - Leading Innovation In Organizations
- WGSS 28200 - Introduction To LGBT Studies
- WGSS 38000 - Gender And Multiculturalism
- WGSS 38300 - Women And Work
- Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

## Other Requirements:

**Intercultural Requirement:**

1. Complete Intercultural Development Inventory (IDI) Pre-test (CGT 10101) and Post Test (CGT 45001).
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre-test (CGT 10101) and Post Test (CGT 45001).
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

## **Virtual Product Integration Supplemental Information**

### **Advanced English Selective**

Possible Cornerstone Selective - See Cornerstone Certificate

- ENGL 20500 - Introduction To Creative Writing
- ENGL 30400 - Advanced Composition
- ENGL 41900 - Multimedia Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

### **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).

## Statistics Selective

- PSY 20100 - Introduction To Statistics In Psychology
- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods
- STAT 35000 - Introduction To Statistics
- TLI 31600 - Statistical Quality Control

## Technical Elective

Any course within the Purdue Polytechnic Institute, Engineering, Management or Science.

## Humanities Elective

Possible Cornerstone Selective - See Cornerstone Certificate

Any course within the Purdue College of Liberal Arts.

## Human Cultures Selective

Possible Cornerstone Selective - See Cornerstone Certificate

- CLCS 33900 - Literature And The Law
- ENGL 22500 - Literature, Inequality, And Injustice
- ENGL 32200 - Word, Image, Media
- ENGL 36700 - Mystery And Detective Fiction
- ENGL 37300 - Science Fiction And Fantasy
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 31505 - American Beauty
- HIST 33805 - History Of Human Rights
- HIST 36305 - The History Of Medicine And Public Health
- HIST 38001 - History Of United States Agriculture
- HIST 38200 - American Constitutional History
- HIST 38300 - Recent American Constitutional History
- HIST 38400 - History Of Aviation
- HIST 38700 - History Of The Space Age
- HIST 39400 - Environmental History Of The United States
- HIST 47005 - Women And Health In America

- ITAL 28100 - The Italian Renaissance And Its Scientific And Cultural Impact On Western Civilization
- PHIL 24000 - Social And Political Philosophy
- PHIL 28000 - Ethics And Animals
- PHIL 29000 - Environmental Ethics

## Science Foundational Selective Core

Approved Science Core Courses

## CGT Globalization Selective

Possible Cornerstone Selective - See Cornerstone Certificate

- AAS 27100 - Introduction To African American Studies
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families



- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- POL 36000 - Women And The Law
- POL 41300 - The Human Basis Of Politics
- POL 42300 - International Environmental Policy
- POL 42900 - Contemporary Political Problems
- POL 43300 - International Organization
- PSY 25100 - Health Psychology
- PSY 32200 - Neuroscience Of Motivated Behavior
- SOC 10000 - Introductory Sociology
- SOC 31000 - Racial And Ethnic Diversity
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 31400 - Leading Innovation In Organizations
- WGSS 28200 - Introduction To LGBT Studies
- WGSS 38000 - Gender And Multiculturalism
- WGSS 38300 - Women And Work
- Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

## Other Requirements:

### **Intercultural Requirement:**

1. Complete Intercultural Development Inventory (IDI) Pre-test (CGT 10101) and Post Test (CGT 45001)
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre-test (CGT 10101) and Post Test (CGT 45001)
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

## **Visual Effects Compositing Supplemental Information**

### **Advanced English Selective**

Possible Cornerstone Selective - See Cornerstone Certificate

- ENGL 20500 - Introduction To Creative Writing
- ENGL 30400 - Advanced Composition
- ENGL 41900 - Multimedia Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

### **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).

### **Statistics Selective**

- PSY 20100 - Introduction To Statistics In Psychology
- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods
- STAT 35000 - Introduction To Statistics
- TLI 31600 - Statistical Quality Control

## Technical Elective

- Any course within the Purdue Polytechnic Institute, Engineering, Management, or Science.

## Humanities Elective

Possible Cornerstone Selective - See Cornerstone Certificate

Any course within the Purdue College of Liberal Arts.

## Human Cultures Selective

Possible Cornerstone Selective - See Cornerstone Certificate

- CLCS 33900 - Literature And The Law
- ENGL 22500 - Literature, Inequality, And Injustice
- ENGL 32200 - Word, Image, Media
- ENGL 36700 - Mystery And Detective Fiction
- ENGL 37300 - Science Fiction And Fantasy
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 31505 - American Beauty
- HIST 33805 - History Of Human Rights
- HIST 36305 - The History Of Medicine And Public Health
- HIST 38001 - History Of United States Agriculture
- HIST 38200 - American Constitutional History
- HIST 38300 - Recent American Constitutional History
- HIST 38400 - History Of Aviation
- HIST 38700 - History Of The Space Age
- HIST 39400 - Environmental History Of The United States
- HIST 47005 - Women And Health In America
- ITAL 28100 - The Italian Renaissance And Its Scientific And Cultural Impact On Western Civilization
- PHIL 24000 - Social And Political Philosophy
- PHIL 28000 - Ethics And Animals
- PHIL 29000 - Environmental Ethics

## Science Foundational Selective Core

Approved Science Core Courses

## CGT Globalization Selective

Possible Cornerstone Selective - See Cornerstone Certificate

- AAS 27100 - Introduction To African American Studies
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HIST 49900 - History Internship - History of Sexual Regulation in the US
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry

- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- POL 36000 - Women And The Law
- POL 41300 - The Human Basis Of Politics
- POL 42300 - International Environmental Policy
- POL 42900 - Contemporary Political Problems
- POL 43300 - International Organization
- PSY 25100 - Health Psychology
- PSY 32200 - Neuroscience Of Motivated Behavior
- SOC 10000 - Introductory Sociology
- SOC 31000 - Racial And Ethnic Diversity
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 31400 - Leading Innovation In Organizations
- WGSS 28200 - Introduction To LGBT Studies
- WGSS 38000 - Gender And Multiculturalism
- WGSS 38300 - Women And Work
- Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

## Other Requirements:

### **Intercultural Requirement:**

1. Complete Intercultural Development Inventory (IDI) Pre-test (CGT10101) and Post-Test (CGT45001)
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre-test (CGT10101) and Post Test (CGT45001)
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:

### Animation

- CGT 24100 - Introduction to Computer Animation
- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34100 - Motion for Computer Animation
- CGT 44200 - Production for Computer Animation

### Building Information Modeling

- CGT 26200 - Introduction To Construction Graphics
- CGT 36000 - Applications Of Construction Documentation I
- CGT 46000 - Building Information Modeling For Commercial Construction
- CGT 46200 - Applications Of Construction Documentation II

### Data Visualization

- CGT 27000 - Introduction To Data Visualization
- CGT 37000 - Interactive Data Visualization
- CGT 37700 - Scientific Visualization
- CGT 47000 - Data Visualization Studio

### Visual Effects

- CGT 14700 - Visual Effects Introduction
- CGT 24600 - Compositing I
- CGT 24700 - Visual Effects - Particles And Procedural Effects
- CGT 34600 - Digital Video And Audio
- CGT 34800 - Photorealistic Shaders

### Virtual Product Integration

- CGT 10301 - Geometric Modeling Applications
- CGT 11301 - Product Data Management
- CGT 20301 - Model-Based Definition
- CGT 21301 - Simulation And Visualization Applications
- CGT 30301 - Digital Manufacturing
- CGT 31301 - The Business Of Managing Digital Product Data

### Other CGT Selective Options

- CGT 39000 - Computer Graphics

- CGT 49000 - Computer Graphics
- CGT 49100 - Special Topics in Computer Graphics

## Advanced English Selective

Possible Cornerstone Selective - See Cornerstone Certificate

- ENGL 20500 - Introduction To Creative Writing
- ENGL 30400 - Advanced Composition
- ENGL 41900 - Multimedia Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

## Communication Selective

Possible Cornerstone Selective - See Cornerstone 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).

## Statistics Selective

- PSY 20100 - Introduction To Statistics In Psychology
- STAT 25000 - Problems Solving In Probability
- STAT 30100 - Elementary Statistical Methods
- STAT 35000 - Introduction To Statistics
- TLI 31600 - Statistical Quality Control

## Technical Elective

- Any course within the Purdue Polytechnic Institute, Engineering, Management, or Science.

## Humanities Elective

Possible Cornerstone Selective. See Cornerstone Certificate

Any course within the College of Liberal Arts.

## Human Cultures: Humanities Core

Possible Cornerstone Selective. See Cornerstone Certificate

- CLCS 33900 - Literature And The Law
- ENGL 22500 - Literature, Inequality, And Injustice
- ENGL 32200 - Word, Image, Media
- ENGL 36700 - Mystery And Detective Fiction
- ENGL 37300 - Science Fiction And Fantasy
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 31505 - American Beauty
- HIST 33805 - History Of Human Rights
- HIST 36305 - The History Of Medicine And Public Health
- HIST 38001 - History Of United States Agriculture
- HIST 38200 - American Constitutional History
- HIST 38300 - Recent American Constitutional History
- HIST 38400 - History Of Aviation
- HIST 38700 - History Of The Space Age
- HIST 39400 - Environmental History Of The United States
- HIST 47005 - Women And Health In America
- ITAL 28100 - The Italian Renaissance And Its Scientific And Cultural Impact On Western Civilization
- PHIL 24000 - Social And Political Philosophy
- PHIL 28000 - Ethics And Animals
- PHIL 29000 - Environmental Ethics

## Science Foundational Selective Core

Approved Science Core Courses

## CGT Globalization Selective

Possible Cornerstone Selective - See Cornerstone Certificate

- AAS 27100 - Introduction To African American Studies
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace



- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HIST 49900 - History Internship - History of Sexual Regulation in the US
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- POL 36000 - Women And The Law
- POL 41300 - The Human Basis Of Politics
- POL 42300 - International Environmental Policy
- POL 42900 - Contemporary Political Problems
- POL 43300 - International Organization
- PSY 25100 - Health Psychology
- PSY 32200 - Neuroscience Of Motivated Behavior
- SOC 10000 - Introductory Sociology
- SOC 31000 - Racial And Ethnic Diversity
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 31400 - Leading Innovation In Organizations

- WGSS 28200 - Introduction To LGBT Studies
- WGSS 38000 - Gender And Multiculturalism
- WGSS 38300 - Women And Work
- Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

## Other Requirements:

### **Intercultural Requirement:**

1. Complete Intercultural Development Inventory (IDI) Pre-test (CGT10101) and Post Test (CGT45001)
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre-test (CGT10101) and Post Test (CGT45001)
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

# 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.

## 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, [www.abet.org](http://www.abet.org).

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

## Degree Requirements

# 120 Credits Required

Departmental/Program Major Courses (55 credits)

Required Major Courses (55 credits)

- ENGT 18000 - Engineering Technology Foundations
  - ENGT 18100 - Engineering Technology Applications
  - ECET 17700 - Data Acquisition And Systems Control
  - ECET 17900 - Introduction To Digital Systems
  - ECET 22700 - DC And Pulse Electronics ♦
  - ECET 22900 - Concurrent Digital Systems
  - ECET 27000 - Electronics Prototype Development And Construction
  - ECET 27400 - Wireless Communications
  - ECET 27700 - AC And Power Electronics
  - ECET 27900 - Embedded Digital Systems ♦
  - ECET 33700 - Continuous Systems Analysis And Design
  - ECET 33900 - Digital Signal Processing
  - ECET 37600 - Electrical Energy Systems
  - ECET 38001 - Global Professional Issues In Engineering Technology
  - ECET 38800 - Analog IC Applications
  - ECET 49900 - Electrical Engineering Technology
  - ECET 42800 - Audio Electronics-Selected Topics
- Senior Capstone I Selective

## Other Departmental/Program Course Requirements (62 credits)

- CNIT 10500 - Introduction To C Programming
- MA 16010 - Applied Calculus I
- MA 16020 - Applied Calculus II
- PHYS 22000 - General Physics
- PHYS 22100 - General Physics
- TECH 12000 - Design Thinking In Technology
- THTR 16300 - Introduction To Sound Design And Technology
- THTR 20100 - Theatre Appreciation
- THTR 35300 - Theater Audio Techniques I
- THTR 25300 - Survey Of Audio Production or
- THTR 26300 - Introduction To Sound Studios
- THTR 36800 - Theatre Production II (2 for Theater Production Minor) or
- DANC 36800 - Dance Sound Design (2 for Theater Production Minor)
- STAT 22500 - Introduction To Probability Models or
- STAT 30100 - Elementary Statistical Methods
  - Freshman Speech Selective+ (satisfies Oral Communication for core) - Credit Hours: 3.00
  - English Composition Selective+ (satisfies Written Communication for core) - Credit Hours: 3.00
  - Written Communication Selective+ (satisfies Oral Communication for core) - Credit Hours: 3.00
  - Oral Communication Selective+ (satisfies Oral Communication for core) - Credit Hours: 3.00
  - Acoustics Selective - Credit Hours: 3.00
  - Business Selective - Credit Hours: 3.00
  - General Education Selective+- Credit Hours: 3.00
  - Advanced Theatre Sound Selective - Credit Hours: 3.00 (Human Cultures Behavioral/Social Science for core may be selected to satisfy either the Business Selective or a General Education Selective requirement.)
  - Industrial Economics Selective - Credit Hours: 3.00

- Intercultural Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

## Electives + (3 credits)

Any non-remedial course.

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

Click here for Audio Engineering Technology Supplemental Information.

## Program Requirements

### Fall 1st Year

- CNIT 10500 - Introduction To C Programming
- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications
- MA 16010 - Applied Calculus I
- TECH 12000 - Design Thinking In Technology
- English Composition Selective+ or Freshman Speech Selective+ - Credit Hours: 3.00

### 16 Credits

### Spring 1st Year

- ECET 17700 - Data Acquisition And Systems Control
- ECET 17900 - Introduction To Digital Systems
- MA 16020 - Applied Calculus II
- PHYS 22000 - General Physics
- Freshman Speech Selective+ or English Composition + - Credit Hours: 3.00

## 16 Credits

### Fall 2nd Year

- ECET 22700 - DC And Pulse Electronics ♦
- ECET 22900 - Concurrent Digital Systems
- PHYS 22100 - General Physics
- THTR 16300 - Introduction To Sound Design And Technology  
Written Communication Selective+

## 15 Credits

### Spring 2nd Year

- ECET 27000 - Electronics Prototype Development And Construction
- ECET 49900 - Audio Electronics Foundations
- ECET 27700 - AC And Power Electronics
- THTR 20100 - Theatre Appreciation  
Oral Communication Selective+

## 15 Credits

### Fall 3rd Year

- ECET 27900 - Embedded Digital Systems ♦
- ECET 37600 - Electrical Energy Systems
- ECET 38001 - Global Professional Issues In Engineering Technology
- ECET 38800 - Analog IC Applications
- THTR 25300 - Survey Of Audio Production or
- THTR 26300 - Introduction To Sound Studios

## 15 Credits

### Spring 3rd Year

- ECET 27400 - Wireless Communications
- ECET 33700 - Continuous Systems Analysis And Design
- THTR 36800 - Theatre Production II or
- DANC 36800 - Dance Sound Design
- STAT 30100 - Elementary Statistical Methods or

- STAT 22500 - Introduction To Probability Models
- Acoustics Selective - Credit Hours: 3.00
- Business Selective - Credit Hours: 3.00

## 16 Credits

### Fall 4th Year

- ECET 33900 - Digital Signal Processing
- THTR 35300 - Theater Audio Techniques I
- Senior Capstone I Selective - Credit Hours: 3.00
- General Education Selective+ - Credit Hours: 3.00
- Industrial Economics Selective - Credit Hours: 3.00

## 15 Credits

### Spring 4th Year

- ECET 42800 - Audio Electronics-Selected Topics ♦
- Senior Capstone II Selective - Credit Hours: 3.00
- Advanced Theater Sound Selective - Credit Hours: 3.00
- Elective+ - Credit Hours: 3.00

## 12 Credits

### Notes

- Human Cultures Behavioral/Social Science for University Core may be selected to satisfy either the Business Selective or a General Education Selective requirement.
- 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.
- Senior Capstone Selective I/II and 12 hours of ECET Selectives must be taken at the Purdue University location conferring the degree.
- 32 credit hours of 300-level or higher courses must be completed at Purdue University.
- Intercultural Requirement (ungraded) must be completed.
- Professional Requirement (ungraded) must be completed.
- + The options for this selective include at least one course that will also satisfy Cornerstone Certificate requirements.

### 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

# 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, [www.abet.org](http://www.abet.org).

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  
(<https://polytechnic.purdue.edu/degrees/automation-and-systems-integration-engineering-technology>)

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (120 credits)

### Required Major Courses (59 credits)

- ENGT 18000 - Engineering Technology Foundations ♦
- ENGT 18100 - Engineering Technology Applications
- MET 10200 - Production Design And Specifications ♦
- MET 11100 - Applied Statics
- MET 11300 - Mechanics Applications
- MET 23000 - Fluid Power
- MET 24500 - Manufacturing Systems ♦
- MET 28400 - Introduction To Industrial Controls ♦
- MFET 24800 - Introduction To Robotics



- MFET 34400 - Automated Manufacturing Processes
- MFET 37400 - Manufacturing Integration I
- Materials and Processes Selective - Credit Hours: 3.00
- Continuous Control Selective - Credit Hours: 3.00
- Intercultural Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

### ASET Courses (24 credits, included in required major courses total)

- ECET 33700 - Continuous Systems Analysis And Design
- CNIT 10500 - Introduction To C Programming  
Manufacturing Selective
- Manufacturing Selective - Credit Hours: 3.00
- Manufacturing/Controls/Graphic Selective - Credit Hours: 3.00
- Materials and Processes Selective - Credit Hours: 3.00
- CNIT or CS 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 (57 credits)

- CHM 11100 - General Chemistry
- ECET 22400 - Electronic Systems ♦
- ECET 38001 - Global Professional Issues In Engineering Technology
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy and Science, Technology & Society for core)
- TLI 33400 - Economic Analysis For Technology Systems or
- IET 45100 - Monetary Analysis For Industrial Decisions
- Physics Selective (satisfies Science for core) - Credit Hours: 4.00
- Science Selective (satisfies Science for core) - Credit Hours: 3.00
- Freshman Composition Selective + (satisfies Written Communication 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
- CGT Selective - Credit Hours: 2.00
- Statistics/Quality Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Freshman Speech Selective + (satisfies Oral Communication for core) - Credit Hours: 3.00
- Communications Selective + - Credit Hours: 3.00
- Technical Writing Selective + - Credit Hours: 3.00

### Electives (4 credits)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Click here for Automation and Systems Integration Engineering Technology Supplemental Information.

## Program Requirements

### Fall 1st Year

- CNIT 10500 - Introduction To C Programming
- ENGT 18000 - Engineering Technology Foundations ♦
- ENGT 18100 - Engineering Technology Applications
- MA 16010 - Applied Calculus I ♦
- Freshman Composition Selective or Freshman Speech Selective + - Credit Hours: 3.00
- Materials and Processes Selective - Credit Hours: 3.00

### 16 Credits

### Spring 1st Year

- MA 16020 - Applied Calculus II
- MET 11100 - Applied Statics
- TECH 12000 - Design Thinking In Technology
- Freshman Speech Selective + or Freshman Composition Selective - Credit Hours: 3.00
- Materials and Processes Selective - Credit Hours: 3.00

### 15 Credits

## Fall 2nd Year

- CHM 11100 - General Chemistry
- Behavioral/Social Science Foundation Selective - Credit Hours: 3.00
- Humanities Foundation Selective - Credit Hours: 3.00
- Computer Graphics Selective - Credit Hours: 2.00
- ECET 22400 - Electronic Systems ♦
- MET 11300 - Mechanics Applications

15 Credits

## Spring 2nd Year

- MET 10200 - Production Design And Specifications ♦
- MET 24500 - Manufacturing Systems ♦
- MET 28400 - Introduction To Industrial Controls ♦
- Physics Selective - Credit Hours: 4.00
- Elective - Credit Hours: 1.00

14 Credits

## Fall 3rd Year

- MET 23000 - Fluid Power
- MFET 34400 - Automated Manufacturing Processes
- Science Selective - Credit Hours: 3.00
- Technical Writing Selective + - Credit Hours: 3.00
- CNIT or CS Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- MFET 37400 - Manufacturing Integration I
- MFET 24800 - Introduction To Robotics
- ECET 33700 - Continuous Systems Analysis And Design
- Manufacturing Selective - Credit Hours: 3.00
- Statistics or Quality Selective - Credit Hours: 3.00

15 Credits

## Fall 4th Year

- ECET 38001 - Global Professional Issues In Engineering Technology
- TLI 33400 - Economic Analysis For Technology Systems or

- IET 45100 - Monetary Analysis For Industrial Decisions
- Manufacturing/Controls/Graphics Selective - Credit Hours: 3.00
- Continuous Controls Selective - Credit Hours: 3.00
- Senior Capstone Selective I - Credit Hours: 3.00

15 Credits

## Spring 4th Year

- Senior Capstone Selective II - Credit Hours: 3.00
- Communications Selective + - Credit Hours: 3.00
- Humanities/Social Science Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

## Notes

- 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.
- 32 credit hours of 300-level or higher courses must be completed at Purdue University.
- + denotes options Cornerstone Certificate course.
- Complete a Professional Requirement.
- Complete an Intercultural Requirement.

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## **Computer Engineering Technology, BS**

The Computer Engineering Technology major focuses electives on digital electronics, digital signal processing, and embedded micro-computers. Following this plan also results in earning a Computer and Information Technology minor.

## About the Program

The Computer Engineering Technology major focuses electives on digital electronics, digital signal processing, and embedded micro-computers.

Accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (52 credits)

### Required Major Courses (52 credits)

- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications
- ECET 17700 - Data Acquisition And Systems Control
- ECET 17900 - Introduction To Digital Systems
- ECET 22700 - DC And Pulse Electronics ♦
- ECET 22900 - Concurrent Digital Systems
- ECET 27000 - Electronics Prototype Development And Construction
- ECET 27400 - Wireless Communications
- ECET 27900 - Embedded Digital Systems ♦
- ECET 38001 - Global Professional Issues In Engineering Technology
- ECET 32900 - Advanced Embedded Digital Systems
- ECET 33900 - Digital Signal Processing
- ECET 34900 - Advanced Digital Systems
- ECET 43900 - Advanced Digital Signal Processing
- Computer Engineering Technology Selective - Credit Hours: 3.00
- ECET Elective - 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 10500 - Introduction To C Programming
- CNIT 17600 - Information Technology Architectures
- CNIT 18000 - Introduction To Systems Development
- CNIT 25501 - Object-Oriented Programming Introduction
- CNIT 34400 - Network Engineering Fundamentals
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)

- PHYS 22000 - General Physics (satisfies Science for core)
- PHYS 22100 - General Physics (satisfies Science for core)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy and Science, Technology & Society for core)
- MA 16020 - Applied Calculus II
  
- STAT 22500 - Introduction To Probability Models or
- STAT 30100 - Elementary Statistical Methods
  
- Freshman Speech Selective - Credit Hours: 3.00 (satisfies Oral Communication for core)
- English Composition Selective - Credit Hours: 3.00 (satisfies Written Communication for core)
- Business Selective - Credit Hours: 3.00 (may satisfy Behavioral/Social Science for core)
- Industrial Economics Selective - Credit Hours: 3.00
- General Education Selectives - Credit Hours: 12.00 (may satisfy Human Culture: Humanities and Human Culture: Behavioral/Social Sciences for core)
- Oral Communication Selectives - Credit Hours: 3.00
- Written Communication Selective - Credit Hours: 3.00
- Global/Intercultural Requirement - Credit Hours: 0.00
- Professional Requirement/Internship - Credit Hours: 0.00

## Elective (3 credits)

- Elective - Credit Hours: 3.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click [here](#).

## Program Requirements

### Fall 1st Year

- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications
- CNIT 10500 - Introduction To C Programming
- MA 16010 - Applied Calculus I
- TECH 12000 - Design Thinking In Technology
- English Composition Selective - Credit Hours: 3.00

## 16 Credits

### Spring 1st Year

- ECET 17700 - Data Acquisition And Systems Control
- ECET 17900 - Introduction To Digital Systems
- MA 16020 - Applied Calculus II
- PHYS 22000 - General Physics
- Freshman Speech Selective - Credit Hours: 3.00

## 16 Credits

### Fall 2nd Year

- ECET 22700 - DC And Pulse Electronics ♦
- ECET 22900 - Concurrent Digital Systems
- PHYS 22100 - General Physics
- 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
- ECET 27400 - Wireless Communications
- ECET 27900 - Embedded Digital Systems ♦
- General Education Selective - Credit Hours: 3.00
- Written Communication Selective - Credit Hours: 3.00

## 15 Credits

### Fall 3rd Year

- CNIT 25501 - Object-Oriented Programming Introduction
- ECET 34900 - Advanced Digital Systems
- ECET 33900 - Digital Signal Processing
- ECET 38001 - Global Professional Issues In Engineering Technology

- General Education Selective - Credit Hours: 3.00

## 15 Credits

### Spring 3rd Year

- ECET 32900 - Advanced Embedded Digital Systems
- ECET 43900 - Advanced Digital Signal Processing
- CNIT 18000 - Introduction To Systems Development
- Industrial Economics Selective - Credit Hours: 3.00
- Business Selective - Credit Hours: 3.00

## 15 Credits

### Fall 4th Year

- CNIT 17600 - Information Technology Architectures
- CNIT 34400 - Network Engineering Fundamentals

## 15 Credits

### Spring 4th Year

- STAT 22500 - Introduction To Probability Models or
- STAT 30100 - Elementary Statistical Methods
- Senior Capstone Selective II - Credit Hours: 3.00
- ECET Selective - Credit Hours: 3.00

## 12 Credits

## Notes

- 2.0 Graduation GPA is required for the Bachelor of Science degree.
- 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.
- Senior Capstone Selective I/II and ECET Selectives must be taken at the Purdue University location conferring the degree.
- 32 credit hours of 300-level or higher courses must be completed at Purdue University.
- Intercultural Requirement (ungraded) must be completed.
- Professional Requirement (ungraded) must be completed.

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

# 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, [www.abet.org](http://www.abet.org).

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

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (55 credits)

### Required Major Courses (55 credits)

- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications
- ECET 17700 - Data Acquisition And Systems Control
- ECET 17900 - Introduction To Digital Systems
- ECET 22700 - DC And Pulse Electronics ♦
- ECET 22900 - Concurrent Digital Systems
- ECET 27000 - Electronics Prototype Development And Construction

- ECET 27400 - Wireless Communications
- ECET 27700 - AC And Power Electronics
- ECET 27900 - Embedded Digital Systems ♦
- ECET 37600 - Electrical Energy Systems
- ECET 38001 - Global Professional Issues In Engineering Technology
- ECET Advanced Analysis Selective - Credit Hours: 3.00
- ECET Electives - 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)

- CNIT 10500 - Introduction To C Programming
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- PHYS 22000 - General Physics (satisfies Science for core)
- PHYS 22100 - General Physics (satisfies Science for core)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy and Science, Technology & Society for core)
- STAT 22500 - Introduction To Probability Models or
- STAT 30100 - Elementary Statistical Methods
- Freshman Speech Selective + - Credit Hours: 3.00 (satisfies Oral Communication for core)
- English Composition Selective + - Credit Hours: 3.00 (satisfies Written Communication for core)
- Business Selective - Credit Hours: 3.00
- General Education Selectives: 12.00
  - One must meet the 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
- General Education Human Cultures: Behavioral/Social Sciences Selective + - Credit Hours: 3.00
- General Education Selectives+ - Credit Hours: 6.00
- Oral Communication Selective+ - Credit Hours: 3.00
- Written Communication Selective+ - Credit Hours: 3.00
- Technical Selectives (9 additional credit hours of *technical courses*, including additional ECET courses) - Credit Hours 9.00
- Industrial Economics Selective - Credit Hours: 3.00
- Intercultural Requirement - 0.0 Credit Hours
- Professional Requirement/Internship - 0.0 Credit Hours

## Elective+ (3 credits)

Any non-remedial course.

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy

- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Click here for Electrical Engineering Technology Supplemental Information.

## Program Requirements

### Fall 1st Year

- CNIT 10500 - Introduction To C Programming
- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications
- MA 16010 - Applied Calculus I
- TECH 12000 - Design Thinking In Technology
- English Composition or Freshman Speech Selective+ - Credit Hours: 3.00

16 Credits

### Spring 1st Year

- ECET 17700 - Data Acquisition And Systems Control
- ECET 17900 - Introduction To Digital Systems
- MA 16020 - Applied Calculus II
- PHYS 22000 - General Physics
- Freshmen Speech or English Composition Selective+ - Credit Hours: 3.00

16 Credits

### Fall 2nd Year

- ECET 22700 - DC And Pulse Electronics ♦
- ECET 22900 - Concurrent Digital Systems
- PHYS 22100 - General Physics

- General Education Selective+ - Credit Hours: 3.00
- Written Communication Selective+ - Credit Hours: 3.00

## 16 Credits

### Spring 2nd Year

- ECET 27000 - Electronics Prototype Development And Construction
- ECET 27400 - Wireless Communications
- ECET 27700 - AC And Power Electronics
- General Education Selective+ - Credit Hours: 3.00 \*\*
- Oral Communication Selective+ - Credit Hours: 3.00

## 15 Credits

### Fall 3rd Year

- ECET 37600 - Electrical Energy Systems
- ECET 38001 - Global Professional Issues In Engineering Technology
- STAT 22500 - Introduction To Probability Models or
- STAT 30100 - Elementary Statistical Methods
- ECET Advanced Analysis Selective - Credit Hours: 3.00
- ECET Selective - Credit Hours: 3.00

## 15 Credits

### Spring 3rd Year

- ECET 27900 - Embedded Digital Systems ♦
- ECET Selective - Credit Hours: 3.00
- Business Selective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00
- Industrial Economics Selective - Credit Hours: 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
- Intercultural Requirement - Credit Hours: 0.00
- Professional Requirement/Internship - Credit Hours: 0.00

## 12 Credits

## Notes

- \*\* Human Cultures Behavioral/Social Science for University Core may be selected to satisfy either the Business Selective or a General Education Selective requirement.
- 2.0 Graduation GPA is required for the Bachelor of Science degree.
- 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.
- Senior Capstone Selective I/II and 12 hours of ECET Selectives must be taken at the Purdue University location conferring the degree.
- 32 credit hours of 300-level or higher courses must be completed at Purdue University.
- 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 Electrical Engineering Technology Supplemental Information for a complete list of selectives and requirements (including ungraded requirements)
- + The options for this selective include at least one course that will also satisfy Cornerstone Certificate requirements.

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

# Energy Engineering Technology, BS

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.

## Degree Requirements

### 120 Credits Required

#### Departmental/Program Major Courses (55 credits)

#### Required Major Courses (55 credits)

- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications
- ECET 17700 - Data Acquisition And Systems Control
- ECET 17900 - Introduction To Digital Systems
- ECET 22700 - DC And Pulse Electronics ♦
- ECET 22900 - Concurrent Digital Systems
- ECET 27000 - Electronics Prototype Development And Construction
- ECET 27400 - Wireless Communications
- ECET 27700 - AC And Power Electronics
- ECET 27900 - Embedded Digital Systems ♦
- ECET 37600 - Electrical Energy Systems
- ECET 38001 - Global Professional Issues In Engineering Technology
- ECET 33300 - Power Electronics In Energy Systems
- ECET 37300 - Applied Electronic Drives
- ECET 38600 - Building Electrical Codes And Standard Practices
- ECET 43600 - Electrical Power Transmissions, Distribution, And Smart Control
- 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 (62 credits)

- CNIT 10500 - Introduction To C Programming
- MA 16010 - Applied Calculus I
- MA 16020 - Applied Calculus II
- MET 22000 - Heat And Power
- PHYS 22000 - General Physics

- PHYS 22100 - General Physics
  - POL 22300 - Introduction To Environmental Policy
  - POL 32700 - Global Green Politics
  - TECH 12000 - Design Thinking In Technology
  - MET 53000 - Facilities Engineering Technology or
  - CE 35500 - Engineering Environmental Sustainability
- 
- Freshman Speech Selective - Credit Hours: 3.00
  - English Composition Selective - Credit Hours: 3.00
  - Oral Communication Selective - Credit Hours: 3.00
  - Written Communication Selective - Credit Hours: 3.00
  - Statistics Selective - Credit Hours: 3.00
  - Business Selective - Credit Hours: 3.00
  - General Education Selectives - Credit Hours: 6.00
  - Industrial Economics Selective - Credit Hours: 3.00
  - Energy Related Technical Selective - Credit Hours: 3.00
  - Intercultural Requirement - Credit Hours: 0.00
  - Professional Requirement - Credit Hours: 0.00

## Elective (3 credits)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

Click for Energy Engineering Technology Supplemental Information .

## Program Requirements

## Fall 1st Year

- CNIT 10500 - Introduction To C Programming
- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications
- MA 16010 - Applied Calculus I
- TECH 12000 - Design Thinking In Technology
- English Composition or Freshman Speech Selective - Credit Hours: 3.00

16 Credits

## Spring 1st Year

- ECET 17700 - Data Acquisition And Systems Control
- ECET 17900 - Introduction To Digital Systems
- MA 16020 - Applied Calculus II
- PHYS 22000 - General Physics
- Freshman Speech or English Composition Selective - Credit Hours: 3.00

16 Credits

## Fall 2nd Year

- ECET 22700 - DC And Pulse Electronics ♦
- ECET 22900 - Concurrent Digital Systems
- PHYS 22100 - General Physics
- POL 22300 - Introduction To Environmental Policy
- Oral Communication Selective - Credit Hours: 3.00

16 Credits

## Spring 2nd Year

- ECET 27000 - Electronics Prototype Development And Construction
- ECET 27900 - Embedded Digital Systems ♦
- ECET 27700 - AC And Power Electronics
- POL 32700 - Global Green Politics
- Written Communication Selective - Credit Hours: 3.00

15 Credits



## Fall 3rd Year

- ECET 37600 - Electrical Energy Systems
- ECET 38001 - Global Professional Issues In Engineering Technology
- ECET Advanced Analysis Selective - Credit Hours: 3.00
- General Education Selective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- ECET 27400 - Wireless Communications
- ECET 33300 - Power Electronics In Energy Systems
- MET 22000 - Heat And Power
- Business Selective - Credit Hours: 3.00
- Industrial Economics Selective - Credit Hours: 3.00

15 Credits

## Fall 4th Year

- ECET 37300 - Applied Electronic Drives
- ECET 38600 - Building Electrical Codes And Standard Practices
- Senior Capstone Selective I - Credit Hours: 3.00
- General Education Selective - Credit Hours: 3.00
- Energy Related Technical Selective - Credit Hours: 3.00

15 Credits

## Spring 4th Year

- ECET 43600 - Electrical Power Transmissions, Distribution, And Smart Control
- MET 53000 - Facilities Engineering Technology or
- CE 35500 - Engineering Environmental Sustainability
- Senior Capstone Selective II - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Global/Intercultural Requirement - Credit Hours: 0.00
- Professional Requirement/Internship - Credit Hours: 0.00

12 Credits

## Notes

- 2.0 Graduation GPA is required for the Bachelor of Science degree.

- Students must earn a "D-" or better in all courses. Pass/no pass grading allowed for General Education Selectives and Free 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.
- Senior Capstone Selective I/II must be taken at the Purdue University location conferring the degree.
- 32 credit hours of 300-level or higher courses must be completed at Purdue University.
- Intercultural Requirement (ungraded) must be completed.
- Professional Requirement (ungraded) must be completed.

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

# 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, [www.abet.org](http://www.abet.org).

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](#)

## Degree Requirements

## 120 Credits Required

## Department/Program Major Courses (40 credits)

## Required Department Courses (40 credits)

- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications
- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- TLI 31600 - Statistical Quality Control
- TLI 33400 - Economic Analysis For Technology Systems
- TLI 33520 - Human Factors For Technology Systems
- TLI 33620 - Total Productive Maintenance
- TLI 43530 - Operations Planning And Management
- TLI 43540 - Facilities Planning And Material Handling
- TLI 43630 - Design Of Experiments
- TLI 43640 - Lean Six Sigma ♦
- TLI 48390 - Industrial Engineering Technology Capstone I: Problem Identification And Analysis
- TLI 48395 - Industrial Engineering Technology Capstone II: Project Design
- Professional Requirement - Credit Hours: 0.00
- Global/Intercultural Requirement - Credit Hours: 0.00

## Other Departmental Requirements (72 credits)

### Other Departmental Courses (25 credits)

- ECET 22400 - Electronic Systems
- ECON 21000 - Principles Of Economics
- MET 24500 - Manufacturing Systems
- PHYS 22000 - General Physics (satisfies Science for core)
- STAT 30100 - Elementary Statistical Methods
- TECH 12000 - Design Thinking In Technology (*satisfies both Information Literacy and Science, Technology and Society for core*)
- TLI 11200 - Foundations Of Organizational Leadership ♦
- TLI 21300 - Project Management

### Selectives (47 credits)

- 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
- Oral Communication Selective (*satisfies Oral Communication for core*) - Credit Hours: 3.00
- Written Communication Selective (*satisfies Written Communication 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
- History of Science & Technology Selective - Credit Hours: 3.00
- Manufacturing Automation Selective - Credit Hours: 3.00

- Materials & Processes Selective - Credit Hours: 3.00
- Technical Graphic Selective - Credit Hours: 2.00
- Technical Electives - Credit Hours: 9.0

## Electives (8 credits)

Any course, any subject - Credit Hours: 8.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Click here for Industrial Engineering Technology Supplemental Information.

## Program Requirements

### Fall 1st Year

- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications
- TECH 12000 - Design Thinking In Technology
- Oral Communication or Written Communication Selective - Credit Hours: 3.00
- Mathematics Selective - Credit Hours: 3.00
- Humanities Selective - Credit Hours: 3.00

### 16 Credits

### Spring 1st Year

- TLI 11200 - Foundations Of Organizational Leadership ♦
- PHYS 22000 - General Physics
- Behavioral/Social Science Selective - Credit Hours: 3.00
- Materials & Processes Selective - Credit Hours: 3.00
- Written Communication or Oral Communication Selective - Credit Hours: 3.00

## 16 Credits

### Fall 2nd Year

- TLI 21300 - Project Management
- TLI 21400 - Introduction To Supply Chain Management Technology
- Computer Programming Selective - Credit Hours: 3.00
- Lab Science Selective - Credit Hours: 3.00
- Technical Graphics Selective - Credit Hours: 2.00

## 14 Credits

### Spring 2nd Year

- TLI 31600 - Statistical Quality Control
- MET 24500 - Manufacturing Systems
- ECET 22400 - Electronic Systems
- ECON 21000 - Principles Of Economics
- History of Science & Tech Selective - Credit Hours: 3.00

## 15 Credits

### Fall 3rd Year

- STAT 30100 - Elementary Statistical Methods
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- TLI 33400 - Economic Analysis For Technology Systems
- TLI 33620 - Total Productive Maintenance
- Advanced Written Communication Selective - Credit Hours: 3.00

## 15 Credits

### Spring 3rd Year

- TLI 33520 - Human Factors For Technology Systems
- TLI 43630 - Design Of Experiments
- TLI 43530 - Operations Planning And Management
- Manufacturing Automation Selective - Credit Hours: 3.00
- Advanced Oral Communication Selective - Credit Hours: 3.00

## 15 Credits

### Fall 4th Year

- TLI 48390 - Industrial Engineering Technology Capstone I: Problem Identification And Analysis
- TLI 43640 - Lean Six Sigma ♦
- Technical Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 15 Credits

### Spring 4th Year

- TLI 43540 - Facilities Planning And Material Handling
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00
- TLI 48395 - Industrial Engineering Technology Capstone II: Project Design

## 14 Credits

### Notes

- 2.0 Graduation GPA required for Bachelor of Science degree.
- 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

# 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, [www.abet.org](http://www.abet.org).

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

## Degree Requirements

### 120 Credits Required

#### Departmental/Program Major Courses (120 credits)

#### Required Major Courses (59 credits)

- ENGT 18000 - Engineering Technology Foundations ♦
- ENGT 18100 - Engineering Technology Applications
- MET 10200 - Production Design And Specifications
- MET 11100 - Applied Statics ♦
- MET 14300 - Materials And Processes I
- MET 14400 - Materials And Processes II
- MET 21100 - Applied Strength Of Materials
- MET 21300 - Dynamics
- MET 22000 - Heat And Power
- MET 23000 - Fluid Power
- MET 24500 - Manufacturing Systems
- MET 28400 - Introduction To Industrial Controls
- MET 31300 - Applied Fluid Mechanics
- MET 32000 - Applied Thermodynamics
- MET 34600 - Advanced Materials In Manufacturing
- Professional Requirement - Credit Hours: 0.00
- Intercultural Requirement - Credit Hours: 0.00

#### MET Selectives (15 credits included within major credits)

- Mechanics Selective - Credit Hours: 3.00
- MET Elective or approved Focus Area elective - Credit Hours: 3.00
- MET Capstone Selective I - Credit Hours: 3.00
- MET Capstone Selective II - Credit Hours: 3.00
- Technical Selective or approved Focus Area Selective - Credit Hours: 3.00

## Other Departmental/Program Course Requirements (61 credits)

- CHM 11100 - General Chemistry
- ECET 22400 - Electronic Systems
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- PHYS 22000 - General Physics (satisfies Science for core)
- PHYS 22100 - General Physics (satisfies Science for core)
- STAT 30100 - Elementary Statistical Methods
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy and Science, Technology & Society for core)
- TLI 33400 - Economic Analysis For Technology Systems or
- IET 45100 - Monetary Analysis For Industrial Decisions
- Freshman Composition Selective (satisfies Written Communication for core) - Credit Hours: 3.00
- Computer Graphics Technology Selective - Credit Hours: 2.00
- Economics/Finance Selective - Credit Hours 3.00
- Programming Selective - Credit Hours 3.00
- Freshman Speech Selective (satisfies Oral Communication for Core) -Credit hours: 3.00
- Communications Selective - Credit hours: 3.00
- Technical Writing 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

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:



For current pre-requisites for courses, click [here](#).

## Additional Requirements

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

## Program Requirements

### Fall 1st Year

- ENGT 18000 - Engineering Technology Foundations ♦
- ENGT 18100 - Engineering Technology Applications
- MA 16010 - Applied Calculus I
- MET 14400 - Materials And Processes II
- Freshman Speech or Freshman Composition Selective+ - Credit Hours: 3.00
- Computer Graphics Technology Selective - Credit Hours: 2.00

### 15 Credits

### Spring 1st Year

- MA 16020 - Applied Calculus II
- MET 11100 - Applied Statics ♦
- MET 14300 - Materials And Processes I
- TECH 12000 - Design Thinking In Technology
- Freshman Composition or Freshman Speech Selective + - Credit Hours: 3.00

### 15 Credits

### Fall 2nd Year

- ECET 22400 - Electronic Systems
- MET 21100 - Applied Strength Of Materials
- PHYS 22000 - General Physics
- Programming Selective - Credit Hours: 3.00

### 14 Credits

### Spring 2nd Year

- MET 10200 - Production Design And Specifications
- MET 21300 - Dynamics
- MET 28400 - Introduction To Industrial Controls

- PHYS 22100 - General Physics
- Humanities Selective - Credit Hours: 3.00

## 16 Credits

### Fall 3rd Year

- CHM 11100 - General Chemistry
- MET 22000 - Heat And Power
- MET 23000 - Fluid Power
- MET 24500 - Manufacturing Systems
- STAT 30100 - Elementary Statistical Methods

## 15 Credits

### Spring 3rd Year

- MET 32000 - Applied Thermodynamics
- MET 34600 - Advanced Materials In Manufacturing
- Economics/Finance Selective - Credit Hours: 3.00
- Global/Professional Selective - Credit Hours: 3.00
- Mechanics Selective - Credit Hours: 3.00

## 15 Credits

### Fall 4th Year

- TLI 33400 - Economic Analysis For Technology Systems
- MET 31300 - Applied Fluid Mechanics
- MET Capstone Selective I - Credit Hours: 3.00
- Technical/Management (TECH/MGMT) Selective - Credit Hours: 3.00
- Technical Writing Selective+ - Credit Hours: 3.00

## 15 Credits

### Spring 4th Year

- MET Capstone Selective II - Credit Hours: 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
- Communications Selective+ - Credit Hours: 3.00

## 15 Credits

## Notes

- 2.0 Graduation GPA are required for the Bachelor of Science degree.
- Students must earn a "D-" or better in all courses unless otherwise noted.
- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.
- 32 credit hours of 300-level or higher courses must be completed at Purdue University.
- Complete a Professional Requirement.
- Complete an Intercultural Requirement.
- + denotes optional Cornerstone Certificate course.

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## **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, [www.abet.org](http://www.abet.org).

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

### **Degree Requirements**

### **120 Credits Required**

## Departmental/Program Major Courses (120 credits)

### Required Major Courses (62 credits)

- CNIT 10500 - Introduction To C Programming ♦
- ECET 17900 - Introduction To Digital Systems
- ECET 27900 - Embedded Digital Systems
- ECET 32700 - Instrumentation And Data Acquisition Design
- ECET 33700 - Continuous Systems Analysis And Design
- ENGT 18000 - Engineering Technology Foundations ♦
- ENGT 18100 - Engineering Technology Applications
- MET 10200 - Production Design And Specifications
- MET 11100 - Applied Statics
- MET 11300 - Mechanics Applications
- MET 23000 - Fluid Power
- MET 24500 - Manufacturing Systems
- MET 28400 - Introduction To Industrial Controls
- MET 38200 - Controls And Instrumentation For Automation
- MFET 34400 - Automated Manufacturing Processes
- MFET 37400 - Manufacturing Integration I
- Manufacturing Selective - Credit Hours: 3.00
- Mechatronics Selective - Credit Hours: 3.00
- Controls Selective - Credit Hours: 3.00
- Materials and Processes Selective - Credit Hours: 3.00
- Capstone Selective I - Credit Hours: 3.00
- Capstone Selective II - Credit Hours: 3.00
- Professional Requirement - Credit Hours: 0.00
- Intercultural Requirement - Credit Hours: 0.00

### Other Departmental/Program Course Requirements (54 credits)

- CHM 11100 - General Chemistry (satisfies Science for core)
- ECET 22400 - Electronic Systems ♦
- ECET 38001 - Global Professional Issues In Engineering Technology
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- TECH 12000 - Design Thinking In Technology
- TLI 33400 - Economic Analysis For Technology Systems or
- IET 45100 - Monetary Analysis For Industrial Decisions
- Science Selective - Credit Hours: 3.00
- Freshman Composition Selective (satisfies Written Communication for core) - Credit Hours: 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
- Humanities/Social Science Elective - Credit Hours: 3.00
- Physics Selective (satisfies Science for core) - Credit Hours: 4.00

- Computer Graphics Selective - Credit Hours: 2.00
- Statistics/Quality Selective - Credit Hours: 3.00
- Freshman Speech Selective + - Credit Hours: 3.00 (satisfies Oral Communication for Core)
- Communications Selective + - Credit Hours: 3.00
- Technical Writing Selective + - Credit Hours: 3.00

## Electives (4 credits)

Any non-remedial course

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Click here for Mechatronics Engineering Technology Supplemental Information.

## Program Requirements

### Fall 1st Year

- CNIT 10500 - Introduction To C Programming ♦
- ENGT 18000 - Engineering Technology Foundations ♦
- ENGT 18100 - Engineering Technology Applications
- MA 16010 - Applied Calculus I ♦
- Materials and Processes Selective - Credit Hours: 3.00
- Freshman Composition or Freshman Speech Selective + - Credit Hours: 3.00

16 Credits

## Spring 1st Year

- ECET 22400 - Electronic Systems ♦
- MA 16020 - Applied Calculus II
- MET 11100 - Applied Statics
- TECH 12000 - Design Thinking In Technology
- Freshman Speech or Freshman Composition Selective + - Credit hours: 3.00

15 Credits

## Fall 2nd Year

- CHM 11100 - General Chemistry
- ECET 17900 - Introduction To Digital Systems
- MET 11300 - Mechanics Applications
- MET 28400 - Introduction To Industrial Controls ♦
- Computer Graphics Selective - Credit Hours: 2.00
- Humanities Foundational Selective - Credit Hours: 3.00

15 Credits

## Spring 2nd Year

- ECET 27900 - Embedded Digital Systems
- MET 10200 - Production Design And Specifications
- MET 24500 - Manufacturing Systems ♦
- Physics Selective - Credit Hours: 4.00
- Behavioral/Social Science Foundational Selective - Credit Hours: 3.00

16 Credits

## Fall 3rd Year

- MET 23000 - Fluid Power
- MFET 34400 - Automated Manufacturing Processes
- ECET 32700 - Instrumentation And Data Acquisition Design
- Science Selective - Credit Hours: 3.00
- Technical Writing Selective + - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- ECET 38001 - Global Professional Issues In Engineering Technology
- ECET 33700 - Continuous Systems Analysis And Design

- MFET 37400 - Manufacturing Integration I
- Statistics or Quality Selective - Credit Hours: 3.00
- Manufacturing Selective - Credit Hours: 3.00

## 15 Credits

### Fall 4th Year

- IET 45100 - Monetary Analysis For Industrial Decisions or
- TLI 33400 - Economic Analysis For Technology Systems
- Mechatronics Selective - Credit Hours: 3.00
- Communications Selective + - Credit Hours: 3.00
- Capstone Selective I - Credit Hours: 3.00
- Controls Selective - Credit Hours: 3.00
- Mechatronics Selective - Credit Hours: 3.00

## 15 Credits

### Spring 4th Year

- MET 38200 - Controls And Instrumentation For Automation
- Capstone Selective II - Credit Hours: 3.00
- Humanities/Social Science Elective - Credit Hours: 3.00
- Elective - Credit Hours: 4.00

## 13 Credits

### Notes

- A 2.0 Graduation GPA are required for the Bachelor of Science degree.
- 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.
- 32 credit hours of 300-level or higher courses must be completed at Purdue University.
- Complete a Professional Requirement.
- Complete an Intercultural Requirement.
- "D-" or better required in all major courses.
- + denotes options Cornerstone Certificate course.

## Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion.

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

# 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, [www.abet.org](http://www.abet.org).

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](#)

## Degree Requirements

### 120 Credits Required

#### Departmental/Program Major Courses (59 credits)

#### Required Major Courses (59 credits)

- CNIT 10500 - Introduction To C Programming ♦
- ENGT 18000 - Engineering Technology Foundations ♦
- ENGT 18100 - Engineering Technology Applications ♦
- MET 10200 - Production Design And Specifications
- MET 11100 - Applied Statics



- MET 11300 - Mechanics Applications
- MET 23000 - Fluid Power
- MET 24500 - Manufacturing Systems ♦
- MET 28400 - Introduction To Industrial Controls
- MFET 24800 - Introduction To Robotics
- MFET 34400 - Automated Manufacturing Processes
- MFET 37400 - Manufacturing Integration I
- Manufacturing Selective - Credit Hours: 3.00
- Materials and Processes Selective - Credit Hours: 3.00

## ROET Courses

- ECET 32700 - Instrumentation And Data Acquisition Design
- ECET 33700 - Continuous Systems Analysis And Design
- MFET 34800 - Advanced Industrial Robotics
- Mechatronics/Controls Selective - Credit Hours: 3.00
- Manufacturing/Controls Selective - Credit Hours: 3.00
- Capstone Selective I - Credit Hours: 3.00
- Capstone Selective II - Credit Hours: 3.00
- Professional Selective - Credit Hours: 0.00
- Intercultural Requirement - Credit Hours: 0.00

## Other Departmental/Program Course Requirements (57 credits)

- CHM 11100 - General Chemistry (satisfies Science for Core)
- ECET 22400 - Electronic Systems ♦
- ECET 38001 - Global Professional Issues In Engineering Technology
- MA 16010 - Applied Calculus I ♦ (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy and Science, Technology & Society for core)
- TLI 33400 - Economic Analysis For Technology Systems
- Freshman Speech Selective + (satisfies Oral Communication for core) - Credit Hours: 3.00
- Communications Selective + - Credit Hours: 3.00
- Technical Writing Selective + - Credit Hours: 3.00
- Science Selective - Credit Hours: 3.00
- Freshman Composition Selective (satisfies Written Communication for core) - Credit Hours: 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
- Humanities/Social Science Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Computer Graphics Selective - Credit Hours: 2.00
- Physics Selective (satisfies Science for core) - Credit Hours: 4.00
- Statistics/Quality Selective - Credit Hours: 3.00

## Electives (4 credits)

Any non-remedial course

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Click here for Robotics Engineering Technology Supplemental Information.

## Program Requirements

### Fall 1st Year

- MA 16010 - Applied Calculus I ♦
- ENGT 18000 - Engineering Technology Foundations ♦
- ENGT 18100 - Engineering Technology Applications ♦
- CNIT 10500 - Introduction To C Programming
- Freshman Composition or Freshman Speech Selective - Credit Hours: 3.00
- Materials and Processes Selective - Credit Hours: 3.00

### 16 Credits

### Spring 1st Year

- ECET 22400 - Electronic Systems ♦
- MA 16020 - Applied Calculus II
- MET 11100 - Applied Statics

- TECH 12000 - Design Thinking In Technology
- Freshman Speech or Freshman Composition Selective - Credit Hours: 3.00

## 15 Credits

### Fall 2nd Year

- CHM 11100 - General Chemistry
- MET 11300 - Mechanics Applications
- MET 28400 - Introduction To Industrial Controls
- Behavioral/Social Science Foundation Selective - Credit Hours: 3.00
- Computer Graphics Selective ♦ - Credit Hours: 2.00

## 15 Credits

### Spring 2nd Year

- MET 10200 - Production Design And Specifications
- MET 24500 - Manufacturing Systems ♦
- MFET 24800 - Introduction To Robotics
- Physics Selective - Credit Hours: 4.00
- Elective - Credit Hours: 3.00

## 16 Credits

### Fall 3rd Year

- ECET 32700 - Instrumentation And Data Acquisition Design
- MET 23000 - Fluid Power
- MFET 34400 - Automated Manufacturing Processes
- Statistics or Quality Selective - Credit Hours: 3.00
- Science Selective - Credit Hours: 3.00

## 15 Credits

### Spring 3rd Year

- ECET 33700 - Continuous Systems Analysis And Design
- ECET 38001 - Global Professional Issues In Engineering Technology
- MFET 37400 - Manufacturing Integration I
- Manufacturing Selective - Credit Hours: 3.00
- Humanities/Social Science Elective - Credit Hours: 3.00

## 15 Credits

## Fall 4th Year

- MFET 34800 - Advanced Industrial Robotics
- TLI 33400 - Economic Analysis For Technology Systems or
- IET 45100 - Monetary Analysis For Industrial Decisions
- Communications Selective +
- Mechatronics/Controls Selective - Credit Hours: 3.00
- Capstone Selective I

## 15 Credits

## Spring 4th Year

- Capstone Selective II - Credit Hours: 3.00
- Humanities/Social Science Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Manufacturing/Controls Selective - Credit Hours: 3.00
- Elective - Credit Hours: 1.00
- Interculture requirement - Credit Hours: 0.00
- Professional requirement - Credit Hours: 0.00

## 13 Credits

## Notes

- 2.0 Graduation GPA are required for the Bachelor of Science degree.
- 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.
- 32 credit hours of 300-level or higher courses must be completed at Purdue University.
- Complete a Professional Requirement.
- Complete an Intercultural Requirement.
- + denotes Cornerstone Certificate option.

## 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## **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, [www.abet.org](http://www.abet.org).

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

### **Degree Requirements**

## **120 Credits Required**

### **Department/Program Major Courses (46 credits)**

#### **Required Department Courses (46 credits)**

- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications
- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- TLI 31600 - Statistical Quality Control
- TLI 34200 - Warehouse And Inventory Management
- TLI 34300 - Technical And Service Selling
- TLI 34350 - Business To Business Sales Management
- TLI 41400 - Financial Analysis For Technology Systems
- TLI 43530 - Operations Planning And Management
- TLI 43630 - Design Of Experiments
- TLI 43640 - Lean Six Sigma
- TLI 44275 - Global Transportation And Logistics Management
- IET 44500 - Strategic Supply Chain Management
- TLI 48390 - Industrial Engineering Technology Capstone I: Problem Identification And Analysis
- TLI 48395 - Industrial Engineering Technology Capstone II: Project Design
- Globalization/Intercultural Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

## Other Departmental Requirements (69 credits)

### Other Departmental Courses (28 Credits)

- ECET 22400 - Electronic Systems
- ECON 21000 - Principles Of Economics
- MET 24500 - Manufacturing Systems
- MGMT 20010 - Business Accounting
- PHYS 22000 - General Physics ♦
- STAT 30100 - Elementary Statistical Methods
- TECH 12000 - Design Thinking In Technology (*satisfies both Information Literacy and Science, Technology and Society for core*)
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 21300 - Project Management

### Selectives (41 credits)

- 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
- Oral Communication Selective (*satisfies Oral Communication for core*) - Credit Hours: 3.00
- Written Communication Selective (*satisfies Written Communication 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
- History of Science & Technology Selective - Credit Hours: 3.00
- Manufacturing Automation Selective - Credit Hours: 3.00
- Materials & Processes Selective - Credit Hours: 3.00
- Technical Graphics Selective - Credit Hours: 2.00
- Technical Elective - Credit Hours: 3.00

### Electives (5 credits)

Any non-remedial course.

### University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication

- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Click here for Supply Chain & Sales Engineering Technology Supplemental Information.

## Program Requirements

### Fall 1st Year

- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications
- TECH 12000 - Design Thinking In Technology
- Mathematics Selective - Credit Hours: 3.00
- Oral Communication Selective - Credit Hours: 3.00
- Humanities Selective - Credit Hours: 3.00

### 16 Credits

### Spring 1st Year

- TLI 11200 - Foundations Of Organizational Leadership
- PHYS 22000 - General Physics ♦
- Behavioral/Social Science Selective - Credit Hours: 3.00
- Materials & Processes Selective - Credit Hours: 3.00
- Written Communication Selectiv - Credit Hours: 3.00

### 16 Credits

### Fall 2nd Year

- TLI 21300 - Project Management
- TLI 21400 - Introduction To Supply Chain Management Technology
- Computer Programming Selective - Credit Hours 3.00
- Lab Science Selective\* - Credit Hours 3.00
- Technical Graphics Selective - Credit Hours 2.00

### 14 Credits

## Spring 2nd Year

- ECET 22400 - Electronic Systems
- ECON 21000 - Principles Of Economics
- MET 24500 - Manufacturing Systems
- MGMT 20010 - Business Accounting
- TLI 34200 - Warehouse And Inventory Management

15 Credits

## Fall 3rd Year

- STAT 30100 - Elementary Statistical Methods
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- TLI 31600 - Statistical Quality Control
- TLI 34300 - Technical And Service Selling

15 Credits

## Spring 3rd Year

- TLI 34350 - Business To Business Sales Management
- TLI 44275 - Global Transportation And Logistics Management
- TLI 43630 - Design Of Experiments
- TLI 43530 - Operations Planning And Management

15 Credits

## Fall 4th Year

- TLI 41400 - Financial Analysis For Technology Systems
- TLI 43640 - Lean Six Sigma
- TLI 48390 - Industrial Engineering Technology Capstone I: Problem Identification And Analysis

## Spring 4th Year

- IET 44500 - Strategic Supply Chain Management
- TLI 48395 - Industrial Engineering Technology Capstone II: Project Design
- Advanced Oral Comm Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 2.00

14 Credits

15 Credits



## Notes

2.0 Graduation GPA required for Bachelor of Science degree.

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

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The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## 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 17900 - Introduction To Digital Systems
- ECET 22700 - DC And Pulse Electronics
- ECET 17700 - Data Acquisition And Systems Control or
- ECET 22400 - Electronic Systems
- OR
- ECE 20100 - Linear Circuit Analysis I and
- ECE 20700 - Electronic Measurement Techniques
- ECET 27700 - AC And Power Electronics or
- ECET 27900 - Embedded Digital Systems

- 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.)

## Prerequisite Information

A C programming course is a pre-requisite to ECET 17900. C programming courses at Purdue include:

- CNIT 10500 - Introduction To C Programming
- CNIT 15501 - Introduction To Software Development Concepts
- CS 15900 - C Programming
- CS 24000 - Programming In C

## 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.

## Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

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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 (16 credits)

### Required Courses (16 credits)

- MFET 28800 - Smart Manufacturing Operational And Information Networks
- MFET 35800 - Smart Manufacturing And The Global Economy
- CGT 20401 - Data Capture, Collection, Analysis, And Visualization In Smart Manufacturing
- CGT 39500 - Smart Manufacturing Enterprise Organization And Operations
- CNIT 16100 - Introduction To Programming And Data Management For Smart Manufacturing
- MFET 15900 - Introduction To The Smart Manufacturing Enterprise

## Notes

- 2.5 GPA in all minor courses.

## Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Supply Chain Management Technology Minor

Supply chain management 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)

- TLI 23500 - Introduction To Lean And Sustainable Systems
- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- TLI 34300 - Technical And Service Selling
- TLI 34200 - Warehouse And Inventory Management or
- TLI 34250 - Purchasing And Contract Management

## Note

- All courses must have a grade of a "C" or higher.

## Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Program Information

## Audio Engineering Technology Supplemental Information

## ECET Senior Capstone I and II Selective (6 hours)

Select one pair of Senior Capstone Selectives I and II

- ECET 43000 - Electrical And Electronic Product And Program Management and
- ECET 46000 - Project Design And Development
- or
- ECET 43100 - International Capstone Project Planning And Design and
- ECET 46100 - International Capstone Project Execution
- or
- ENGT 40500 - Entrepreneurial Capstone I and
- ENGT 40600 - Entrepreneurial Capstone II

## English Composition Selective+ (3 hours)

- ENGL 10600 - First-Year Composition
- ENGL 10800 - Accelerated First-Year Composition
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

## Freshman Speech Selective+ (3 hours)

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

## Written Communication Selective+ (3 hours)

- ENGL 20500 - Introduction To Creative Writing
- ENGL 30400 - Advanced Composition
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing
- ENGL 42400 - Writing For High Technology Industries

## Oral Communication Selective+ (3 hours)

- Any communications (COM) course at the 20000 level or higher.

## Business Selective (3 hours)

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: AGECE 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:
- AGECE 20300 - Introductory Microeconomics For Food And Agribusiness
- AGECE 20400 - Introduction To Resource Economics And Environmental Policy
- AGECE 21700 - Economics
- AGECE 25000 - Economic Geography Of World Food And Resources
- CSR 34200 - Personal Finance
- ECON 21000 - Principles Of Economics
- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics
- IT 10400 - Industrial Organization
- IT 23000 - Industrial Supply Chain Management
- IT 33000 - Industrial Sales And Sales Management
- IT 33200 - Purchasing, Inventory, And Warehouse Management
- OLS 25200 - Human Relations In Organizations
- OLS 27400 - Applied Leadership
- OLS 28400 - Leadership Principles
- OLS 32500 - Meeting Management
- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 21300 - Project Management
- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 34200 - Warehouse And Inventory Management
- TLI 34250 - Purchasing And Contract Management
- TLI 34300 - Technical And Service Selling

## General Education Selective+ (3 hours)

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.

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); 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)

## Industrial Economics Selective (3 hours)

- IET 45000 - Production Cost Analysis
- IET 45100 - Monetary Analysis For Industrial Decisions
- TLI 33400 - Economic Analysis For Technology Systems

## Advanced Theater Sound Selective (3 hours)

- ECET 34900 - Advanced Digital Systems
- THTR 36300 - Sound Design
- THTR 56300 - Advanced Sound Design
- THTR 56900 - Special Problems In Audio Production
- THTR 59700 - Production And Design Seminar

## Acoustics Selective (3 hours)

- MET 49000 - Special Topics In MET  
-Applied Acoustics

## Minor

Minors are offered through a variety of disciplines. The discipline offering the minor establishes the requirement. A minor is not required.

## Theater Design and Production Minor

Students who complete the AUET major with 1-4 additional credit hours of THTR/DANC courses may be eligible for the Theater Design and Production Minor. At a minimum, the minor requires an additional credit hour of THTR/DANC 36800 (which can be used to satisfy the Electives); at least 50% of the courses for the minor must be taken at Purdue University and GPA requirements must be met.

## 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
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture

- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- POL 36000 - Women And The Law
- POL 41300 - The Human Basis Of Politics
- POL 42300 - International Environmental Policy
- POL 43300 - International Organization

- POL 42900 - Contemporary Political Problems - It's a Complex World
  - PSY 12000 - Elementary Psychology
  - PSY 25100 - Health Psychology
  - PSY 32200 - Neuroscience Of Motivated Behavior
  - SOC 10000 - Introductory Sociology
  - SOC 31000 - Racial And Ethnic Diversity
  - SOC 33900 - Introduction To The Sociology Of Developing Nations
  - TECH 33000 - Technology And The Global Society
  - TLI 11100 - Introduction To Manufacturing And Supply Chain Systems
  - TLI 11200 - Foundations Of Organizational Leadership
  - TLI 31400 - Leading Innovation In Organizations
  - WGSS 28200 - Introduction To LGBT Studies
  - WGSS 38000 - Gender And Multiculturalism
  - WGSS 38300 - Women And Work
- Any foreign language 20000 level or higher (20100, 20200, 30100, 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.

## **Automation and Systems Integration Engineering Technology Supplemental Information**

### **Freshman Composition Selective +**

- ENGL 10600 - First-Year Composition
- ENGL 10800 - Accelerated First-Year Composition
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

### **Freshman Speech Selective+**

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

### **Communication Selective+**

- COM 31500 - Speech Communication Of Technical Information
- COM 32000 - Small Group Communication
- COM 41500 - Discussion Of Technical Problems
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

### **Technical Writing Selective+**

- ENGL 42100 - Technical Writing
- ENGL 42400 - Writing For High Technology Industries

### **Materials and Processes Selective**

- MET 14300 - Materials And Processes I
- MET 14400 - Materials And Processes II

### **Computer Graphics Selective**

- CGT 11000 - Technical Graphics Communications
- CGT 16300 - Graphical Communication And Spatial Analysis
- IT 10500 - Industrial Technology Introduction To Design

## Graphics Selective

- CGT 11301 - Product Data Management
- CGT 22600 - Introduction To Constraint-Based Modeling
- MET 30200 - CAD In The Enterprise

## CNIT or CS Selective

- CNIT 15500 - Introduction to Object-Oriented Programming
- CNIT 15501 - Introduction To Software Development Concepts
- CNIT 16100 - Introduction To Programming And Data Management For Smart Manufacturing
- CNIT 17500 - Visual Programming
- MET 16400 - Computing In Engineering Technology
- CS 15900 - C Programming

## Technical Selective

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
- FNR 30110 - Sustainable Wood Products Manufacturing
- MGMT 45500 - Legal Background For Business I
- OLS 28400 - Leadership Principles

## Statistics or Quality Selective

- STAT 30100 - Elementary Statistical Methods
- TLI 31600 - Statistical Quality Control

## Physics Selective

- PHYS 17200 - Modern Mechanics
- PHYS 22000 - General Physics

## Science Selective

- BIOL 11000 - Fundamentals Of Biology I
- BIOL 20300 - Human Anatomy And Physiology
- CHM 11200 - General Chemistry
- CHM 11600 - General Chemistry
- PHYS 22100 - General Physics
- PHYS 24100 - Electricity And Optics

## Continuous Control Selective

- ECET 37201 - Continuous Control Electronics
- MET 33400 - Advanced Fluid Power
- MET 43200 - Hydraulic Motion Control Systems
- MET 43600 - Pneumatic Motion Control Systems
- MET 48200 - Mechatronics
- MFET 29200 - Projects In Automation, Robotics And Mechatronics
- MFET 39200 - Advanced Projects In Automation, Robotics, And Mechatronics

## Controls Selective

- ECET 27400 - Wireless Communications
- ECET 32700 - Instrumentation And Data Acquisition Design
- ECET 35901 - Computer Based Data Acquisition Applications
- ECET 37201 - Continuous Control Electronics
- ECET 49900 - Electrical Engineering Technology  
- Applied Comp Vision Sensing & Auto
- MET 33400 - Advanced Fluid Power
- MET 38200 - Controls And Instrumentation For Automation
- MET 43200 - Hydraulic Motion Control Systems
- MET 43600 - Pneumatic Motion Control Systems
- MFET 29200 - Projects In Automation, Robotics And Mechatronics
- MFET 39200 - Advanced Projects In Automation, Robotics, And Mechatronics

## Manufacturing Selective

- AT 27200 - Introduction To Composite Technology
- AT 30802 - Aircraft Materials Processes
- AT 47200 - Advanced Composite Technology
- CGT 32600 - Graphics Standards For Product Definition
- CGT 42300 - Product Data Management
- CGT 42600 - Industry Applications Of Simulation And Visualization
- ECET 27000 - Electronics Prototype Development And Construction
- IT 38100 - Total Productive Maintenance
- IT 38500 - Industrial Ergonomics
- IT 43400 - Global Transportation And Logistics Management
- IT 44200 - Production Planning
- IT 44600 - Six Sigma Quality
- IT 48300 - Facility Design For Lean Manufacturing
- MET 30200 - CAD In The Enterprise
- MET 34900 - Stringed Instrument Design And Manufacture
- MET 45100 - Manufacturing Quality Control
- MFET 29200 - Projects In Automation, Robotics And Mechatronics
- MFET 34200 - Advanced Manufacturing Processes And Practices
- MFET 34800 - Advanced Industrial Robotics
- MFET 39200 - Advanced Projects In Automation, Robotics, And Mechatronics
- MFET 44600 - Advanced Manufacturing Operations
- TLI 33620 - Total Productive Maintenance

- TLI 44275 - Global Transportation And Logistics Management

## Senior Capstone Selective I

- ECET 43000 - Electrical And Electronic Product And Program Management
- ECET 43100 - International Capstone Project Planning And Design
- ENGT 40500 - Entrepreneurial Capstone I
- MET 40100 - Capstone Projects I
- MFET 48000 - Project Planning For Integration

## Senior Capstone Selective II

- ECET 46000 - Project Design And Development
- ECET 46100 - International Capstone Project Execution
- ENGT 40600 - Entrepreneurial Capstone II
- MET 40200 - Capstone Projects II
- MFET 48100 - Integration Of Manufacturing Systems

## Humanities Foundation Selective

<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

## Behavioral/Social Science Foundation Selective

<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

## Humanities/Social Science Elective

- AD 22600 - History Of Art To 1400  
Any 20000 level course or higher in PSY, SOC, HIST, ECON, POL, PHIL, REL, ANTH, English Literature, a foreign language or
- AD 22700 - History Of Art Since 1400
- AD 25100 - History Of Photography I
- AD 25500 - Art Appreciation
- AD 30701 - History Of Contemporary Photography
- AD 31100 - Ancient Greek Art
- AD 31200 - Ancient Roman Art
- MUS 25000 - Music Appreciation
- MUS 37400 - Contemporary Music
- MUS 37600 - World Music
- MUS 37800 - Jazz History
- MUS 38100 - Music History I: Antiquity To Mozart
- MUS 38200 - Music History II: Beethoven To The Present

## Elective

Any non-remedial course.

## 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
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
  - EDPS 31700 - Collaborative Leadership: Mentoring
  - ENGL 41400 - Studies In Literature And Culture
  - HDFS 28000 - Diversity In Individual And Family Life
  - HDFS 33200 - Stress And Coping In Contemporary Families
  - HEBR 38500 - The Holocaust In Modern Hebrew Literature
  - HIST 19500 - The Historian's Craft: Historical Research And Film
  - HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
  - HIST 33805 - History Of Human Rights
  - HIST 35000 - Science And Society In The Twentieth Century World
  - HIST 36600 - Hispanic Heritage Of The United States
  - HIST 37700 - History And Culture Of Native America
  - HIST 46900 - Black Civil Rights Movement
  - HTM 37000 - Sustainable Tourism And Responsible Travel
  - HTM 37200 - Global Tourism Geography
  - MSL 20100 - Individual Leadership Studies
  - OLS 35000 - Creativity In Business And Industry
  - PHIL 11400 - Global Moral Issues
  - PHIL 43500 - Philosophy Of Mind
  - POL 22200 - Women, Politics, And Public Policy
  - POL 23500 - International Relations Among Rich And Poor Nations
  - POL 32600 - Black Political Participation In America
  - POL 32700 - Global Green Politics
  - POL 36000 - Women And The Law
  - POL 41300 - The Human Basis Of Politics
  - POL 42300 - International Environmental Policy
  - POL 42900 - It's A Complex World
  - POL 43300 - International Organization
  - PSY 12000 - Elementary Psychology
  - SOC 10000 - Introductory Sociology
  - SOC 31000 - Racial And Ethnic Diversity
  - TECH 33000 - Technology And The Global Society
  - TLI 11200 - Foundations Of Organizational Leadership
  - TLI 31400 - Leading Innovation In Organizations
  - WGSS 28200 - Introduction To LGBT Studies
  - WGSS 38000 - Gender And Multiculturalism
  - WGSS 38300 - Women And Work
- Any foreign language 20000 level or higher (20100, 20200, 30100, 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.

## Computer Engineering Technology Supplemental Information

### English Composition Selective

- ENGL 10600 - First-Year Composition
- ENGL 10800 - Accelerated First-Year Composition
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

### Freshman Speech Selective

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

### Oral Communication Selective

Any communications (COM) course at the 200 level or higher.

## Written Communication Selective

- ENGL 20500 - Introduction To Creative Writing
- ENGL 30400 - Advanced Composition
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing
- ENGL 42400 - Writing For High Technology Industries

## General Education Selectives

Select 12 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.
- 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.

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); 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)

## Industrial Economics Selective

- TLI 33400 - Economic Analysis For Technology Systems
- IET 45100 - Monetary Analysis For Industrial Decisions
- IT 45000 - Production Cost Analysis

## Business Selective

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: 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
- AGEC 20400 - Introduction To Resource Economics And Environmental Policy
- AGEC 21700 - Economics
- CSR 34200 - Personal Finance
- ECON 21000 - Principles Of Economics
- ECON 25100 - Microeconomics



- ECON 25200 - Macroeconomics
- IT 10400 - Industrial Organization
- IT 23000 - Industrial Supply Chain Management
- IT 33000 - Industrial Sales And Sales Management
- IT 33200 - Purchasing, Inventory, And Warehouse Management
- OLS 25200 - Human Relations In Organizations
- OLS 27400 - Applied Leadership
- OLS 28400 - Leadership Principles
- OLS 32500 - Meeting Management
- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 21300 - Project Management
- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 34200 - Warehouse And Inventory Management
- TLI 34250 - Purchasing And Contract Management
- TLI 34300 - Technical And Service Selling

## Computer Engineering Selective

- ECET 35901 - Computer Based Data Acquisition Applications
- ECET 42800 - Audio Electronics-Selected Topics

## Senior Capstone I & II

Select one pair of Senior Capstone Selectives:

- ECET 43000 - Electrical And Electronic Product And Program Management
- ECET 46000 - Project Design And Development
- ECET 43100 - International Capstone Project Planning And Design
- ECET 46100 - International Capstone Project Execution

## ECET Selective

- ECET 30201 - Introduction To Industrial Controls
- ECET 31100 - Electrical Systems And Signals In Healthcare
- ECET 31410 - Military RF Electronic Applications
- ECET 32100 - Introduction To Nanotechnology
- ECET 33300 - Power Electronics In Energy Systems
- ECET 33500 - Computer Architecture And Performance Evaluation
- ECET 33700 - Continuous Systems Analysis And Design
- ECET 35901 - Computer Based Data Acquisition Applications
- ECET 37201 - Continuous Control Electronics
- ECET 37300 - Applied Electronic Drives
- ECET 38600 - Building Electrical Codes And Standard Practices
- ECET 38800 - Analog IC Applications
- ECET 42800 - Audio Electronics-Selected Topics
- ECET 43600 - Electrical Power Transmissions, Distribution, And Smart Control

## Elective

Any non remedial course.

## 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.

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- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 22300 - Human Factors For Flight Crews
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training

- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- POL 36000 - Women And The Law
- POL 41300 - The Human Basis Of Politics
- POL 42300 - International Environmental Policy
- POL 43300 - International Organization
- PSY 12000 - Elementary Psychology
- PSY 25100 - Health Psychology
- PSY 32200 - Neuroscience Of Motivated Behavior
- SOC 10000 - Introductory Sociology
- SOC 31000 - Racial And Ethnic Diversity
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems
- TLI 31400 - Leading Innovation In Organizations
- WGSS 28200 - Introduction To LGBT Studies
- WGSS 38000 - Gender And Multiculturalism
- WGSS 38300 - Women And Work

## 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.

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.

## Electrical Engineering Technology Supplemental Information

### ECET Electives (12 hours)

ECET Electives can be selected from one or more of the following groups. Please note that not all ECET Electives are offered every year.

#### Audio

- ECET 32700 - Instrumentation And Data Acquisition Design
- ECET 33900 - Digital Signal Processing
- ECET 34900 - Advanced Digital Systems
- ECET 38800 - Analog IC Applications
- ECET 42800 - Audio Electronics-Selected Topics

## Communications

- ECET 31410 - Military RF Electronic Applications
- ECET 36400 - Fundamentals Of Electromagnetics
- ECET 44400 - Wireless Systems: Design And Measurement

## Computer/Digital

- ECET 32900 - Advanced Embedded Digital Systems
- ECET 33500 - Computer Architecture And Performance Evaluation
- ECET 33900 - Digital Signal Processing
- ECET 34900 - Advanced Digital Systems
- ECET 35901 - Computer Based Data Acquisition Applications
- ECET 43900 - Advanced Digital Signal Processing

## Smart Living

- ECET 31100 - Electrical Systems And Signals In Healthcare
- ECET 32100 - Introduction To Nanotechnology
- ECET 32700 - Instrumentation And Data Acquisition Design

## Smart Environment

- ECET 30201 - Introduction To Industrial Controls
- ECET 32700 - Instrumentation And Data Acquisition Design
- ECET 37201 - Continuous Control Electronics
- ECET 38600 - Building Electrical Codes And Standard Practices
- ECET 43600 - Electrical Power Transmissions, Distribution, And Smart Control

## Smart Mobility

- ECET 32300 - Introduction To Electric Vehicle Systems
- ECET 33300 - Power Electronics In Energy Systems
- ECET 37300 - Applied Electronic Drives
- ECET 42301 - Electrical Vehicle Integration And Fabrication

## Professional Practice

ECET Co-op Sessions 4 and 5 with seminar: credit hours: 3.00

## Advanced Analysis Selectives (3 hours)

- ECET 33700 - Continuous Systems Analysis And Design
- ECET 33900 - Digital Signal Processing

## ECET Senior Capstone I & II Selectives (6 hours)

Select one pair Senior Capstone I & II Selectives.

- ECET 43000 - Electrical And Electronic Product And Program Management and
- ECET 46000 - Project Design And Development
- or
- ECET 43100 - International Capstone Project Planning And Design and
- ECET 46100 - International Capstone Project Execution
- or
- ENGT 40500 - Entrepreneurial Capstone I and
- ENGT 40600 - Entrepreneurial Capstone II

## Technical Selectives (9 hours)

- 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 15800 and 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  
Sust Envy Tech: Intl Perspectv Purdue In Germany

## English Composition Selective+ (3 hours)

- ENGL 10600 - First-Year Composition
- ENGL 10800 - Accelerated First-Year Composition
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

## Freshman Speech Selective+ (3 hours)

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

## Written Communication Selective+ (3 hours)

- ENGL 20500 - Introduction To Creative Writing
- ENGL 30400 - Advanced Composition
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

- ENGL 42400 - Writing For High Technology Industries

## Oral Communication Selective+ (3 hours)

- Any communication (COM) course at the 20000 level or higher.

## Business Selective (3 hours)

- AGECE 20300 - Introductory Microeconomics For Food And Agribusiness
- Any Agricultural Economics course (AGECE) 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 20400 - Introduction To Resource Economics And Environmental Policy
- AGECE 21700 - Economics
- AGECE 25000 - Economic Geography Of World Food And Resources
- CSR 34200 - Personal Finance
- ECON 21000 - Principles Of Economics
- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics
- IT 10400 - Industrial Organization
- IT 23000 - Industrial Supply Chain Management
- IT 33000 - Industrial Sales And Sales Management
- IT 33200 - Purchasing, Inventory, And Warehouse Management
- OLS 25200 - Human Relations In Organizations
- OLS 27400 - Applied Leadership
- OLS 28400 - Leadership Principles
- OLS 32500 - Meeting Management
- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 21300 - Project Management
- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 34200 - Warehouse And Inventory Management
- TLI 34250 - Purchasing And Contract Management
- TLI 34300 - Technical And Service Selling

## General Education Selectives (12 hours)

### 1. General Education Selectives

Select 12 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.

- 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.

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); 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)

## Industrial Economics Selective (3 hours)

- IET 45000 - Production Cost Analysis
- IET 45100 - Monetary Analysis For Industrial Decisions
- TLI 33400 - Economic Analysis For Technology Systems

## Minor

Minors are offered through a variety of disciplines. The discipline offering the minor establishes the requirement. A minor is not required.

## 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).

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- AAS 27100 - Introduction To African American Studies
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures



- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- POL 36000 - Women And The Law
- POL 41300 - The Human Basis Of Politics
- POL 42300 - International Environmental Policy
- POL 42900 - It's A Complex World
- POL 43300 - International Organization
- PSY 12000 - Elementary Psychology
- PSY 25100 - Health Psychology

- PSY 32200 - Neuroscience Of Motivated Behavior
  - SOC 10000 - Introductory Sociology
  - SOC 31000 - Racial And Ethnic Diversity
  - SOC 33900 - Introduction To The Sociology Of Developing Nations
  - TECH 33000 - Technology And The Global Society
  - TLI 11200 - Foundations Of Organizational Leadership
  - TLI 31400 - Leading Innovation In Organizations
  - WGSS 28200 - Introduction To LGBT Studies
  - WGSS 38000 - Gender And Multiculturalism
  - WGSS 38300 - Women And Work
- Any foreign language 20000 level or higher (20100, 20200, 30100, 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.

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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.

## **Energy Engineering Technology Supplemental Information**

### **English Composition Selective**

- ENGL 10600 - First-Year Composition
- ENGL 10800 - Accelerated First-Year Composition
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

### **Freshman Speech Selective**

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

### **Oral Communication Selective**

- Any communications (COM) course at the 20000 level or higher - 3.00 credit hours.

### **Written Communication Selective**

- ENGL 20500 - Introduction To Creative Writing
- ENGL 30400 - Advanced Composition
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing
- ENGL 42400 - Writing For High Technology Industries

### **ECET Advanced Analysis Selective**

- ECET 33700 - Continuous Systems Analysis And Design
- ECET 33900 - Digital Signal Processing

### **Business Selective**

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: AGECE 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:
- AGECE 20300 - Introductory Microeconomics For Food And Agribusiness
- AGECE 20400 - Introduction To Resource Economics And Environmental Policy
- AGECE 21700 - Economics
- AGECE 25000 - Economic Geography Of World Food And Resources
- CSR 34200 - Personal Finance
- ECON 21000 - Principles Of Economics
- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics
- IT 10400 - Industrial Organization
- IT 23000 - Industrial Supply Chain Management
- IT 33000 - Industrial Sales And Sales Management
- IT 33200 - Purchasing, Inventory, And Warehouse Management
- OLS 25200 - Human Relations In Organizations
- OLS 27400 - Applied Leadership
- OLS 28400 - Leadership Principles
- OLS 32500 - Meeting Management
- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 15200 - Business Principles For Organizational Leadership
- TLI 21300 - Project Management
- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 34200 - Warehouse And Inventory Management
- TLI 34250 - Purchasing And Contract Management
- TLI 34300 - Technical And Service Selling

## Statistics Selective

- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods

## Industrial Economics Selective

- IET 45100 - Monetary Analysis For Industrial Decisions
- IT 45000 - Production Cost Analysis
- TLI 33400 - Economic Analysis For Technology Systems

## General Education Selective

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.
- 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.

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); 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

- EAPS 30100 - Oil !
- EAPS 32700 - Climate, Science And Society
- EAPS 37500 - Great Issues - Fossil Fuels, Energy And Society
- MET 23000 - Fluid Power
- MET 42200 - Power Plants And Energy Conversion
- SFS 30200 - Principles Of Sustainability

## Senior Capstone Selective I and II

- ECET 43000 - Electrical And Electronic Product And Program Management and
- ECET 46000 - Project Design And Development
- or
- ECET 43100 - International Capstone Project Planning And Design and
- ECET 46100 - International Capstone Project Execution

## Elective

Any non-remedial course - 3.00 credit hours.

## Intercultural Requirement

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.

## Professional Requirement

Professional 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.

## **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
- MET 14400 - Materials And Processes II

## Mathematics Selective (3 Credits)

- MA 15800 - Precalculus- Functions And Trigonometry
- MA 16010 - Applied Calculus I
- MA 16100 - Plane Analytic Geometry And Calculus I
- MA 16200 - Plane Analytic Geometry And Calculus II
- MA 16500 - Analytic Geometry And Calculus I
- MA 16600 - Analytic Geometry And Calculus II

## Oral Communication Selective (3 Credits)

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

## Written Communication Selective (3 Credits)

- ENGL 10600 - First-Year Composition
- ENGL 10800 - Accelerated First-Year Composition
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

## Computer Programming Selective (3 Credits)

- CNIT 10500 - Introduction To C Programming
- CNIT 15500 - Introduction to Object-Oriented Programming
- CNIT 15501 - Introduction To Software Development Concepts
- CNIT 17500 - Visual Programming
- CS 15900 - C Programming
- CS 17700 - Programming With Multimedia Objects
- CS 18000 - Problem Solving And Object-Oriented Programming
- MET 16400 - Computing In Engineering Technology

## History of Science and Technology Selective (3 Credits)

- HIST 30305 - Food In Modern America
- HIST 30605 - Technology And War In U.S. History
- HIST 31405 - Science, Technology, Engineering And Mathematics (STEM) And Gender
- HIST 31505 - American Beauty

- HIST 33000 - History Of The British Empire And Commonwealth, 1783 To 1960
- HIST 33400 - Science And Society In Western Civilization II
- HIST 38001 - History Of United States Agriculture
- HIST 38400 - History Of Aviation
- HIST 38700 - History Of The Space Age
- POL 42900 - Contemporary Political Problems

## Lab Science Selective (3 Credits)

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

## Technical Graphics Selective (2 Credits)

- CGT 11000 - Technical Graphics Communications
- CGT 16300 - Graphical Communication And Spatial Analysis
- IT 10500 - Industrial Technology Introduction To Design

## Advanced Oral Communication Selective (3 Credits)

- COM 31400 - Advanced Presentational Speaking
- COM 31500 - Speech Communication Of Technical Information
- COM 31800 - Principles Of Persuasion
- COM 32000 - Small Group Communication
- COM 32400 - Introduction To Organizational Communication
- COM 32500 - Interviewing: Principles And Practice
- COM 41500 - Discussion Of Technical Problems
- COM 43500 - Communication And Emerging Technologies

## Advanced Written Communication Selective (3 Credits)

- ENGL 30400 - Advanced Composition
- ENGL 30600 - Introduction To Professional Writing
- ENGL 41900 - Multimedia Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing
- ENGL 42400 - Writing For High Technology Industries

## Manufacturing Automation Selective (3 Credits)

- MET 28400 - Introduction To Industrial Controls
- MFET 30000 - Applications Of Automation In Manufacturing
- MFET 34400 - Automated Manufacturing Processes

## Free Elective (8 Credits)

Any non-remedial course

## Technical Elective (9 Credits)

- Any Polytechnic Institute or Engineering (ENGR or EPCS) course not already required on the plan of study
- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- ENTR 31000 - Marketing And Management For New Ventures
- ENTR 31500 - Business Planning For Social Entrepreneurship

## 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
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 22300 - Human Factors For Flight Crews
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction



- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- POL 36000 - Women And The Law
- POL 41300 - The Human Basis Of Politics
- POL 42300 - International Environmental Policy
- POL 42900 - Contemporary Political Problems - It's A Complex World
- POL 43300 - International Organization
- PSY 12000 - Elementary Psychology
- PSY 25100 - Health Psychology
- PSY 32200 - Neuroscience Of Motivated Behavior
- SOC 10000 - Introductory Sociology
- SOC 31000 - Racial And Ethnic Diversity
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 31400 - Leading Innovation In Organizations
- WGSS 28200 - Introduction To LGBT Studies
- WGSS 38000 - Gender And Multiculturalism
- WGSS 38300 - Women And Work

## 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.

\*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.

## Mechanical Engineering Technology Supplemental Information

### CGT Selective

- CGT 11000 - Technical Graphics Communications
- CGT 16300 - Graphical Communication And Spatial Analysis
- IT 10500 - Industrial Technology Introduction To Design

## Freshman Composition +

- ENGL 10600 - First-Year Composition
- ENGL 10800 - Accelerated First-Year Composition
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

## Freshman Speech Selective +

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

## Economics/Finance Selective

- AGECE 21700 - Economics
- CSR 34200 - Personal Finance
- ECON 21000 - Principles Of Economics
- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics
- ENTR 20000 - Introduction To Entrepreneurship And Innovation

## Communications Selective +

- COM 31500 - Speech Communication Of Technical Information
- COM 32000 - Small Group Communication
- COM 41500 - Discussion Of Technical Problems
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

## Technical Writing Selective +

- ENGL 42100 - Technical Writing
- ENGL 42400 - Writing For High Technology Industries

## Technical Selective

- ANSC 23000 - Physiology Of Domestic Animals
- AT 27200 - Introduction To Composite Technology
- AT 27800 - Nondestructive Testing For Aircraft
- AT 47800 - Advanced Nondestructive Testing
- BCHM 22100 - Analytical Biochemistry
- BCM 23000 - Mechanical And Electrical Systems
- BCM 31500 - Mechanical Construction Estimating
- BCM 38000 - Concrete Construction
- BIOL 20300 - Human Anatomy And Physiology
- BIOL 22100 - Introduction To Microbiology
- CGT 22600 - Introduction To Constraint-Based Modeling

- CGT 30301 - Digital Manufacturing
- CHM 11200 - General Chemistry
- CHM 11600 - General Chemistry
- CHM 48100 - Environmental Chemistry
- CE 35000 - Introduction To Environmental And Ecological Engineering
- CE 35500 - Engineering Environmental Sustainability
- HSCI 31200 - Radiation Science Fundamentals
- IE 57700 - Human Factors In Engineering
- IT 33000 - Industrial Sales And Sales Management
- IT 34500 - Automatic Identification And Data Capture
- IT 35100 - Advanced Industrial Safety And Health Management
- IT 43400 - Global Transportation And Logistics Management
- MA 26100 - Multivariate Calculus
- MFET 28800 - Smart Manufacturing Operational And Information Networks
- NS 35000 - Naval Ship Systems
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- TLI 33620 - Total Productive Maintenance
- A 300-400 level ENGR, ECET, MFET, CS or elective IET course (excluding MFET 30000).
- A CHM, MA, PHYS, or STAT course beyond what is required.
- Any MET elective course.
- Purdue 3- session co-op with completed seminar courses.

## Management Selective

- AFT 35100 - Air Force Leadership Studies I
- AFT 36100 - Air Force Leadership Studies II
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENTR 31000 - Marketing And Management For New Ventures
- ENTR 31500 - Business Planning For Social Entrepreneurship
- MFET 35800 - Smart Manufacturing And The Global Economy
- MGMT 20000 - Introductory Accounting
- MGMT 20010 - Business Accounting
- MGMT 45500 - Legal Background For Business I
- MSL 20200 - Leadership And Teamwork
- MSL 30100 - Leadership And Problem Solving
- MSL 40100 - Leadership And Management
- NS 21400 - Fundamentals Of Leadership
- NS 41300 - Naval Leadership, Management, And Ethics
- OLS 25200 - Human Relations In Organizations
- OLS 27400 - Applied Leadership
- OLS 28400 - Leadership Principles
- OLS 36400 - Professional Development Program
- OLS 38600 - Leadership For Organizational Change And Innovation
- PSY 27200 - Introduction To Industrial-Organizational Psychology

- TLI 11200 - Foundations Of Organizational Leadership
- TLI 15200 - Business Principles For Organizational Leadership
- TLI 21300 - Project Management
- TLI 25300 - Principles Of Technology Strategy
- TLI 25400 - Leading Change In Technology Organizations
- TLI 41400 - Financial Analysis For Technology Systems
- Approved Study Abroad Course

## Mechanics Selective

- MET 31100 - Experimental Strength Of Materials
- MET 31700 - Machine Diagnostics
- MET 31400 - Applications Of Machine Elements
- MET 31500 - Applied Mechanism Kinematics And Dynamics
- MET 31601 - Mechanics Of Machine Design
- MET 41100 - Introduction To The Finite Element Method

## Programming Selective

- CNIT 10500 - Introduction To C Programming
- CNIT 15500 - Introduction to Object-Oriented Programming
- CNIT 15501 - Introduction To Software Development Concepts
- CNIT 17500 - Visual Programming
- CS 15900 - C Programming
- CS 17700 - Programming With Multimedia Objects
- CS 18000 - Problem Solving And Object-Oriented Programming
- MET 16400 - Computing In Engineering Technology

## MET Elective (3 credit hours)

- MET 30200 - CAD In The Enterprise  
\* 5 session co-op with completed seminar courses.
- MET 31100 - Experimental Strength Of Materials
- MET 31400 - Applications Of Machine Elements
- MET 31500 - Applied Mechanism Kinematics And Dynamics
- MET 31601 - Mechanics Of Machine Design
- MET 31700 - Machine Diagnostics
- MET 33400 - Advanced Fluid Power
- MET 34900 - Stringed Instrument Design And Manufacture
- MET 38200 - Controls And Instrumentation For Automation
- MET 40000 - Mechanical Design
- MET 40100 - Capstone Projects I
- MET 40200 - Capstone Projects II
- MET 41100 - Introduction To The Finite Element Method
- MET 42100 - Air Conditioning And Refrigeration
- MET 42200 - Power Plants And Energy Conversion

- MET 42600 - Internal Combustion Engines
- MET 43200 - Hydraulic Motion Control Systems
- MET 43600 - Pneumatic Motion Control Systems
- MET 44301 - Joining Processes
- MET 45100 - Manufacturing Quality Control
- MET 48200 - Mechatronics
- MET 48600 - Fundamentals Of Motorsports
- MET 49000 - Special Topics In MET
- MET 49900 - Mechanical Engineering Technology  
- Independent Study

## MET Capstone Selectives I & II

- ECET 43000 - Electrical And Electronic Product And Program Management
- ECET 43100 - International Capstone Project Planning And Design
- ECET 46000 - Project Design And Development
- ECET 46100 - International Capstone Project Execution
- ENGT 40500 - Entrepreneurial Capstone I
- ENGT 40600 - Entrepreneurial Capstone II
- MET 33400 - Advanced Fluid Power
- MET 40000 - Mechanical Design
- MET 40100 - Capstone Projects I
- MET 40200 - Capstone Projects II
- MET 42100 - Air Conditioning And Refrigeration
- MET 42200 - Power Plants And Energy Conversion
- MET 42600 - Internal Combustion Engines
- MET 43200 - Hydraulic Motion Control Systems
- MET 43600 - Pneumatic Motion Control Systems
- MFET 48000 - Project Planning For Integration
- MFET 48100 - Integration Of Manufacturing Systems

## Global/Professional Selective

- ANTH 20500 - Human Cultural Diversity
- ANTH 34100 - Culture And Personality
- ARAB 28000 - Arabic Culture
- CHNS 28000 - Topics in Chinese Civilization and Culture
- CHNS 28500 - Chinese Calligraphy
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- FNR 48800 - Global Environmental Issues
- FR 33000 - French Cinema
- GER 23000 - German Literature In Translation
- GER 28000 - German Special Topics - Beer Brewing in the German Culture
- GER 33000 - German Cinema

- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33300 - Science And Society In Western Civilization I
- HIST 33400 - Science And Society In Western Civilization II
- HIST 36000 - Gender In Middle East History
- JPNS 28000 - Introduction To Modern Japanese Civilization
- LC 23500 - East Asian Literature In Translation
- LC 23900 - Women Writers In Translation
- MFET 35800 - Smart Manufacturing And The Global Economy
- MGMT 45500 - Legal Background For Business I
- MSL 30200 - Leadership And Ethics
- MUS 37600 - World Music
- NS 41300 - Naval Leadership, Management, And Ethics
- OLS 45600 - Leadership In A Global Environment
- PHIL 11400 - Global Moral Issues
- PHIL 20600 - Introduction To Philosophy Of Religion
- PHIL 29000 - Environmental Ethics
- POL 23100 - Introduction To United States Foreign Policy
- PSY 33500 - Stereotyping And Prejudice
- PTGS 33000 - Brazilian, Portuguese, And African Cinema
- SOC 31000 - Racial And Ethnic Diversity
- SPAN 23500 - Spanish American Literature In Translation
- SPAN 33000 - Spanish And Latin American Cinema
- TECH 33000 - Technology And The Global Society
- Approved Study Abroad Course

## Humanities Foundational Selective\*

<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

## Behavioral/Social Science 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.

- AAS 27100 - Introduction To African American Studies
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 22300 - Human Factors For Flight Crews
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry



- PHIL 11400 - Global Moral Issues
  - PHIL 43500 - Philosophy Of Mind
  - POL 22200 - Women, Politics, And Public Policy
  - POL 23500 - International Relations Among Rich And Poor Nations
  - POL 32600 - Black Political Participation In America
  - POL 32700 - Global Green Politics
  - POL 36000 - Women And The Law
  - POL 41300 - The Human Basis Of Politics
  - POL 42300 - International Environmental Policy
  - POL 42900 It's a Complex World
  - POL 43300 - International Organization
  - PSY 12000 - Elementary Psychology
  - PSY 25100 - Health Psychology
  - PSY 32200 - Neuroscience Of Motivated Behavior
  - SOC 10000 - Introductory Sociology
  - SOC 31000 - Racial And Ethnic Diversity
  - SOC 33900 - Introduction To The Sociology Of Developing Nations
  - TECH 33000 - Technology And The Global Society
  - TLI 11200 - Foundations Of Organizational Leadership
  - TLI 31400 - Leading Innovation In Organizations
  - WGSS 28200 - Introduction To LGBT Studies
  - WGSS 38000 - Gender And Multiculturalism
  - WGSS 38300 - Women And Work
- Any foreign language 20000 level or higher (20100, 20200, 30100, 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 Engineering Technology Supplemental Information**

### **Freshman Composition Selective +**

- ENGL 10600 - First-Year Composition
- ENGL 10800 - Accelerated First-Year Composition
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

### **Freshman Speech Selective +**

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

### **Materials and Processes Selective**

- MET 14300 - Materials And Processes I
- MET 14400 - Materials And Processes II

### **Computer Graphics Selective**

- CGT 11000 - Technical Graphics Communications
- CGT 16300 - Graphical Communication And Spatial Analysis
- IT 10500 - Industrial Technology Introduction To Design

### **Communications Selective +**

- COM 31500 - Speech Communication Of Technical Information

- COM 32000 - Small Group Communication
- COM 41500 - Discussion Of Technical Problems
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

## Technical Writing Selective +

- ENGL 42100 - Technical Writing
- ENGL 42400 - Writing For High Technology Industries

## Statistics or Quality Selective

- STAT 30100 - Elementary Statistical Methods
- IT 34200 - Introduction To Statistical Quality
- TLI 31600 - Statistical Quality Control

## Physics Selective

- PHYS 17200 - Modern Mechanics
- PHYS 22000 - General Physics

## Science Selective

- BIOL 11000 - Fundamentals Of Biology I
- BIOL 20300 - Human Anatomy And Physiology
- CHM 11200 - General Chemistry
- CHM 11600 - General Chemistry
- PHYS 22100 - General Physics
- PHYS 24100 - Electricity And Optics

## Mechatronics Selective

- MET 43200 - Hydraulic Motion Control Systems
- MET 43600 - Pneumatic Motion Control Systems
- MET 48200 - Mechatronics
- MET 58100 - Workshop In Mechanical Engineering Technology
- MFET 29200 - Projects In Automation, Robotics And Mechatronics
- MFET 34800 - Advanced Industrial Robotics
- MFET 39200 - Advanced Projects In Automation, Robotics, And Mechatronics

## Controls Selective

- MET 33400 - Advanced Fluid Power
- MET 38200 - Controls And Instrumentation For Automation
- MET 43200 - Hydraulic Motion Control Systems
- MET 43600 - Pneumatic Motion Control Systems

- MET 48200 - Mechatronics
- MFET 29200 - Projects In Automation, Robotics And Mechatronics
- MFET 39200 - Advanced Projects In Automation, Robotics, And Mechatronics
- ECET 27400 - Wireless Communications
- ECET 35901 - Computer Based Data Acquisition Applications
- ECET 49900 - Electrical Engineering Technology - Applied Comp Vision Sensing & Auto

## Manufacturing Selective

- AT 27200 - Introduction To Composite Technology
- AT 30802 - Aircraft Materials Processes
- AT 47200 - Advanced Composite Technology
- CGT 32600 - Graphics Standards For Product Definition
- CGT 42300 - Product Data Management
- CGT 42600 - Industry Applications Of Simulation And Visualization
- ECET 27400 - Wireless Communications
- ECET 49900 - Electrical Engineering Technology (Appl Comp Vision Sensing & Automation)
- IT 38100 - Total Productive Maintenance
- IT 43400 - Global Transportation And Logistics Management
- IT 44200 - Production Planning
- IT 48300 - Facility Design For Lean Manufacturing
- MET 30200 - CAD In The Enterprise
- MET 33400 - Advanced Fluid Power
- MET 34600 - Advanced Materials In Manufacturing
- MET 34900 - Stringed Instrument Design And Manufacture
- MET 43200 - Hydraulic Motion Control Systems
- MET 43600 - Pneumatic Motion Control Systems
- MET 45100 - Manufacturing Quality Control
- MFET 24800 - Introduction To Robotics
- MFET 29200 - Projects In Automation, Robotics And Mechatronics
- MFET 34800 - Advanced Industrial Robotics
- MFET 39200 - Advanced Projects In Automation, Robotics, And Mechatronics
- MFET 49900 - Manufacturing Engineering Technology Independent Project - Technology, Innovation and Culture in Bavaria (Study Abroad)
- MGMT 45500 - Legal Background For Business I
- OLS 28400 - Leadership Principles
- TLI 33620 - Total Productive Maintenance
- TLI 44275 - Global Transportation And Logistics Management

## Capstone Selectives I

- ECET 43000 - Electrical And Electronic Product And Program Management
- ECET 43100 - International Capstone Project Planning And Design
- ENG 40500 - Entrepreneurial Capstone I
- MET 40100 - Capstone Projects I
- MFET 48000 - Project Planning For Integration

## Capstone Selectives II

- ECET 46000 - Project Design And Development
- ECET 46100 - International Capstone Project Execution
- ENGT 40600 - Entrepreneurial Capstone II
- MET 40200 - Capstone Projects II
- MFET 48100 - Integration Of Manufacturing Systems

## 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>

## Humanities/Social Science Elective

any 20000 level course or higher in PSY, SOC, HIST, ECON, POL, PHIL, REL, ANTH, English Literature, or a foreign language

- AD 22600 - History Of Art To 1400
- AD 22700 - History Of Art Since 1400
- AD 25100 - History Of Photography I
- AD 25500 - Art Appreciation
- AD 30701 - History Of Contemporary Photography
- AD 31100 - Ancient Greek Art
- AD 31200 - Ancient Roman Art
- MUS 25000 - Music Appreciation
- MUS 37400 - Contemporary Music
- MUS 37600 - World Music
- MUS 37800 - Jazz History
- MUS 38100 - Music History I: Antiquity To Mozart
- MUS 38200 - Music History II: Beethoven To The Present

## Elective

Any non-remedial course

## 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
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century

- HIST 35000 - Science And Society In The Twentieth Century World
  - HIST 36600 - Hispanic Heritage Of The United States
  - HIST 37700 - History And Culture Of Native America
  - HIST 46900 - Black Civil Rights Movement
  - HTM 37000 - Sustainable Tourism And Responsible Travel
  - HTM 37200 - Global Tourism Geography
  - MSL 20100 - Individual Leadership Studies
  - OLS 35000 - Creativity In Business And Industry
  - PHIL 11400 - Global Moral Issues
  - PHIL 43500 - Philosophy Of Mind
  - POL 22200 - Women, Politics, And Public Policy
  - POL 23500 - International Relations Among Rich And Poor Nations
  - POL 32600 - Black Political Participation In America
  - POL 32700 - Global Green Politics
  - POL 36000 - Women And The Law
  - POL 41300 - The Human Basis Of Politics
  - POL 42300 - International Environmental Policy
  - POL 42900 It's a Complex World
  - POL 43300 - International Organization
  - PSY 12000 - Elementary Psychology
  - PSY 25100 - Health Psychology
  - PSY 32200 - Neuroscience Of Motivated Behavior
  - SOC 10000 - Introductory Sociology
  - SOC 31000 - Racial And Ethnic Diversity
  - SOC 33900 - Introduction To The Sociology Of Developing Nations
  - TECH 33000 - Technology And The Global Society
  - TLI 11200 - Foundations Of Organizational Leadership
  - TLI 31400 - Leading Innovation In Organizations
  - WGSS 28200 - Introduction To LGBT Studies
  - WGSS 38000 - Gender And Multiculturalism
  - WGSS 38300 - Women And Work
- 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.

## **Robotics Engineering Technology Supplemental Information**

### **Freshman Composition Selective +**

- ENGL 10600 - First-Year Composition
- ENGL 10800 - Accelerated First-Year Composition
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

### **Freshman Speech Selective +**

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

### **Computer Graphics Selective**

- CGT 11000 - Technical Graphics Communications
- CGT 16300 - Graphical Communication And Spatial Analysis
- IT 10500 - Industrial Technology Introduction To Design

### **Technical Elective**

- Any 30000 level or higher ECET course which is not currently required on the plan of study.



- CGT 11301 - Product Data Management
- CGT 20301 - Model-Based Definition
- CGT 21301 - Simulation And Visualization Applications
- CGT 30301 - Digital Manufacturing
- CGT 31301 - The Business Of Managing Digital Product Data
- CGT 32600 - Graphics Standards For Product Definition
- CGT 42300 - Product Data Management
- CGT 42600 - Industry Applications Of Simulation And Visualization
- ECET 27900 - Embedded Digital Systems
- FNR 30110 - Sustainable Wood Products Manufacturing
- IT 33000 - Industrial Sales And Sales Management
- IT 34500 - Automatic Identification And Data Capture
- IT 35100 - Advanced Industrial Safety And Health Management
- IT 38100 - Total Productive Maintenance
- IT 43400 - Global Transportation And Logistics Management
- IT 44200 - Production Planning
- IT 48300 - Facility Design For Lean Manufacturing
- MET 30200 - CAD In The Enterprise
- MET 33400 - Advanced Fluid Power
- MET 34600 - Advanced Materials In Manufacturing
- MET 38200 - Controls And Instrumentation For Automation
- MET 43200 - Hydraulic Motion Control Systems
- MET 43600 - Pneumatic Motion Control Systems
- MFET 28800 - Smart Manufacturing Operational And Information Networks
- MGMT 45500 - Legal Background For Business I
- OLS 28400 - Leadership Principles
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- TLI 33620 - Total Productive Maintenance
- TLI 44275 - Global Transportation And Logistics Management

## Statistics or Quality Selective

- IT 34200 - Introduction To Statistical Quality
- STAT 30100 - Elementary Statistical Methods
- TLI 31600 - Statistical Quality Control

## Physics Selective

- PHYS 17200 - Modern Mechanics
- PHYS 22000 - General Physics

## Science Selective

- BIOL 11000 - Fundamentals Of Biology I
- BIOL 20300 - Human Anatomy And Physiology
- CHM 11200 - General Chemistry

- CHM 11600 - General Chemistry
- PHYS 22100 - General Physics
- PHYS 24100 - Electricity And Optics

## Mechatronics Selective

- MET 43200 - Hydraulic Motion Control Systems
- MET 43600 - Pneumatic Motion Control Systems
- MET 48200 - Mechatronics
- MET 58100 - Workshop In Mechanical Engineering Technology
- MFET 29200 - Projects In Automation, Robotics And Mechatronics
- MFET 34800 - Advanced Industrial Robotics
- MFET 39200 - Advanced Projects In Automation, Robotics, And Mechatronics

## Controls Selective

- ECET 27400 - Wireless Communications
- ECET 35901 - Computer Based Data Acquisition Applications
- ECET 49900 - Electrical Engineering Technology - Applied Comp Vision Sensing & Auto
- MET 33400 - Advanced Fluid Power
- MET 38200 - Controls And Instrumentation For Automation
- MET 43200 - Hydraulic Motion Control Systems
- MET 43600 - Pneumatic Motion Control Systems
- MET 48200 - Mechatronics
- MFET 29200 - Projects In Automation, Robotics And Mechatronics
- MFET 39200 - Advanced Projects In Automation, Robotics, And Mechatronics
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics

## Manufacturing Selective

- AT 27200 - Introduction To Composite Technology
- AT 30802 - Aircraft Materials Processes
- AT 47200 - Advanced Composite Technology
- CGT 20301 - Model-Based Definition
- CGT 21301 - Simulation And Visualization Applications
- CGT 30301 - Digital Manufacturing
- CGT 31301 - The Business Of Managing Digital Product Data
- CGT 32600 - Graphics Standards For Product Definition
- CGT 42300 - Product Data Management
- CGT 42600 - Industry Applications Of Simulation And Visualization
- ECET 27000 - Electronics Prototype Development And Construction
- ECET 49900 - Electrical Engineering Technology - Applied Comp Vision Sensing & Auto
- IT 38100 - Total Productive Maintenance
- IT 43400 - Global Transportation And Logistics Management
- IT 44200 - Production Planning
- IT 48300 - Facility Design For Lean Manufacturing

- MET 30200 - CAD In The Enterprise
- MET 34900 - Stringed Instrument Design And Manufacture
- MET 45100 - Manufacturing Quality Control
- MFET 29200 - Projects In Automation, Robotics And Mechatronics
- MFET 39200 - Advanced Projects In Automation, Robotics, And Mechatronics
- MFET 49900 - Manufacturing Engineering Technology Independent Project - Technology, Innovation and Culture in Bavaria (Study Abroad)
- TLI 33620 - Total Productive Maintenance
- TLI 44275 - Global Transportation And Logistics Management

## Communications Selective +

- COM 31500 - Speech Communication Of Technical Information
- COM 32000 - Small Group Communication
- COM 41500 - Discussion Of Technical Problems
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

## Technical Writing Selective +

- ENGL 42100 - Technical Writing
- ENGL 42400 - Writing For High Technology Industries

## Humanities/Social Science Elective

Any 20000 level course or higher in PSY, SOC, ENGL literature, HIST, ECON, POL, PHIL, REL, ANTH, a foreign language

## Humanities Foundational Selective

<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

## Behavioral/Social Science Foundational Selective

<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

## Capstone Selectives I

- ECET 43000 - Electrical And Electronic Product And Program Management
- ECET 43100 - International Capstone Project Planning And Design
- ENGT 40500 - Entrepreneurial Capstone I
- MET 40100 - Capstone Projects I
- MFET 48000 - Project Planning For Integration

## Capstone Selectives II

- ECET 46000 - Project Design And Development
- ECET 46100 - International Capstone Project Execution
- ENGT 40600 - Entrepreneurial Capstone II
- MET 40200 - Capstone Projects II
- MFET 48100 - Integration Of Manufacturing Systems

## Elective

Any non-remedial course

## 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
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image

- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- POL 36000 - Women And The Law
- POL 41300 - The Human Basis Of Politics
- POL 42300 - International Environmental Policy
- POL 42900 - Contemporary Political Problems - It's a Complex World
- POL 43300 - International Organization
- PSY 12000 - Elementary Psychology
- PSY 25100 - Health Psychology
- PSY 32200 - Neuroscience Of Motivated Behavior
- SOC 10000 - Introductory Sociology
- SOC 31000 - Racial And Ethnic Diversity
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 31400 - Leading Innovation In Organizations
- WGSS 28200 - Introduction To LGBT Studies
- WGSS 38000 - Gender And Multiculturalism
- WGSS 38300 - Women And Work
- Any foreign language 20000 level or higher (20100, 20200, 30100, 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.

## 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
- MET 14400 - Materials And Processes II

## Mathematics Selective (3 Credits)

- MA 15800 - Precalculus- Functions And Trigonometry
- MA 16010 - Applied Calculus I
- MA 16100 - Plane Analytic Geometry And Calculus I
- MA 16200 - Plane Analytic Geometry And Calculus II
- MA 16500 - Analytic Geometry And Calculus I
- MA 16600 - Analytic Geometry And Calculus II

## Oral Communication Selective (3 Credits)

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

## Written Communication Selective (3 Credits)

- ENGL 10600 - First-Year Composition
- ENGL 10800 - Accelerated First-Year Composition
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

## Computer Programming Selective (3 Credits)

- CNIT 10500 - Introduction To C Programming
- CNIT 15500 - Introduction to Object-Oriented Programming
- CNIT 15501 - Introduction To Software Development Concepts
- CNIT 17500 - Visual Programming
- CS 15800 - C Programming
- CS 15900 - C Programming
- CS 17700 - Programming With Multimedia Objects
- CS 18000 - Problem Solving And Object-Oriented Programming
- MET 16400 - Computing In Engineering Technology

## History of Science and Technology Selective (3 Credits)

- HIST 30305 - Food In Modern America

- HIST 30605 - Technology And War In U.S. History
- HIST 31405 - Science, Technology, Engineering And Mathematics (STEM) And Gender
- HIST 31505 - American Beauty
- HIST 33000 - History Of The British Empire And Commonwealth, 1783 To 1960
- HIST 33400 - Science And Society In Western Civilization II
- HIST 38001 - History Of United States Agriculture
- HIST 38400 - History Of Aviation
- HIST 38700 - History Of The Space Age
- POL 42900 - Contemporary Political Problems

## Lab Science Selective (3 Credits)

Must be at least a 3 credit hour lab from the approved UCC Science list:  
<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

## Technical Graphics Selective (2 Credits)

- CGT 11000 - Technical Graphics Communications
- CGT 16300 - Graphical Communication And Spatial Analysis
- IT 10500 - Industrial Technology Introduction To Design

## Advanced Oral Communication Selective (3 Credits)

- COM 31400 - Advanced Presentational Speaking
- COM 31500 - Speech Communication Of Technical Information
- COM 31800 - Principles Of Persuasion
- COM 32000 - Small Group Communication
- COM 32400 - Introduction To Organizational Communication
- COM 32500 - Interviewing: Principles And Practice
- COM 41500 - Discussion Of Technical Problems
- COM 43500 - Communication And Emerging Technologies

## Advanced Written Communication Selective (3 Credits)

- ENGL 30400 - Advanced Composition
- ENGL 30600 - Introduction To Professional Writing
- ENGL 41900 - Multimedia Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing
- ENGL 42400 - Writing For High Technology Industries

## Manufacturing Automation Selective (3 Credits)

- MET 28400 - Introduction To Industrial Controls
- MFET 30000 - Applications Of Automation In Manufacturing
- MFET 34400 - Automated Manufacturing Processes



## Free Elective (5 Credits)

## Technical Elective (3 Credits)

Any Polytechnic Institute or Engineering (ENGR or EPCS) course not already required on the plan of study,

- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- ENTR 31000 - Marketing And Management For New Ventures
- ENTR 31500 - Business Planning For Social Entrepreneurship

## 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
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 37300 - Self-Presentation And Social Image
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience

- ECET 38001 - Global Professional Issues In Engineering Technology
  - EDPS 23500 - Learning And Motivation
  - EDPS 30000 - Student Leadership Development
  - EDPS 30100 - Peer Counseling Training
  - EDPS 31500 - Collaborative Leadership: Interpersonal Skills
  - EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
  - EDPS 31700 - Collaborative Leadership: Mentoring
  - ENGL 41400 - Studies In Literature And Culture
  - HDFS 28000 - Diversity In Individual And Family Life
  - HDFS 33200 - Stress And Coping In Contemporary Families
  - HEBR 38500 - The Holocaust In Modern Hebrew Literature
  - HIST 19500 - The Historian's Craft: Historical Research And Film
  - HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
  - HIST 35000 - Science And Society In The Twentieth Century World
  - HIST 36600 - Hispanic Heritage Of The United States
  - HIST 37700 - History And Culture Of Native America
  - HIST 46900 - Black Civil Rights Movement
  - HTM 37000 - Sustainable Tourism And Responsible Travel
  - HTM 37200 - Global Tourism Geography
  - MSL 20100 - Individual Leadership Studies
  - OLS 35000 - Creativity In Business And Industry
  - PHIL 11400 - Global Moral Issues
  - PHIL 43500 - Philosophy Of Mind
  - POL 22200 - Women, Politics, And Public Policy
  - POL 23500 - International Relations Among Rich And Poor Nations
  - POL 32600 - Black Political Participation In America
  - POL 32700 - Global Green Politics
  - POL 36000 - Women And The Law
  - POL 41300 - The Human Basis Of Politics
  - POL 42300 - International Environmental Policy
  - POL 42900 - Contemporary Political Problems - It's a Complex World
  - POL 43300 - International Organization
  - PSY 12000 - Elementary Psychology
  - PSY 25100 - Health Psychology
  - PSY 32200 - Neuroscience Of Motivated Behavior
  - SOC 10000 - Introductory Sociology
  - SOC 33900 - Introduction To The Sociology Of Developing Nations
  - TECH 33000 - Technology And The Global Society
  - TLI 11200 - Foundations Of Organizational Leadership
  - TLI 31400 - Leading Innovation In Organizations
  - WGSS 28200 - Introduction To LGBT Studies
  - WGSS 38000 - Gender And Multiculturalism
  - WGSS 38300 - Women And Work
- Any foreign language 20000 level or higher (20100, 20200, 30100, 30200)

## 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.

\*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.

## 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**

### **Military Science and Leadership Minor**

#### Requirements for the Minor (15 credits)

##### Required Courses (12 credits)

- MSL 30100 - Leadership And Problem Solving
- MSL 30200 - Leadership And Ethics
- MSL 40100 - Leadership And Management
- MSL 40200 - Officership

##### Military History/Policy Selective (3 credits)

- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 35100 - The Second World War
- HIST 35500 - History Of American Military Affairs (preferred class for minor)
- HIST 43900 - Communist China
- MSL 35000 - American Military History And Leadership
- PHIL 23100 - Religions Of The West
- POL 23100 - Introduction To United States Foreign Policy
- POL 23700 - Modern Weapons And International Relations
- POL 43900 - United States Foreign Policy Making

## **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.

## **Disclaimer**

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

### **Naval Science Minor**

#### Requirements for the Minor (15 credits)

##### Required Courses (12 credits)

- NS 11000 - Introduction To Naval Science
- NS 21300 - Sea Power And Maritime Affairs
- NS 21400 - Fundamentals Of Leadership
- NS 41300 - Naval Leadership, Management, And Ethics

## Naval Science Selectives (3 credits)

- NS 21200 - Naval Weapons Systems
- NS 31000 - Navigation
- NS 31100 - Naval Operations
- NS 33000 - Evolution Of Warfare
- NS 35000 - Naval Ship Systems
- NS 44000 - Amphibious Warfare And Leadership

## Note

- All courses must have a grade of a "C" or higher.

## Disclaimer

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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

## 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

### 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](#).

## Degree Requirements

### 120 Credits Required

#### Departmental/Program Major Requirements (60 credits)

#### Required Major Courses (45 credits)

- TLI 11200 - Foundations Of Organizational Leadership
- TLI 21300 - Project Management
- TLI 31400 - Leading Innovation In Organizations
- TLI 25500 - Foundations Of Human Resource Development
- TLI 31500 - New Product Development
- TLI 35510 - Training And Talent Development
- TLI 35520 - Organization Development And Change
- TLI 35530 - Strategic Planning In Human Resources
- TLI 35560 - Employment And Labor Law For The Human Resource Professionals
- TLI 35570 - Job Analysis And Job Design

- TLI 35580 - The Individual And Organizational Performance
- TLI 45560 - Professional Internship In Human Resources
- TLI 45570 - Global Human Resources
- TLI 45580 - Human Resource Information Systems And People Analytics
- TLI 45590 - Human Resources Capstone
- Globalization Experience - Credit Hours: 0.00

## Human Resource Management Minor required (15 credits)

The following courses are integrated into the Plan of Study and will fulfill the Human Resource Management Minor.

- OBHR 33000 - Introduction To Organizational Behavior
- MGMT 44430 - Staffing: Talent Acquisition
- MGMT 44431 - Compensation: Total Rewards
- MGMT 44690 - Negotiation And Decision Making
- MGMT 44301 - Management Of Human Resources or
- MGMT 44428 - Human Resources Management

## Other Departmental/Program Course Requirements (51 credits)

- COM 22400 - Communicating In The Global Workplace
- EDPS 10101 - Learning In Context-An Introduction To The Learning Sciences
- ENGL 42000 - Business Writing
- MA 16010 - Applied Calculus I
- MGMT 30400 - Introduction To Financial Management
- PHIL 11100 - Introduction To Ethics (satisfies Human Cultures: Humanities for core)
- PSY 12000 - Elementary Psychology (satisfies Behavioral/Social Science for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity (satisfies Written Communication for core)  
Science Foundation Selective
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World (satisfies Oral Communication for core)
- SOC 10000 - Introductory Sociology
- SOC 31600 - Industry And Society
- STAT 30100 - Elementary Statistical Methods
- TECH 12000 - Design Thinking In Technology (satisfies both Information Literacy and Science, Technology and Society for core)
- ECON 21000 - Principles Of Economics or
- AGECE 21700 - Economics or
- ECON 25100 - Microeconomics or
- ECON 25200 - Macroeconomics
- MA 15555 - Quantitative Reasoning or
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning for core)
- Science Foundation Selective - Credit Hours: 3.00

## Electives (9 credits)

### University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

### Prerequisite Information:

For current pre-requisites for courses, click here.

### Additional Requirements

Click here for Human Resource Developmental Supplemental Information.

### Program Requirements

#### Fall 1st Year

- SOC 10000 - Introductory Sociology
- TECH 12000 - Design Thinking In Technology
- TLI 11200 - Foundations Of Organizational Leadership
  
- MA 15555 - Quantitative Reasoning or
- MA 15800 - Precalculus- Functions And Trigonometry
  
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

#### 15 Credits

#### Spring 1st Year

- PSY 12000 - Elementary Psychology
- EDPS 10101 - Learning In Context-An Introduction To The Learning Sciences



- PHIL 11100 - Introduction To Ethics
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity
- Science Foundation Selective - Credit Hours: 3.00

## 15-16 Credits

### Fall 2nd Year

- COM 22400 - Communicating In The Global Workplace
- MA 16010 - Applied Calculus I
- TLI 25500 - Foundations Of Human Resource Development
- TLI 31400 - Leading Innovation In Organizations
- TLI 31500 - New Product Development

## 15 Credits

### Spring 2nd Year

- OBHR 33000 - Introduction To Organizational Behavior
- SOC 31600 - Industry And Society
- TLI 21300 - Project Management
- AGECE 21700 - Economics or
- ECON 21000 - Principles Of Economics or
- ECON 25100 - Microeconomics or
- ECON 25200 - Macroeconomics
- Science Selective - Credit Hours: 3.00

## 15 Credits

### Fall 3rd Year

- TLI 35510 - Training And Talent Development
- TLI 35560 - Employment And Labor Law For The Human Resource Professionals
- TLI 35580 - The Individual And Organizational Performance
- MGMT 30400 - Introduction To Financial Management
- MGMT 44690 - Negotiation And Decision Making

## 15 Credits

### Spring 3rd Year

- STAT 30100 - Elementary Statistical Methods

- TLI 35520 - Organization Development And Change
- TLI 35530 - Strategic Planning In Human Resources
- TLI 35570 - Job Analysis And Job Design
- MGMT 44301 - Management Of Human Resources or
- MGMT 44428 - Human Resources Management

## 15 Credits

### Fall 4th Year

- TLI 45560 - Professional Internship In Human Resources
- TLI 45570 - Global Human Resources
- MGMT 44430 - Staffing: Talent Acquisition
- TLI 45580 - Human Resource Information Systems And People Analytics
- Elective - Credit Hours: 3.00

## 15 Credits

### Spring 4th Year

- ENGL 42000 - Business Writing
- TLI 45590 - Human Resources Capstone
- MGMT 44431 - Compensation: Total Rewards
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 15 Credits

### Notes

- 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).
- 2.0 Graduation GPA required for Bachelor of Science degree.
- "B-" or better required in all HRD major courses
- Students are required to complete a globalization experience that addresses the corresponding embedded outcome from the University Core Curriculum.

### 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## 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.

[Organizational Leadership Website](#)

### Degree Requirements

## 120 Credits Required

### Department/Program Major Courses (54 credits)

- OLS 34600 - Critical Thinking And Ethics
- OLS 38600 - Leadership For Organizational Change And Innovation
- OLS 37500 - Training Methods
- OLS 37800 - Labor And Management Relations
- OLS 45000 - Project Management For Organizational And Human Resource Development
- OLS 45400 - Gender And Diversity In Management
- OLS 47700 - Conflict Management
- OLS 48700 - Leadership Philosophy
- OLS 58300 - Coaching And Mentoring In Organizations
- TLI 10000 - Organizational Leadership Orientation
- TLI 15200 - Business Principles For Organizational Leadership
- TLI 20000 - Organization Leadership Mentorship
- TLI 21300 - Project Management
- TLI 30000 - Organizational Leadership Coaching
- TLI 31400 - Leading Innovation In Organizations
- TLI 31500 - New Product Development
- TLI 45580 - Human Resource Information Systems And People Analytics
- TLI 45800 - Leadership For Competitive Advantage

- TLI 11200 - Foundations Of Organizational Leadership or
- OLS 25200 - Human Relations In Organizations
- TLI 41400 - Financial Analysis For Technology Systems or
- IT 43200 - Financial Transactions In Distribution
  
- Globalization Experience - Credit Hours: 0.00

## Other Departmental Courses (57 Credits)

- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- ENGL 42100 - Technical Writing
- PSY 27200 - Introduction To Industrial-Organizational Psychology
- PSY 12000 - Elementary Psychology (satisfies Behavioral Social Sciences for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity (satisfies Written Communication for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World (satisfies Oral Communication for core)
- STAT 11300 - Statistics And Society
- STAT 30100 - Elementary Statistical Methods
- TECH 12000 - Design Thinking In Technology (*satisfies both Information Literacy and Science, Technology and Society for core*)
- TECH 22000 - Designing Technology For People
- TECH 33000 - Technology And The Global Society
  
- MA 15555 - Quantitative Reasoning or
- MA 15800 - Precalculus- Functions And Trigonometry (*satisfies Quantitative Reasoning for core*)
  
- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting
- ECON 21000 - Principles Of Economics or
- AGECE 21700 - Economics or
- ECON 25100 - Microeconomics or
- ECON 25200 - Macroeconomics
- Cornerstone Selective II - Credit Hours: 3.00
- Cornerstone Selective III - Credit Hours: 3.00
- Humanities Selective - Credit Hours: 3.00
- Science Selective - Credit Hours: 3.00
- Science Selective - Credit Hours: 3.00

## Electives (9 credits)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1

- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Click here for Organizational Leadership Supplemental Information.

## Program Requirements

### Fall 1st Year

- TECH 12000 - Design Thinking In Technology
- TLI 10000 - Organizational Leadership Orientation
- TLI 11200 - Foundations Of Organizational Leadership
- MA 15555 - Quantitative Reasoning or
- MA 15800 - Precalculus- Functions And Trigonometry
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World
- Humanities Selective - Credit Hours: 3.00

### 16 Credits

### Spring 1st Year

- PSY 12000 - Elementary Psychology
- STAT 11300 - Statistics And Society
- TLI 15200 - Business Principles For Organizational Leadership
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World
- Science Selective - Credit Hours: 3.00

## 15 Credits

### Fall 2nd Year

- TLI 20000 - Organization Leadership Mentorship
- STAT 30100 - Elementary Statistical Methods
- PSY 27200 - Introduction To Industrial-Organizational Psychology
- TECH 22000 - Designing Technology For People
- Cornerstone Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 16 Credits

### Spring 2nd Year

- OLS 38600 - Leadership For Organizational Change And Innovation
- TLI 21300 - Project Management
  
- AGECON 21700 - Economics or
- ECON 21000 - Principles Of Economics or
- ECON 25100 - Microeconomics or
- ECON 25200 - Macroeconomics
  
- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting
- Science Selective - Credit Hours: 3.00

## 15 Credits

### Fall 3rd Year

- OLS 37500 - Training Methods
- TECH 33000 - Technology And The Global Society
- TLI 30000 - Organizational Leadership Coaching
- TLI 31400 - Leading Innovation In Organizations
- TLI 31500 - New Product Development
- Cornerstone Selective - Credit Hours: 3.00

## 16 Credits

### Spring 3rd Year

- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- OLS 34600 - Critical Thinking And Ethics
- OLS 37800 - Labor And Management Relations
- TLI 45800 - Leadership For Competitive Advantage

- Elective - Credit Hours: 3.00

## 15 Credits

### Fall 4th Year

- OLS 45400 - Gender And Diversity In Management
- OLS 47700 - Conflict Management
- OLS 48700 - Leadership Philosophy
- OLS 58300 - Coaching And Mentoring In Organizations
- TLI 41400 - Financial Analysis For Technology Systems

## 15 Credits

### Spring 4th Year

- ENGL 42100 - Technical Writing
- OLS 45000 - Project Management For Organizational And Human Resource Development
- TLI 45580 - Human Resource Information Systems And People Analytics
- Elective - Credit Hours: 3.00

## 12 Credits

## Notes

- 2.0 Graduation GPA required for Bachelor of Science degree.
- 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

# 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.

Technology Education Website

## Degree Requirements

### 120 Credits Required

#### Major Required Courses (45 credits)

2.5 ETTE Core GPA required for Bachelor of Science degree, courses listed below.

- CGT 11000 - Technical Graphics Communications \*
- ECET 22400 - Electronic Systems \*
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy and Science Technology & Society Selective for core) \*
- TLI 16100 - Prototyping In Engineering/Technology Education \*
- TLI 26200 - Foundations Of Integrated STEM Education \* •
- TLI 26500 - Teaching The TE Of STEM \* •
- TLI 36100 - Engineering And Technology Education Instructional Planning And Evaluation \* •
- TLI 36700 - Teaching Design And Innovation I \* •
- TLI 46000 - Teaching Design And Innovation II \* •
- TLI 46100 - Engineering/Technology Teacher Lab Planning \* •
- TLI 46200 - Methods Of Teaching Engineering/Technology Education \* •

#### Technical Electives (12 credits)

- Technical Electives<sup>6</sup> - Credit Hours: 3.00 \*
- Technical Electives<sup>6</sup> - Credit Hours: 3.00 \*
- Technical Electives<sup>6</sup> - Credit Hours: 3.00 \*
- Technical Electives<sup>6</sup> - Credit Hours: 3.00 \*

#### Professional Education Requirements (37 credits)

3.0 Prof Ed GPA required for Bachelor of Science degree, with each class at least a C- or higher, courses listed below plus the above TLI courses indicated with this symbol •

#### Foundational Courses



- EDCI 20500 - Exploring Teaching As A Career •
- EDCI 27000 - Introduction To Educational Technology And Computing \* •
- EDCI 28500 - Multiculturalism And Education •
- EDPS 23500 - Learning And Motivation \* •
- EDST 20010 - Educational Policies And Laws •
- EDPS 26500 - The Inclusive Classroom \* •
- EDPS 32700 - Classroom Assessment •
- EDPS 43010 - Secondary Creating And Managing Learning Environments •

## Methods

- EDCI 30900 - Reading In Middle And Secondary Schools: Methods And Problems \* •

## Capstone (16 credits)

- EDCI 49800 - Supervised Teaching •

## Other Departmental Requirements (34 credits)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- MA 15300 - College Algebra (satisfies Quantitative Reasoning for core)
- MA 15555 - Quantitative Reasoning
- PHYS 22000 - General Physics (satisfies Science for core)
- PSY 12000 - Elementary Psychology
- Humanities Selective <sup>4</sup> (satisfies Human Cultures Humanities for core)- Credit Hours: 3.00
- Lab Science Foundation Selective<sup>1</sup> (satisfies Science for core) - Credit Hours: 3.00
- Science Selective - Credit Hours: 3.00
- Written Communication Foundation Selective <sup>3</sup> (satisfies Written Communication for core)- Credit Hours: 3.00
- Advanced Communication Selective <sup>5</sup>- Credit Hours: 3.00
- Advanced Communication Selective <sup>5</sup>- Credit Hours: 3.00

## Electives (4 credits)

Any non-remedial course offered for credit at the University not already required/being used on the plan of study.

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication

- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Click here for Technology Education Supplemental Information.

## K-12 Integrated STEM Optional Concentration

- K-12 Integrated STEM Optional Concentration for Education

## Program Requirements

### Fall 1st Year

- TLI 26200 - Foundations Of Integrated STEM Education
- TECH 12000 - Design Thinking In Technology
- EDCI 27000 - Introduction To Educational Technology And Computing
- MA 15300 - College Algebra
- Written Communication Foundation Selective <sup>3</sup> - Credit Hours: 3.00

### 15 Credits

### Spring 1st Year

- TLI 16100 - Prototyping In Engineering/Technology Education
- CGT 11000 - Technical Graphics Communications
- MA 15555 - Quantitative Reasoning
- COM 11400 - Fundamentals Of Speech Communication
- Humanities <sup>4</sup> - Credit Hours: 3.00

### 15 Credits

### Fall 2nd Year

- EDCI 20500 - Exploring Teaching As A Career
- EDCI 28500 - Multiculturalism And Education
- EDST 20010 - Educational Policies And Laws
- Lab Science Foundation Selective <sup>1</sup> - Credit Hours: 3.00

- Technical Elective <sup>6</sup> - Credit Hours: 3.00
- Elective<sup>7</sup> - Credit Hours: 1.00

## 14 Credits

### Spring 2nd Year

- TLI 26500 - Teaching The TE Of STEM
- ECET 22400 - Electronic Systems
- EDPS 23500 - Learning And Motivation
- EDPS 26500 - The Inclusive Classroom
- PHYS 22000 - General Physics

## 16 Credits

### Fall 3rd Year

- EDPS 32700 - Classroom Assessment
- EDPS 43010 - Secondary Creating And Managing Learning Environments
- PSY 12000 - Elementary Psychology
- Technical Elective <sup>6</sup> - Credit Hours: 3.00
- Science Foundation Selective <sup>2</sup> - Credit Hours: 3.00
- Elective <sup>7</sup> - Credit Hours: 3.00

## 14 Credits

### Spring 3rd Year

- TLI 36100 - Engineering And Technology Education Instructional Planning And Evaluation
- TLI 36700 - Teaching Design And Innovation I
- EDCI 30900 - Reading In Middle And Secondary Schools: Methods And Problems
- Advanced Communication Selective <sup>5</sup> - Credit Hours: 3.00
- Technical Elective <sup>6</sup> - Credit Hours: 3.00

## 15 Credits

### Fall 4th Year

- TLI 46000 - Teaching Design And Innovation II
- TLI 46100 - Engineering/Technology Teacher Lab Planning
- TLI 46200 - Methods Of Teaching Engineering/Technology Education
- Advanced Communication Selective <sup>5</sup> - Credit Hours: 3.00
- Technical Elective <sup>6</sup> - Credit Hours: 3.00

## 15 Credits

## Spring 4th Year

- EDCI 49800 - Supervised Teaching

16 Credits

## Notes

- 3.0 Professional Education GPA required for Bachelor of Science degree, with at least a C- or higher.

\* 2.5 Core GPA required for Bachelor of Science degree.

2.5 Graduation GPA required for Bachelor of Science degree.

Students must fulfill all Teacher Education Requirements <sup>8</sup>. (See Supplemental Information)

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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Minor

### **Aerospace Studies Minor**

Requirements for the Minor (14 credits)

Required Courses (14 credits)

- AFT 23000 - The Evolution Of USAF Air And Space Power I

- AFT 24000 - The Evolution Of USAF Air And Space Power II
- AFT 35100 - Air Force Leadership Studies I
- AFT 36100 - Air Force Leadership Studies II
- AFT 47100 - National Security Affairs I
- AFT 48100 - National Security Affairs II

## Notes

- AFT 30000 level courses may be taken in the same semester as AFT 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.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Biometrics Minor

### Requirements for the Minor (15 credits)

#### Required Courses (15 credits)

- IT 54000 - Biometric Performance And Usability Analysis
- IT 54500 - Biometrics Technology And Applications
- STAT 30100 - Elementary Statistical Methods
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- TLI 49800 - Undergraduate Research In Technology Leadership And Innovation

## Note

- All courses must have a grade of a "C" or higher.

## Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Biotechnology Minor

Biotechnology refers to harnessing the properties of a living organism to develop and manufacture products that benefit human life. With this minor, you will gain the basic knowledge and understanding of life science-based products,

processes, and product quality to prepare you for employment opportunities in the area of biotechnology and biotech-manufacturing.

## Requirements for the Minor (16 credits)

### Required Courses (7 credits)

- IT 22600 - Biotechnology Laboratory I
- IT 22700 - Biotechnology Laboratory II
- TLI 52100 - Drug Development or
- TLI 52200 - Good Regulatory Practice

### Lab Science Selectives (6 credits)

- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II
- CHM 11100 - General Chemistry
- CHM 11200 - General Chemistry
- CHM 11500 - General Chemistry
- CHM 11600 - General Chemistry

### Statics Selective (3 credits)

- CHE 32000 - Statistical Modeling And Quality Enhancement
- IT 34200 - Introduction To Statistical Quality
- STAT 50300 - Statistical Methods For Biology
- STAT 30100 - Elementary Statistical Methods
- STAT 35000 - Introduction To Statistics
- STAT 22500 - Introduction To Probability Models
- TLI 31600 - Statistical Quality Control

## Notes

- All courses must have a grade of a "C" or higher.

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The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Design and Innovation Minor

This minor in design and innovation allows Purdue students the opportunity to pursue a focus on creating, developing, and financing a new innovative technology in a global society. The minor provides learning through a three course

series of in design as well selections in global/cultural immersion, and explore economic development for innovation or study leadership in technology leadership.

## Requirements for the Minor (15 credits)

### A. Required Courses (9 credits)

- TECH 12000 - Design Thinking In Technology
- TECH 34000 - Prototyping Technology For People or
- TLI 46000 - Teaching Design And Innovation II
- TECH 22000 - Designing Technology For People or
- TLI 36700 - Teaching Design And Innovation I

### B. Global/Cultural Experience (3 credits)

- TECH 33000 - Technology And The Global Society
- TECH 40000 - Technology Study Abroad (recommended)

### C. Specialization (3 credits)

- *Must have grade of "C" or better.*

- TLI 31400 - Leading Innovation In Organizations
- TLI 31500 - New Product Development
- TLI 33400 - Economic Analysis For Technology Systems

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## Organizational Leadership Minor

A minor in organizational leadership and supervision will expose you to current issues in leadership and how organizations operate. The knowledge and skills you learn from these classes will be beneficial in any career after graduation.

## Requirements for the Minor (12 credits)

### Required Courses (12 credits)

- TLI 11200 - Foundations Of Organizational Leadership or
- OLS 25200 - Human Relations In Organizations
- TLI 15200 - Business Principles For Organizational Leadership or
- OLS 27400 - Applied Leadership

- TLI 21300 - Project Management or
- TLI 25300 - Principles Of Technology Strategy or
- OLS 28400 - Leadership Principles
- TLI 25400 - Leading Change In Technology Organizations or
- OLS 38600 - Leadership For Organizational Change And Innovation

## Notes

- All TLI courses must have a grade of a "C" or higher.
- TLI 11100 is only accepted for the TLI 15200 or OLS 27400 OL minor requirement for the Fall 2015/Spring 2016 semesters.

## Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## Program Information

### Human Resource Developmental Supplemental Information

#### Human Resource Management Minor (15 credits)

Complete the School of Management Human Resource Management Minor (HRMM) by completing outlined courses on this Plan of Study.

- OBHR 33000 - Introduction To Organizational Behavior
- MGMT 44301 - Management Of Human Resources or
- MGMT 44428 - Human Resources Management
- MGMT 44430 - Staffing: Talent Acquisition
- MGMT 44431 - Compensation: Total Rewards
- MGMT 44690 - Negotiation And Decision Making

#### Science Selective (6 credits)

Must be a class from the approved UCC Science list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

#### Electives (9 credits)

Any non-remedial course offered for credit at the University not already required/being used on the plan of study.

## Cornerstone Certificate

The Cornerstone Certificate is integrated into this Plan of Study.



[Click here for Cornerstone Certificate requirements.](#)

## Globalization Experience (0 credits)

### Minimum requirements:

1. Complete Intercultural Development Inventory (IDI) Pre and Post Tests
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre and Post Tests
3. Complete TLI-Approved Global Course (TLI 45560 Global HUMAN Resources), Faculty-Led Study Abroad, international internship, or International Capstone/Collaborative Project

### TLI-Approved Global Courses:

- AAS 27100 - Introduction To African American Studies
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights

- HIST 36600 - Hispanic Heritage Of The United States
  - HIST 37700 - History And Culture Of Native America
  - HIST 46900 - Black Civil Rights Movement
  - HTM 37000 - Sustainable Tourism And Responsible Travel
  - HTM 37200 - Global Tourism Geography
  - MSL 20100 - Individual Leadership Studies
  - OLS 35000 - Creativity In Business And Industry
  - PHIL 11400 - Global Moral Issues
  - PHIL 43500 - Philosophy Of Mind
  - POL 22200 - Women, Politics, And Public Policy
  - POL 23500 - International Relations Among Rich And Poor Nations
  - POL 32600 - Black Political Participation In America
  - POL 32700 - Global Green Politics
  - POL 36000 - Women And The Law
  - POL 42300 - International Environmental Policy
  - POL 42900 - Contemporary Political Problems - It's a Complex World
  - POL 43300 - International Organization
  - PSY 12000 - Elementary Psychology
  - PSY 25100 - Health Psychology
  - PSY 32200 - Neuroscience Of Motivated Behavior
  - SOC 10000 - Introductory Sociology
  - SOC 31000 - Racial And Ethnic Diversity
  - SOC 33900 - Introduction To The Sociology Of Developing Nations
  - TECH 33000 - Technology And The Global Society
  - TLI 11200 - Foundations Of Organizational Leadership
  - TLI 31400 - Leading Innovation In Organizations
  - WGSS 28200 - Introduction To LGBT Studies
  - WGSS 38000 - Gender And Multiculturalism
  - WGSS 38300 - Women And Work
- Any foreign language 20000 level or higher (20100, 20200, 30100, 30200, 40100, 40200)

## **Organizational Leadership Supplemental Information**

### **Humanities Selective**

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>

### **Cornerstone Selectives (6 Credits)**

The Cornerstone Certificate is integrated into this Plan of Study.

## Cornerstone Certificate

- Please select one course from Level II list.
- Please select one course from Level III list. (The second Level III course is fulfilled by ENGL 42100).

## Globalization Experience (0 credits)

### Minimum requirements:

1. Complete Intercultural Development Inventory (IDI) Pre and Post Tests
2. Complete Beliefs, Events, and Values Inventory (BEV) Pre and Post Tests
3. Complete an Intercultural Knowledge and Effectiveness (IKE) component
4. Complete TLI-Approved Global Course, Faculty-Led Study Abroad, International Internship, or International Capstone/Collaborative Project

## TLI-Approved Global Courses

- AAS 27100 - Introduction To African American Studies
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 37300 - Self-Presentation And Social Image
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings

- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 19500 - The Historian's Craft: Historical Research And Film
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Individual Leadership Studies
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- POL 36000 - Women And The Law
- POL 42300 - International Environmental Policy
- POL 42900 - Contemporary Political Problems - It's a Complex World
- POL 43300 - International Organization
- PSY 12000 - Elementary Psychology
- PSY 25100 - Health Psychology
- SOC 10000 - Introductory Sociology
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 31400 - Leading Innovation In Organizations
- WGSS 28200 - Introduction To LGBT Studies
- WGSS 38000 - Gender And Multiculturalism
- WGSS 38300 - Women And Work
- Any foreign language 20000 level or higher (20100, 20200, 30100, 30200, 40100, 40200)

## **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
- ASTR 26400 - Descriptive Astronomy: Stars And Galaxies
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II

- BIOL 12100 - Biology I: Diversity, Ecology, And Behavior
- BIOL 13100 - Biology II: Development, Structure, And Function Of Organisms
- BIOL 13500 - First Year Biology Laboratory
- BIOL 14600 - Introduction To Biology
- BIOL 20300 - Human Anatomy And Physiology
- BIOL 20400 - Human Anatomy And Physiology
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry
- CHM 11200 - General Chemistry
- CHM 11500 - General Chemistry
- CHM 11600 - General Chemistry
- CHM 12500 - Introduction To Chemistry I
- CHM 12600 - Introduction To Chemistry II
- CHM 13600 - General Chemistry Honors
- CHM 20000 - Fundamentals Of Chemistry
- EAPS 10900 - The Dynamic Earth
- EAPS 11100 - Physical Geology
- EAPS 11200 - Earth Through Time
- EAPS 24300 - Earth Materials I
- EAPS 24400 - Earth Materials II
- ENTM 20600 - General Entomology and
- ENTM 20700 - General Entomology Laboratory
- HORT 10100 - Fundamentals Of Horticulture
- PHYS 17200 - Modern Mechanics
- PHYS 22000 - General Physics
- PHYS 22100 - General Physics
- PHYS 24100 - Electricity And Optics
- PHYS 27200 - Electric And Magnetic Interactions

## 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
- ENGL 10800 - Accelerated First-Year Composition

## Advanced Communication Selective (6 Credits)

- COM 31400 - Advanced Presentational Speaking
- COM 31500 - Speech Communication Of Technical Information
- COM 31800 - Principles Of Persuasion
- COM 32000 - Small Group Communication
- COM 32400 - Introduction To Organizational Communication
- COM 32500 - Interviewing: Principles And Practice

- COM 41500 - Discussion Of Technical Problems
- ENGL 30400 - Advanced Composition
- ENGL 30600 - Introduction To Professional Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

## Technical Elective (12 Credits)

Any Polytechnic Institute or Engineering (ENGR or EPCS) course not already required on the plan of study

## Teacher Education Requirements

1. Basic Skills Competency Academic Assessment
2. Engineering and Technology Education Content Tests
3. **Gate A: Admission to Teacher Education Program (TEP)** EDCI 20500, EDCI 28500, EDPS 23500, EDPS 26500
4. **Gate B: Retention** -TLI 46100, TLI 46200
5. **Criminal History Background Check:** A valid Criminal Background Check must be on file in the Office of Field Experiences (OFE).
6. **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.

## Technology Education Supplemental Information

### Humanities Foundational Selective (3 Credits)

<sup>4</sup> See approved UCC Humanities list at: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

### 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
- ASTR 26400 - Descriptive Astronomy: Stars And Galaxies
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II
- BIOL 12100 - Biology I: Diversity, Ecology, And Behavior
- BIOL 13100 - Biology II: Development, Structure, And Function Of Organisms
- BIOL 13500 - First Year Biology Laboratory
- BIOL 14600 - Introduction To Biology
- BIOL 20300 - Human Anatomy And Physiology
- BIOL 20400 - Human Anatomy And Physiology
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry
- CHM 11200 - General Chemistry
- CHM 11500 - General Chemistry

- CHM 11600 - General Chemistry
- CHM 12500 - Introduction To Chemistry I
- CHM 12600 - Introduction To Chemistry II
- CHM 13600 - General Chemistry Honors
- CHM 20000 - Fundamentals Of Chemistry
- EAPS 10900 - The Dynamic Earth
- EAPS 11100 - Physical Geology
- EAPS 11200 - Earth Through Time
- EAPS 24300 - Earth Materials I
- EAPS 24400 - Earth Materials II
- HORT 10100 - Fundamentals Of Horticulture
- PHYS 17200 - Modern Mechanics
- PHYS 22000 - General Physics
- PHYS 22100 - General Physics
- PHYS 24100 - Electricity And Optics
- PHYS 27200 - Electric And Magnetic Interactions
  
- ENTM 20600 - General Entomology and
- ENTM 20700 - General Entomology Laboratory

### Science Foundation Selective (3 Credits)

Any BIOL, CHM, EAPS, PHYS, or UCC Science course not already required/being used on the plan of study. <sup>1</sup> Must be a lab from the approved UCC Science list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

### Written Communication Foundation Selective (minimum 3 Credits)

- ENGL 10600 - First-Year Composition
- ENGL 10800 - Accelerated First-Year Composition

### Advanced Communication Selective (6 Credits)

- COM 31400 - Advanced Presentational Speaking
- COM 31500 - Speech Communication Of Technical Information
- COM 31800 - Principles Of Persuasion
- COM 32000 - Small Group Communication
- COM 32400 - Introduction To Organizational Communication
- COM 32500 - Interviewing: Principles And Practice
- COM 41500 - Discussion Of Technical Problems
- ENGL 30400 - Advanced Composition
- ENGL 30600 - Introduction To Professional Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

### Technical Elective (12 Credits)

Any Polytechnic Institute or Engineering (ENGR or EPCS) course not already required on the plan of study

## Teacher Education Requirements

1. Basic Skills Competency Academic Assessment
2. Engineering and Technology Education Content Tests
3. **Gate A: Admission to Teacher Education Program (TEP)** EDCI 20500, EDCI 28500, EDPS 23500, EDPS 26500
4. **Gate B: Retention** -TLI 46100, TLI 46200
5. **Criminal History Background Check:** A valid Criminal Background Check must be on file in the Office of Field Experiences (OFE).
6. **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. <https://www.education.purdue.edu/teacher-preparation/clinical-experiences/faq/>
  - EDCI 20500 - Exploring Teaching As A Career
  - EDCI 28500 - Multiculturalism And Education
  - EDPS 23500 - Learning And Motivation
  - EDPS 26500 - The Inclusive Classroom
  - **Gate B: Retention**
  - TLI 46100 - Engineering/Technology Teacher Lab Planning
  - TLI 46200 - Methods Of Teaching Engineering/Technology Education
  - **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. For additional information, please visit [http://www.teach.purdue.edu/current\\_st/criminalbackgroundcheck.html](http://www.teach.purdue.edu/current_st/criminalbackgroundcheck.html).