Purdue University In Indianapolis

Announcing our next giant leap: a new extension of our flagship campus bringing the academic rigor and accessible excellence we’re known for to central Indiana. Purdue is uniquely able to fuel growth and accelerate an innovation-based economy for Indianapolis, the state and the nation.

"Fueling a transformational growth, Purdue University’s first comprehensive urban campus will offer unique opportunities for Boilermaker students and faculty. We will expand enrollment. We will build startups. We will create new knowledge. We will connect talents and industry. We will maximize Indy’s unique strengths such as sports and biomedical technology. Purdue campuses now bookend the Hard Tech Corridor: 65 miles connecting Indy and West Lafayette with LEAP Innovation District at the midpoint. We will generate talents, jobs and innovation together in America’s heartland!"  

Mung Chiang, President, Purdue University

Find more information on the website: Purdue University in Indianapolis

Past IUPUI Program Information: IUPUI Plans of Study for Continuing Students at Purdue in Indianapolis

Bachelor of Science

Animation And Visual Effects, BS

About the Program

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

Animation Website

Animation and Visual Effects Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (54 credits)

Required Major Courses (39 credits)

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

**CGT Entertainment Selectives (15 credits)**

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

- MA 15800 - Precalculus - Functions And Trigonometry Credits: 3.00 *(satisfies Quantitative Reasoning Selective for core)*
- MA 16010 - Applied Calculus I Credits: 3.00 *(satisfies Quantitative Reasoning Selective for core)*
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity Credits: 3.00 ♦ *(satisfies Written Communication AND Information Literacy for core & a Cornerstone Area A)*
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World Credits: 3.00 ♦ *(satisfies Oral Communication for core & a Cornerstone Area A)*
- PHYS 22000 - General Physics Credits: 4.00 ♦ *(satisfies Science for core)*
  Advanced English Selective - 1 Course *(possible Cornerstone Selective)*
- ENGL 20500 - Introduction To Creative Writing Credits: 3.00 or
- ENGL 30400 - Advanced Composition Credits: 3.00 or
- ENGL 41900 - Multimedia Writing Credits: 3.00 or
- ENGL 42000 - Business Writing Credits: 3.00 or
- ENGL 42100 - Technical Writing Credits: 3.00
  Statistics Selective - 1 Course
- IET 31600 - Statistical Quality Control Credits: 3.00 or
- PSY 20100 - Introduction To Statistics In Psychology Credits: 3.00 or
- STAT 22500 - Introduction To Probability Models Credits: 3.00 or
- STAT 30100 - Elementary Statistical Methods Credits: 3.00 or
- STAT 35000 - Introduction To Statistics Credits: 3.00
- Human Cultures: Humanities Selective (HUM) Core - Credit Hours: 3.00 *(satisfies Human Cultures: Humanities for core & possible Cornerstone Selective)*
- Human Cultures: Behavioral/Social Science (BSS) Core - Credit Hours: 3.00 *(satisfies Human Culture Behavior/Social Science for core)*
- Humanities Elective - Credit Hours: 6.00 *(possible Cornerstone Selective)*
- Science (SCI) Core - Credit Hours: 3.00 *(satisfies Science for core)*
- CGT Global Selective - Credit Hours: 3.00 *(possible Cornerstone Selective)*
- Technical Electives - Credit Hours: 12.00
Electives (14 Credits)

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

Cornerstone Certificate

- Cornerstone Certificate is required with this major.

Supplemental Lists

Click here for Animation And Visual Effects & Themed Entertainment Design Supplemental Information.

Grade Requirements

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

GPA Requirements

- 2.00 Graduation GPA required for Bachelor of Science degree.

Course Requirements and Notes

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

Non-course / Non-credit Requirements

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

See Supplemental Information for details.

Pass/No Pass Policy

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

Transfer Credit Policy

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

University Requirements
University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost's Website.

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

Civics Literacy Proficiency Requirement

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

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

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

Upper Level Requirement

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

Sample 4-Year Plan

Fall 1st Year

- CGT 11200 - Sketching For Visualization And Communication Credits: 3.00
- CGT 11800 - Fundamentals Of Imaging Technology Credits: 3.00
- CGT 12300 - Animation Foundations Credits: 3.00
- CGT 14100 - Internet Foundations Technologies And Development Credits: 3.00
- MA 15800 - Precalculus - Functions And Trigonometry Credits: 3.00

15 Credits
Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication Credits: 3.00
- CGT 17208 - User Experience Design Studio I: Fundamentals Credits: 3.00
- CGT 24100 - Introduction To Computer Animation Credits: 3.00
- CGT 27000 - Introduction To Data Visualization Credits: 3.00
- MA 16010 - Applied Calculus I Credits: 3.00

15 Credits

Fall 2nd Year

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity Credits: 3.00 ♦
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World Credits: 3.00 ♦
- CGT 14700 - Visual Effects Introduction Credits: 3.00
- CGT Entertainment Selective - Credit Hours: 3.00
- Human Cultures: Humanities (HUM) Core - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- CGT 20500 - Portfolio Review Credits: 0.00
- CGT 25001 - Computer Graphics Professional Practices I Credits: 1.00
- PHYS 22000 - General Physics Credits: 4.00
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World Credits: 3.00 ♦
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity Credits: 3.00 ♦
- CGT Entertainment Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

14 Credits

Fall 3rd Year

- CGT 44200 - Production For Computer Animation Credits: 3.00
  Statistics Selective - 1 Course
- IET 31600 - Statistical Quality Control Credits: 3.00 or
- PSY 20100 - Introduction To Statistics In Psychology Credits: 3.00 or
- STAT 22500 - Introduction To Probability Models Credits: 3.00 or
- STAT 30100 - Elementary Statistical Methods Credits: 3.00 or
- STAT 35000 - Introduction To Statistics Credits: 3.00
• CGT Entertainment Selective - Credit Hours: 3.00
• Science (SCI) Core - Credit Hours: 3.00
• Technical Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

• CGT 30505 - Portfolio II Credits: 0.00
• CGT 44200 - Production For Computer Animation Credits: 3.00
• CGT Entertainment Selective - Credit Hours: 3.00
• Humanities Elective - Credit Hours: 3.00
• Human Cultures: Behavioral/Social Science (BSS) Core - Credit Hours: 3.00
• CGT Global Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

• CGT 41101 - Contemporary Problems In Applied Computer Graphics I Credits: 2.00
• CGT Entertainment Selective - Credit Hours: 3.00
• Elective - Credit Hours: 2.00
• Technical Elective - Credit Hours: 3.00
• Humanities Elective - Credit Hours: 3.00
• Elective - Credit Hours: 3.00

16 Credits

Spring 4th Year

• CGT 40500 - Senior Portfolio Review Credits: 0.00
• CGT 41201 - Contemporary Problems In Applied Computer Graphics II Credits: 2.00
• CGT 45001 - Computer Graphics Professional Practices II Credits: 1.00
  Advanced English Selective - 1 Course (possible Cornerstone Selective)
• ENGL 20500 - Introduction To Creative Writing Credits: 3.00 or
• ENGL 30400 - Advanced Composition Credits: 3.00 or
• ENGL 41900 - Multimedia Writing Credits: 3.00 or
• ENGL 42000 - Business Writing Credits: 3.00 or
• ENGL 42100 - Technical Writing Credits: 3.00

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

15 Credits
Pre-Requisite Information

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

Critical Course

The ♦ course is considered critical.

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

Disclaimer

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

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

Artificial Intelligence, BS

About the Program

Artificial Intelligence (AI) systems are increasingly being deployed for real-world tasks. Students in the AI major will master the foundations and tools for building and understanding artificial intelligence systems which reason about data, correct themselves, and make decisions. Students will explore the link between cognitive psychology, neuroscience, and AI, as well as the ethics of AI, which are integral to a holistic understanding of AI. The major will open pathways to new careers ranging from healthcare and sustainability to business and economics.

Artificial Intelligence (College of Science)

Computer Science Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Curriculum and Degree Requirements for College of Science

A College of Science degree is conferred when a student successfully completes all requirements in their degree program. Students will complete coursework or approved experiential learning activities to meet the following three degree components:
1. Major
2. Science Core Curriculum
3. Electives

Students may use any of the following options to meet College of Science degree requirements:

- Purdue Coursework
- AP, IB, and CLEP credit. The use of AP and IB coursework varies between College of Science degree plans.
- Transfer Credit. Students should consult the Admissions Transfer Credit Resource page for all available transfer options.

College of Science degree programs vary widely in their approval and use of the proceeding options and thus students are strongly encouraged to work closely with their academic advisors and to regularly consult their MyPurduePlan to view the use of each option in their degree plan.

Most College of Science degree programs contain elective credits students may use to pursue courses that relate to their interests or which support their major area of study. The elective area of a degree plan may also be used to complete minors, second majors and certificates such as the Entrepreneurial Certificate. Any Purdue course may be used to meet the elective area of a student's degree plan.

**College of Science Core Requirements**

All Students starting Purdue University Fall semester, 2007 or later are required to pursue the 2007 Science Core curriculum.

The College of Science Core Curriculum requires the completion of approved coursework and/or experiential learning opportunities in the following academic areas:

- Composition and Presentation
- Computing
- Cultural Diversity (Language and Culture)
- General Education
- Great Issues in Science
- Laboratory Science
- Mathematics
- Science Technology and Society
- Statistics
- Teambuilding and Collaboration

**Earning Core Curricular Requirements through Experience**

Students may meet selected core curriculum requirements through approved experiential learning opportunities. Interested students should contact their academic advisor for more information on this option and incorporating experiential learning into their four-year program of study. For more information on earning requirements through experience, please click here.

**Departmental/Program Major Courses (62-63 credits)**

Must have a C or better in all courses.

**Required Major Courses (50-51 credits)**

Must have a C or better in all courses.

- CS 17600 - Data Engineering In Python **Credits: 3.00**
- CS 18000 - Problem Solving And Object-Oriented Programming **Credits: 4.00**
CS 18200 - Foundations Of Computer Science Credits: 3.00
CS 24300 - Artificial Intelligence Basics Credits: 3.00
CS 25300 - Data Structures And Algorithms For DS/Al Credits: 3.00
CS 37300 - Data Mining And Machine Learning Credits: 3.00
CS 38100 - Introduction To The Analysis Of Algorithms Credits: 3.00
CS 47100 - Introduction To Artificial Intelligence Credits: 3.00
PSY 12000 - Elementary Psychology Credits: 3.00
MA 26100 - Multivariate Calculus Credits: 4.00 or
MA 27101 - Honors Multivariate Calculus Credits: 5.00
MA 26500 - Linear Algebra Credits: 3.00 or
MA 35100 - Elementary Linear Algebra Credits: 3.00
MA 41600 - Probability Credits: 3.00 or
STAT 41600 - Probability Credits: 3.00
PHIL 20700 - Ethics For Technology, Engineering, And Design Credits: 3.00 or
PHIL 20800 - Ethics Of Data Science Credits: 3.00
PHIL 22100 - Introduction To Philosophy Of Science Credits: 3.00 or
PHIL 32200 - Philosophy Of Technology Credits: 3.00
PSY 20000 - Introduction To Cognitive Psychology Credits: 3.00 or
PSY 22200 - Introduction To Behavioral Neuroscience Credits: 3.00
STAT 35000 - Introduction To Statistics Credits: 3.00 or
STAT 51100 - Statistical Methods Credits: 3.00

CS Selective I (6 credits)

Must have a C or better in all courses. Choose two:

- CS 43900 - Introduction To Data Visualization Credits: 3.00
- CS 44000 - Large Scale Data Analytics Credits: 3.00
- CS 47300 - Web Information Search And Management Credits: 3.00
- CS 47500 - Human-Computer Interaction Credits: 3.00
- CS 57700 - Natural Language Processing Credits: 3.00
- CS 45800 - Introduction To Robotics Credits: 3.00

CS Selective II (3 credits)

Must have a C or better in all courses. Choose one:

- CS 34800 - Information Systems Credits: 3.00
- CS 44800 - Introduction To Relational Database Systems Credits: 3.00
- CS 48300 - Introduction To The Theory Of Computation Credits: 3.00
- CS 52300 - Social, Economic, And Legal Aspects Of Security Credits: 3.00
- CS 52900 - Security Analytics Credits: 3.00

Philosophy Selective (3 credits)

Must have a C or better in all courses. Choose one:

- PHIL 30300 - History Of Modern Philosophy Credits: 3.00
• PHIL 43200 - Theory Of Knowledge Credits: 3.00
• PHIL 43500 - Philosophy Of Mind Credits: 3.00

Other Departmental/Program Course Requirements (20-37 Credits)

COLLEGE OF SCIENCE CORE REQUIREMENTS

^ - Labeled as a Science Core Selection in the four year plan of study
* - Requirement may be met with a zero credit experiential learning option. See your advisor for more information.

Composition & Presentation

Written Communication (3-4 credits)
Choose one course from the Written Communication list here. (satisfies Written Communication and Information Literacy for core)

Technical Writing And Presentation* (0 or 3 credits)

Special Note: Students completing both COM 11400 (elective) and COM 21700 (Technical Writing and Presentation requirement) may use both courses to meet degree requirements.

Computing (0 credits)

Met with CS 17600.

Cultural Diversity (Language & Culture)^* (0-6 credits)
Choose courses from this list to fulfill each Option below (select courses COULD satisfy Humanities for core).

• Language & Culture Option I - fulfilled by PHIL 20700 or PHIL 20800.
• Language & Culture Option II
• Language & Culture Option III

General Education^ (0 credits)
Choose courses from this list to fulfill each Option below (select courses COULD satisfy Behavioral/Social Science for core).

• Met with PHIL 22100 or PHIL 32200.
• Met with PSY 12000.
• Met with PSY 20000 or PSY 22200.

Great Issues In Science (3 credits)
Choose one from this list.
Laboratory Science (6-8 credits)

Choose courses from this list to fulfill each Option below (satisfies Science for core).

- Laboratory Science Option I
- Laboratory Science Option II

Mathematics (8-10 credits)

(satisfies Quantitative Reasoning for core) - Must have C or better

- MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00
- MA 16500 - Analytic Geometry And Calculus I Credits: 4.00
- MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00
- MA 16600 - Analytic Geometry And Calculus II Credits: 4.00

Science, Technology, and Society^* (0 credits)

Met with PHIL 20700 or PHIL 20800 or PHIL 22100. (satisfies Science, Technology, Society for core)

Statistics (0 credits)

Met with STAT 35000 or STAT 51100.

Team-Building and Collaboration (0 credits)

Met with CS 18000.

Electives (20-38 credits)

Enrollment in freshman seminar course - CS 19300 - Tools is strongly encouraged to be taken with CS 17600. CS 19300 is not a degree requirement. CS 29100 - Sophomore Development Seminar and CS 39100 - Junior Resources Seminar are optional but recommended.

Grade Requirements

For this degree, all major required courses, all major electives (selectives), and their pre-requisites, regardless of department, must be completed with a grade of C or better.

GPA Requirements

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

College of Science Pass/No Pass Option Policy
Only electives and courses at the 50000-level general education requirement may be taken under the pass/no pass option. The pass/no pass grade mode may be entered for courses which are not required by a student's major(s), minor(s) or science core curriculum. Grade mode Passing is equivalent to at a minimum grade of C- had a letter grade been awarded. Students may elect to use the pass/no pass option for no more than 20% of the 124/120 credit requirement for graduation and for no more than two courses per academic year (Fall-Summer). The pass/no pass option cannot be elected for a course that has already been completed with a letter grade. University Regulation. Students may take elective credit while abroad using the P/NP mode. In the case of universities which only post P/NP, the University will apply a calculation process to determine a letter grade. Department of Languages and Cultures P/NP policy and Language Placement results. Students must take advanced coursework for a letter grade to receive credit for lower-level language courses.

College of Science Transfer Credit Policy

College of Science degree programs vary widely in their approval and use of non-Purdue originated credit (AP, IB, CLEP, and transfer credit). Students work closely with their academic advisors and degree plan audits to review the use and approval of each non-Purdue credit option.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost's Website.

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

Civics Literacy Proficiency Requirement

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

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

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

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

Sample 4-year Plan

All Major core courses and Major elective requirements, regardless of department, must be completed with a grade of "C" or higher. All prerequisites to Major core courses and Major elective requirements, regardless of department, must be completed with a grade of C or higher.

Fall 1st Year

- CS 17600 - Data Engineering In Python Credits: 3.00
- PSY 12000 - Elementary Psychology Credits: 3.00
- MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00 or
- MA 16500 - Analytic Geometry And Calculus I Credits: 4.00
- Science Core Selection - Credit Hours: 3.00-4.00 (English Composition suggested.)
- Elective - Credit Hours: 1.00
- Elective - Credit Hours: 1.00 (CS 19300 suggested.)

15-17 Credits

Spring 1st Year

- CS 18000 - Problem Solving And Object-Oriented Programming Credits: 4.00
- CS 18200 - Foundations Of Computer Science Credits: 3.00
- MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00 or
- MA 16600 - Analytic Geometry And Calculus II Credits: 4.00
- PSY 20000 - Introduction To Cognitive Psychology Credits: 3.00 or
- PSY 22200 - Introduction To Behavioral Neuroscience Credits: 3.00

14-15 Credits

Fall 2nd Year

- CS 24300 - Artificial Intelligence Basics Credits: 3.00
- MA 26100 - Multivariate Calculus Credits: 4.00 or
- MA 27101 - Honors Multivariate Calculus Credits: 5.00
- STAT 35000 - Introduction To Statistics Credits: 3.00
- STAT 51100 - Statistical Methods Credits: 3.00
- PHIL 20700 - Ethics For Technology, Engineering, And Design Credits: 3.00 or
- PHIL 20800 - Ethics Of Data Science Credits: 3.00
• Science Core Selection - Credit Hours: 3.00-4.00

16-18 Credits

Spring 2nd Year

• CS 25300 - Data Structures And Algorithms For DS/AI Credits: 3.00
• MA 26500 - Linear Algebra Credits: 3.00
OR
• MA 41600 - Probability Credits: 3.00
OR
• MA 35100 - Elementary Linear Algebra Credits: 3.00
• STAT 41600 - Probability Credits: 3.00
OR
• PHIL 22100 - Introduction To Philosophy Of Science Credits: 3.00
• PHIL 32200 - Philosophy Of Technology Credits: 3.00
• Science Core Selection - Credit Hours: 3.00-4.00

15-16 Credits

Fall 3rd Year

• CS 37300 - Data Mining And Machine Learning Credits: 3.00
• CS Selective I - Credit Hours: 3.00
• Philosophy Selective - Credit Hours: 3.00
• Science Core Selection - Credit Hours: 3.00-4.00
• Science Core Selection - Credit Hours: 3.00-4.00

15-17 Credits

Spring 3rd Year

• CS 38100 - Introduction To The Analysis Of Algorithms Credits: 3.00
• Science Core Selection - Credit Hours: 3.00-4.00
• Science Core Selection - Credit Hours: 3.00-4.00
• Elective - Credit Hours: 3.00
• Elective - Credit Hours: 3.00

15-17 Credits

Fall 4th Year

• CS 47100 - Introduction To Artificial Intelligence Credits: 3.00
• CS Selective I - Credit Hours: 3.00
• Science Core Selection - Credit Hours: 3.00-4.00
• Science Core Selection - Credit Hours: 3.00-4.00
Elective - Credit Hours: 3.00

15-17 Credits

Spring 4th Year

- CS Selective II - Credit Hours: 3.00
- Science Core Selection - Credit Hours: 3.00-4.00
- Science Core Selection - Credit Hours: 3.00-4.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15-17 Credits

Pre-Requisite Information

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

World Language Courses

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

Critical Course

The ♦ course is considered critical.

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

Disclaimer

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

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

Computer and Information Technology, BS
About the Program

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

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

Computer and Information Technology Website

Computer and Information Technology Department Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (51 credits)

A C- GPA is required across all CNIT courses

Computer and Information Technology Required Major Courses (30 credits)

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

Programming Selective (3 credits)

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

Database Selective (3 credits)

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

Information Technology Selectives (15 credits)

At least nine credits must be CNIT courses.

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

CIT Common Core (42 credits)

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

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

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

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

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

• MA 16010 - Applied Calculus I Credits: 3.00

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

• MA 16020 - Applied Calculus II Credits: 3.00

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

• TECH 12000 - Design Thinking In Technology Credits: 3.00

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

Human Cultures: Behavioral/Social Sciences (BSS)

Three credits required from the Human Cultures: Behavioral/Social Sciences (BSS) list.
Humanities Selective (satisfies Human Cultures: Humanities for core) - Credit Hours: 3.00

Human Cultures: Humanities (HUM)

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

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

Science(SCI)

Three credits required from the Science(SCI) list.

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

Science (SCI) - with Lab Component

Three credits required from the Science(SCI) list.

Verify the course has a lab component when scheduling.

The following courses are typically offered with a lab component:

Accounting Selective - Credit Hours: 3.00

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

Economics Selective - Credit Hours: 3.00

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

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

Communication Selective - Credit Hours: 3.00

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

Professional Speaking Selective - Credit Hours: 3.00

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

Professional Writing Selective - Credit Hours: 3.00

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

Professional IT Experience Requirement

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

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

Globalization Requirement - Credit Hours: 0.00

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

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

Step 2: Complete CNIT 32000 or CNIT 37100

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

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

Other Departmental/Program Course Requirements (24 credits)
- TLI 11200 - Foundations Of Organizational Leadership Credits: 3.00

Statistics Selective - Credit Hours: 3.00

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

General Business - Credit Hours: 3.00

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

Interdisciplinary Selective - Credit Hours: 15.00

Globalization Requirement - Credit Hours: 0.00

Elective (3 credits)

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

Supplemental List

Click here for Computer and Information Technology Supplemental Information.

Supplemental List

Click here for Computer and Information Technology Supplemental Information.

Grade Requirements

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

GPA Requirements

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

Course Requirements and Notes

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

Non-course / Non-credit Requirements

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

Pass/No Pass Policy

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

Transfer Credit Policy

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

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost’s Website.

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

Civics Literacy Proficiency Requirement

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

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

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

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

Additional Information

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

Sample 4-Year Plan

### Fall 1st Year

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

15 Credits

### Spring 1st Year

- CNIT 15501 - Introduction To Software Development Concepts **Credits:** 3.00
- CNIT 17600 - Information Technology Architectures **Credits:** 3.00
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits:** 3.00 or
- COM 11400 - Fundamentals Of Speech Communication **Credits:** 3.00
- MA 16010 - Applied Calculus II **Credits:** 3.00
- Behavioral/Social Sciences Foundational Selective - Credit Hours: 3.00

15 Credits

### Fall 2nd Year

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

15 Credits

Spring 2nd Year

• CNIT 25501 - Object-Oriented Programming Introduction Credits: 3.00
• CNIT 27000 - Cybersecurity Fundamentals I Credits: 3.00
• COM 21000 - Addressing Public Issues Credits: 3.00 or
• COM 21200 - Approaches To The Study Of Interpersonal Communication Credits: 3.00 or
• COM 22400 - Communicating In The Global Workplace Credits: 3.00 or
• COM 25100 - Communication, Information, And Society Credits: 3.00 or
• COM 31400 - Advanced Presentational Speaking Credits: 3.00 or
• COM 31500 - Speech Communication Of Technical Information Credits: 3.00 or
• COM 31800 - Principles Of Persuasion Credits: 3.00 or
• COM 32000 - Small Group Communication Credits: 3.00 or
• COM 32400 - Introduction To Organizational Communication Credits: 3.00
• STAT 22500 - Introduction To Probability Models Credits: 3.00 or
• STAT 30100 - Elementary Statistical Methods Credits: 3.00 or
• STAT 50100 - Experimental Statistics I Credits: 3.00 or
• STAT 51100 - Statistical Methods Credits: 3.00
• Lab Science Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

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

15 Credits
Spring 3rd Year

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

15 Credits

Fall 4th Year

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

15 Credits

Spring 4th Year

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

15 Credits

Critical Course

The ♦ course is considered critical.

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

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

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

**Computer Engineering Technology, BS**

**About the Program**

The Computer Engineering Technology major is part of the Electrical Engineering Technology program. The Electrical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, https://www.abet.org, under the commission's general criteria and program criteria for Electrical/Electronic(s) Engineering Technology and similarly named programs.

Computer Engineering Technology

School of Engineering Technology Major Change (CODO) Requirements

**Degree Requirements**

**120 Credits Required**

**Departmental/Program Major Courses (52 credits)**

**Required Major Courses (49 credits)**

- ENGT 18200 - Gateway To Engineering Technology Credits: 4.00
- ECET 17700 - Data Acquisition And Systems Control Credits: 3.00
- ECET 17900 - Introduction To Digital Systems Credits: 3.00
- ECET 22700 - DC And Pulse Electronics Credits: 3.00 ♦
- ECET 22900 - Concurrent Digital Systems Credits: 3.00
- ECET 27000 - Electronics Prototype Development And Construction Credits: 3.00
- ECET 27400 - Wireless Communications Credits: 3.00
- ECET 27900 - Embedded Digital Systems Credits: 3.00 ♦
- ECET 32900 - Advanced Embedded Digital Systems Credits: 3.00
- ECET 33900 - Digital Signal Processing Credits: 3.00
- ECET 34900 - Advanced Digital Systems Credits: 3.00
- Computer Engineering Technology Selective - Credit Hours: 6.00
- ECET Selective - Credit Hours: 3.00
- Senior Capstone Selective I - Credit Hours: 3.00
- Senior Capstone Selective II - Credit Hours: 3.00

**Other Departmental/Program Course Requirements (65 credits)**
- CNIT 17600 - Information Technology Architectures Credits: 3.00
- CNIT 18000 - Introduction To Systems Development Credits: 3.00
- CNIT 25501 - Object-Oriented Programming Introduction Credits: 3.00
- CNIT 34400 - Network Engineering Fundamentals Credits: 3.00
- TECH 12000 - Design Thinking In Technology Credits: 3.00 (satisfies Information Literacy and Science, Technology & Society for core)
  - Intro to C Programming Selective (3 credits)
- CNIT 10500 - Introduction To C Programming Credits: 3.00 (preferred) or
  - CS 15900 - C Programming Credits: 3.00
- Applied Calculus I Selective (3-5 credits) - satisfies Quantitative Reasoning for core
- MA 16010 - Applied Calculus I Credits: 3.00 (preferred) or
  - MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00 or
- MA 16500 - Analytic Geometry And Calculus I Credits: 4.00
  - Applied Calculus II Selective (3-5 credits)
- MA 16020 - Applied Calculus II Credits: 3.00 (preferred) or
  - MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00 or
- MA 16600 - Analytic Geometry And Calculus II Credits: 4.00
  - General Physics I Selective (4 credits) - satisfies Science for core
- PHYS 22000 - General Physics Credits: 4.00 (preferred) or
  - PHYS 17200 - Modern Mechanics Credits: 4.00
  - General Physics II Selective (3-4 credits) - satisfies Science for core
- PHYS 22100 - General Physics Credits: 4.00 (preferred) or
  - PHYS 24100 - Electricity And Optics Credits: 3.00 or
  - PHYS 27200 - Electric And Magnetic Interactions Credits: 4.00
  - Statistics Selective (3 credits)
- STAT 22500 - Introduction To Probability Models Credits: 3.00 or
  - STAT 30100 - Elementary Statistical Methods Credits: 3.00
  - English Composition Selective (3-4 credits) - satisfies Written Communication for core
- ENGL 10600 - First Year Composition With Conferences Credits: 4.00 or
  - ENGL 10800 - First Year Composition Credits: 3.00 or
  - HONR 19903 - Interdisciplinary Approaches In Writing Credits: 3.00 or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity Credits: 3.00
  - Freshman Speech Selective (3 credits) - satisfies Oral Communication for core)
- COM 11400 - Fundamentals Of Speech Communication Credits: 3.00 or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World Credits: 3.00
  - Industrial Economics Selective (3 credits)
- AGEC 33000 - Management Methods For Agricultural Business Credits: 3.00 or
  - AGEC 35200 - Quantitative Techniques For Firm Decision Making Credits: 3.00 or
- IET 33400 - Economic Analysis For Technology Systems Credits: 3.00 or
- MGMT 20000 - Introductory Accounting Credits: 3.00 or
  - MGMT 21200 - Business Accounting Credits: 3.00
  - Written Communication Selective (3 credits)
- ENGL 20500 - Introduction To Creative Writing Credits: 3.00 or
  - ENGL 30400 - Advanced Composition Credits: 3.00 or
- ENGL 42000 - Business Writing Credits: 3.00 or
  - ENGL 42100 - Technical Writing Credits: 3.00 or
- ENGL 42400 - Writing For High Technology Industries Credits: 3.00
- Business Selective - Credit Hours: 3.00 (may satisfy Human Culture: Behavioral/Social Sciences for core)
- **General Education Selectives** - Credit Hours: 12.00 (may satisfy Human Culture: Humanities and Human Culture: Behavioral/Social Sciences for core)
- **Global/Professional Selective** - Credit Hours: 3.00
- **Oral Communication Selectives** - Credit Hours: 3.00 (Any communications COM course at the 20000+ level or higher.)
- **Intercultural Requirement** - Credit Hours: 0.00
- **Professional Requirement** - Credit Hours: 0.00

**Elective (3 credits)**

- Any non-remedial course.

**Supplemental List**

Computer Engineering Technology Supplemental Information

**Professional Requirement**

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response. See supplemental information for approved experiences.

**Grade Requirements**

- Students must earn a "D-" or better in all courses. Pass/no pass grading allowed for General Education Selectives and Electives (up to 15 hrs).
- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.

**GPA Requirements**

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

**Course Requirements and Notes**

- Human Cultures Behavioral/Social Science for University Core may be selected to satisfy either the Business Selective or a General Education Selective requirement.
- Senior Capstone Selective I/II and 12 hours of ECET lab-based courses at the 300-level or higher must be taken at Purdue University West Lafayette and/or Polytechnic Statewide.

**Non-course / Non-credit Requirements**

- Intercultural Requirement (ungraded) must be completed.
• Professional Requirement (ungraded) must be completed.

• Professional and Intercultural requirements will be satisfied by completion of experiences, assessments, and courses that are pre-approved by the EET Curriculum Subcommittee. Approved courses may fulfill other degree requirements.

• Choose from list: Refer to the Computer Engineering Technology Supplemental Information for a complete list of selectives and requirements (including ungraded requirements).

Pass/No Pass Policy

• Pass/no pass grading allowed for General Education Selectives and Electives (up to 15 hrs).

Transfer Credit Policy

Transfer credit from other institutions, including courses taken as dual or concurrent credit in high school, and credit from testing such as Advanced Placement and International Baccalaureate that are an exact match for Purdue courses, may be applied to degree requirements.

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

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost's Website.

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

Civics Literacy Proficiency Requirement

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

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

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

Upper Level Requirement

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

Additional Information

• The Computer Engineering Technology (CEGT) major is within the Electrical Engineering Technology program.

Sample 4-Year Plan

Fall 1st Year

• ENGT 18200 - Gateway To Engineering Technology Credits: 4.00
• TECH 12000 - Design Thinking In Technology Credits: 3.00

Intro to C Programming Selective:
• CNIT 10500 - Introduction To C Programming Credits: 3.00 (preferred) or
• CS 15900 - C Programming Credits: 3.00

Applied Calculus I Selective:
• MA 16010 - Applied Calculus I Credits: 3.00 (preferred) or
• MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00 or
• MA 16500 - Analytic Geometry And Calculus I Credits: 4.00

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

16 Credits

Spring 1st Year
ECET 17700 - Data Acquisition And Systems Control Credits: 3.00
ECET 17900 - Introduction To Digital Systems Credits: 3.00

Applied Calculus II Selective:
- MA 16020 - Applied Calculus II Credits: 3.00 (preferred) or
- MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00 or
- MA 16500 - Analytic Geometry And Calculus I Credits: 4.00

General Physics I Selective:
- PHYS 22000 - General Physics Credits: 4.00 (preferred) or
- PHYS 17200 - Modern Mechanics Credits: 4.00

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

16 Credits

Fall 2nd Year

- ECET 22700 - DC And Pulse Electronics Credits: 3.00
- ECET 22900 - Concurrent Digital Systems Credits: 3.00

General Physics II Selective:
- PHYS 22100 - General Physics Credits: 4.00 (preferred) or
- PHYS 24100 - Electricity And Optics Credits: 3.00 or
- PHYS 27200 - Electric And Magnetic Interactions Credits: 4.00
- General Education Selective - Credit Hours: 3.00
- Oral Communication Selective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- ECET 27000 - Electronics Prototype Development And Construction Credits: 3.00
- ECET 27400 - Wireless Communications Credits: 3.00
- ECET 27900 - Embedded Digital Systems Credits: 3.00
- CNIT 18000 - Introduction To Systems Development Credits: 3.00

Written Communication Selective:
- ENGL 20500 - Introduction To Creative Writing Credits: 3.00 or
• ENGL 30400 - Advanced Composition Credits: 3.00 or
• ENGL 42000 - Business Writing Credits: 3.00 or
• ENGL 42100 - Technical Writing Credits: 3.00 or
• ENGL 42400 - Writing For High Technology Industries Credits: 3.00

15 Credits

Fall 3rd Year

• ECET 34900 - Advanced Digital Systems Credits: 3.00
• ECET 33900 - Digital Signal Processing Credits: 3.00
• CNIT 25501 - Object-Oriented Programming Introduction Credits: 3.00
• General Education Selective - Credit Hours: 3.00
• Global/ Professional Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

• ECET 32900 - Advanced Embedded Digital Systems Credits: 3.00
• CNIT 17600 - Information Technology Architectures Credits: 3.00
• Business Selective - Credit Hours: 3.00
• Computer Engineering Technology Selective - Credit Hours: 3.00
• General Education Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

• Senior Capstone Selective I - Credit Hours: 3.00
• General Education Selective - Credit Hours: 3.00
• Computer Engineering Technology Selective - Credit Hours: 3.00
• CNIT 34400 - Network Engineering Fundamentals Credits: 3.00

Industrial Economics Selective:
• AGE 33000 - Management Methods For Agricultural Business Credits: 3.00 or
• AGE 35200 - Quantitative Techniques For Firm Decision Making Credits: 3.00 or
• IET 33400 - Economic Analysis For Technology Systems Credits: 3.00 or
• MGMT 20000 - Introductory Accounting Credits: 3.00 or
• MGMT 21200 - Business Accounting Credits: 3.00

15 Credits

Spring 4th Year

• Senior Capstone Selective II - Credit Hours: 3.00
• ECET Selective - Credit Hours: 3.00
• Elective - Credit Hours: 3.00

Statistics Selective:
• STAT 22500 - Introduction To Probability Models Credits: 3.00 or
• STAT 30100 - Elementary Statistical Methods Credits: 3.00

12 Credits

Pre-Requisite Information

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

Critical Course

The ♦ course is considered critical.

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

Disclaimer

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

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

Computer Science Honors: Machine Intelligence, BS

About the Program

Students in the Computer Science Honors major, in addition to fulfilling all the requirements for a BS in Computer Science, will complete additional coursework and a research project. Honors students must maintain an overall GPA of 3.25 plus at least a 3.6 in Computer Science and required CSHO courses. The program requirements include additional math coursework, three out of four selected CS and ECE courses, a research seminar and project, and a graduate level course. It is especially suitable for students planning on graduate level coursework, though it also offers advantages to students seeking employment. Machine Intelligence is designed to prepare students to work in fields related to management and analysis of data, including areas such as machine learning, information retrieval, and data mining. The track is designed to prepare students to understand, and effectively apply in practice, the principles and techniques of data and knowledge representation, search, as well as learning and reasoning with data.

Students are invited to declare the major if they meet the qualifications after their first semester or after completion of the six core courses. Students who have been admitted to the Honors College may also join the major. Students may also request to declare
the major if they meet qualifications no later than their seventh semester (student must have at least 2 academic semesters remaining to accommodate both the research seminar and the research project).

Computer Science Website

Computer Science Major Change (CODO) Requirements (Students must first CODO into Computer Science before Honors.)

Degree Requirements

120 Credits Required

Curriculum and Degree Requirements for College of Science

A College of Science degree is conferred when a student successfully completes all requirements in their degree program. Students will complete coursework or approved experiential learning activities to meet the following three degree components:

1. Major
2. Science Core Curriculum
3. Electives

Students may use any of the following options to meet College of Science degree requirements:

- Purdue Coursework
- AP, IB, and CLEP credit. The use of AP and IB coursework varies between College of Science degree plans.
- Transfer Credit. Students should consult the Admissions Transfer Credit Resource page for all available transfer options.

College of Science degree programs vary widely in their approval and use of the proceeding options and thus students are strongly encouraged to work closely with their academic advisors and to regularly consult their MyPurduePlan to view the use of each option in their degree plan.

Most College of Science degree programs contain elective credits students may use to pursue courses that relate to their interests or which support their major area of study. The elective area of a degree plan may also be used to complete minors, second majors and certificates such as the Entrepreneurial Certificate. Any Purdue course may be used to meet the elective area of a student's degree plan.

College of Science Core Requirements

All Students starting Purdue University Fall semester, 2007 or later are required to pursue the 2007 Science Core curriculum.

The College of Science Core Curriculum requires the completion of approved coursework and/or experiential learning opportunities in the following academic areas:

- Composition and Presentation
- Computing
- Cultural Diversity (Language and Culture)
- General Education
- Great Issues in Science
- Laboratory Science
- Mathematics
- Science Technology and Society
- Statistics
Teambuilding and Collaboration

Earning Core Curricular Requirements through Experience

Students may meet selected core curriculum requirements through approved experiential learning opportunities. Interested students should contact their academic advisor for more information on this option and incorporating experiential learning into their four-year program of study. For more information on earning requirements through experience, please click here.

Computer Science Honors Major Courses (58-63 credits)

Must have "C" or better in all courses.

Required CS Honors Major Math Courses (7-8 credits)

Must have "C" or better in all courses.

- MA 35100 - Elementary Linear Algebra Credits: 3.00
- MA 26100 - Multivariate Calculus Credits: 4.00 or
- MA 27101 - Honors Multivariate Calculus Credits: 5.00

Required CS Major Core Courses (21 credits)

Must have C or better in all courses.

- CS 18000 - Problem Solving And Object-Oriented Programming Credits: 4.00 ♦ (satisfies Computing and Teambuilding for College of Science)
- CS 18200 - Foundations Of Computer Science Credits: 3.00 ♦
- CS 24000 - Programming In C Credits: 3.00 ♦
- CS 25000 - Computer Architecture Credits: 4.00
- CS 25100 - Data Structures And Algorithms Credits: 3.00
- CS 25200 - Systems Programming Credits: 4.00

Machine Intelligence Concentration (18 credits)

Must have C or better in all courses.

Required Courses (4 courses)

- CS 37300 - Data Mining And Machine Learning Credits: 3.00
- CS 38100 - Introduction To The Analysis Of Algorithms Credits: 3.00
- CS 47100 - Introduction To Artificial Intelligence Credits: 3.00 or
- CS 47300 - Web Information Search And Management Credits: 3.00
- MA 41600 - Probability Credits: 3.00 or
- STAT 41600 - Probability Credits: 3.00 or
- STAT 51200 - Applied Regression Analysis Credits: 3.00

Selectives (2 courses)
• CS 31400 - Numerical Methods Credits: 3.00
• CS 34800 - Information Systems Credits: 3.00
• CS 35200 - Compilers: Principles And Practice Credits: 3.00
• CS 44800 - Introduction To Relational Database Systems Credits: 3.00
• CS 45600 - Programming Languages Credits: 3.00
• CS 45800 - Introduction To Robotics Credits: 3.00
• CS 47100 - Introduction To Artificial Intelligence Credits: 3.00
• CS 47300 - Web Information Search And Management Credits: 3.00
• CS 57700 - Natural Language Processing Credits: 3.00
• CS 57800 - Statistical Machine Learning Credits: 3.00
• CS 48300 - Introduction To The Theory Of Computation Credits: 3.00
• CS 43900 - Introduction To Data Visualization Credits: 3.00 or
• CS 44000 - Large Scale Data Analytics Credits: 3.00 or
• CS 47500 - Human-Computer Interaction Credits: 3.00

Concentration Notes

• Non-CS courses and graduate level courses may have additional prerequisites that must be met to be eligible to take the course.
• No course may be counted for both a required and selective course within the same track.

Required CS Honors - (12-13 credits)

Need CS GPA of 3.60 or better & cumulative GPA of 3.25 and must have a C or better in all courses

• CS 39700 - Honors Seminar Credits: 0.00
• CS 49700 - Honors Research Project Credits: 3.00 (may use for Track Elective - see Track chairperson for approval)
• MA 35301 - Linear Algebra II Credits: 3.00 or
• MA 41600 - Probability Credits: 3.00 or
• MA 51800 - Advanced Discrete Mathematics Credits: 3.00 or
• An approved MA course with course number higher than MA 35100 - Elementary Linear Algebra Credits: 3.00 or
• An approved STAT course with course number higher than STAT 51100 - Statistical Methods Credits: 3.00
• CS 50000 level course (may use for Track Elective - see Track chairperson for approval) - Credit Hours: 3.00
• Three out of the four following courses: CS 35400, CS 35200, CS 38100, ECE 27000. CS 35400, CS 35200, and CS 38100 may be used to meet track requirements if the courses are required or electives for the student's track.

Other Departmental/Program Course Requirements (32-55 credits)

COLLEGE OF SCIENCE CORE REQUIREMENTS

^ - Labeled as a Science Core Selection in the four year plan of study
* - Requirement may be met with a zero credit experiential learning option. See your advisor for more information.

Composition & Presentation
Written Communication (3-4 credits)

Choose one course from the Written Communication list here. (satisfies Written Communication and Information Literacy for core)

Technical Writing And Presentation* (0-6 credits)

Students may elect to take one course (COM 21700), a combination of courses, or experiences to meet the TWTP requirement. The list of approved courses and experiences can be found here. (satisfies OC for core)

Special Note: Students completing both COM 11400 (elective) and COM 21700 (Technical Writing and Presentation requirement) may use both courses to meet degree requirements.

*Students wishing to meet the Technical Presentation and/or Technical Writing requirement through experience are required to complete the Experiential Learning Contract process.

International Students Only: International students whose primary high school/equivalent instruction was not in English may meet this requirement with a course option only.

Computing

Met with required major coursework.

Cultural Diversity (Language & Culture)^* (0-9 credits)

Choose courses from this list to fulfill each Option below (select courses COULD satisfy Humanities for core).

- Language & Culture Option I
- Language & Culture Option II
- Language & Culture Option III

General Education^ (9 credits)

Choose courses from this list to fulfill each Option below (select courses COULD satisfy Behavioral/Social Science for core).

- General Education Option I
- General Education Option II
- General Education Option III

Great Issues In Science (3 credits)

Choose one from this list.

Laboratory Science (6-8 credits)

Choose courses from this list to fulfill each Option below (satisfies Science for core).

- Laboratory Science Option I
- Laboratory Science Option II
Mathematics (8-10 credits)

*(satisfies Quantitative Reasoning for core) Must have a C or better.

- MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00 or
- MA 16500 - Analytic Geometry And Calculus I Credits: 4.00
- MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00 or
- MA 16600 - Analytic Geometry And Calculus II Credits: 4.00

Science, Technology and Society^* (1-3 credits)

Choose one from the Science Technology and Society list here *(satisfies Science, Technology, Society for core)*

Statistics (3 credits)

- STAT 35000 - Introduction To Statistics Credits: 3.00 ♦ or
- STAT 51100 - Statistical Methods Credits: 3.00 ♦

Team-Building and Collaboration

*Met with required major coursework.*

Electives (2-30 credits)

*Enrollment in freshman seminar course - CS 19300 - Tools is strongly encouraged to be taken with CS 18000. CS 19300 is not a degree requirement. CS 19700, CS 29100 - Sophomore Development Seminar and CS 39100 - Junior Resources Seminar are optional but recommended.*

Grade Requirements

- All major required courses, all track requirements and track selectives, and their pre-requisites, regardless of department, must be completed with a grade of C or better.

GPA Requirements

- 3.6 CS GPA and 3.25 cumulative GPA is required for graduation with the CS Honors degree.

Course Requirements & Notes

- Courses cannot double count between General Education, Culture and Diversity, and Great Issues requirements.

College of Science Pass/No Pass Option Policy

- Only electives and courses at the 50000-level general education requirement may be taken under the pass/no pass option.
The pass/no pass grade mode may be entered for courses which are not required by a student's major(s), minor(s) or science core curriculum. Grade mode Passing is equivalent to at a minimum grade of C- had a letter grade been awarded. Students may elect to use the pass/no pass option for no more than 20% of the 124/120 credit requirement for graduation and for no more than two courses per academic year (Fall-Summer). The pass/no pass option cannot be elected for a course that has already been completed with a letter grade. University Regulation. Students may take elective credit while abroad using the P/NP mode. In the case of universities which only post P/NP, the University will apply a calculation process to determine a letter grade. Department of Languages and Cultures P/NP policy and Language Placement results. Students must take advanced coursework for a letter grade to receive credit for lower-level language courses.

College of Science Transfer Credit Policy

College of Science degree programs vary widely in their approval and use of non-Purdue originated credit (AP, IB, CLEP, and transfer credit). Students work closely with their academic advisors and degree plan audits to review the use and approval of each non-Purdue credit option.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost's Website.

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

Civics Literacy Proficiency Requirement

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

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

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

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

Sample 4-Year Plan

Fall 1st Year

• CS 18000 - Problem Solving And Object-Oriented Programming Credits: 4.00 ♦***
• MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00 or
• MA 16500 - Analytic Geometry And Calculus I Credits: 4.00
• Science Core Selection - Credit Hours: 3.00-4.00 (English Composition suggested.)
• Elective - Credit Hours: 3.00
• Elective - Credit Hours: 1.00 (CS 19300 suggested.)

15-17 Credits

Spring 1st Year

• CS 18200 - Foundations Of Computer Science Credits: 3.00 ***♦
• CS 24000 - Programming In C Credits: 3.00 ***♦
• MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00 or
• MA 16600 - Analytic Geometry And Calculus II Credits: 4.00
• Science Core First-Year Composition Selection - Credit Hours: 3.00-4.00
• Electives - Credit Hours: 1.00 (Recommended CS 19700)
• Electives - Credit Hours: 1.00

15-17 Credits

Fall 2nd Year

• CS 25000 - Computer Architecture Credits: 4.00 ***
• CS 25100 - Data Structures And Algorithms Credits: 3.00 ***
• MA 26100 - Multivariate Calculus Credits: 4.00 or
• MA 27101 - Honors Multivariate Calculus Credits: 5.00
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Electives - Credit Hours: 1.00 (Recommended CS 29100)

15-17 Credits

Spring 2nd Year

• CS 25200 - Systems Programming Credits: 4.00 ***
• MA 35100 - Elementary Linear Algebra Credits: 3.00
• Science Core Selection - Credit Hours: 3.00 - 4.00 (COM 21700 suggested.)
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Elective - Credit Hours: 3.00

16-17 Credits

Fall 3rd Year

• MA 35301 - Linear Algebra II Credits: 3.00 or
• MA 41600 - Probability Credits: 3.00 or
• MA 51800 - Advanced Discrete Mathematics Credits: 3.00 or
• An approved MA course with a course number higher than MA 35100 - Elementary Linear Algebra Credits: 3.00
• An approved MA course with a course number higher than STAT 51100
• STAT 35000 - Introduction To Statistics Credits: 3.00 or
• STAT 51100 - Statistical Methods Credits: 3.00
• Machine Intelligence Concentration course - Credit Hours: 3.00 (Suggested CS 35200)
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Elective - Credit Hours: 1.00 (Recommended CS 39100)
• Elective - Credit Hours: 3.00

16-17 Credits

Spring 3rd Year

• Machine Intelligence Concentration course - Credit Hours: 3.00 (Suggested CS 35400)
• Machine Intelligence Concentration course - Credit Hours: 3.00
• Great Issues In Science - Credit Hours: 3.00
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Elective - Credit Hours: 3.00

15-16 Credits

Fall 4th Year

• CS 39700 - Honors Seminar Credits: 0.00
• Machine Intelligence Concentration course - Credit Hours: 3.00 (Suggested CS 38100)
• Machine Intelligence Concentration course - Credit Hours: 3.00
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Elective - Credit Hours: 3.00

15-17 Credits
Spring 4th Year

- CS 49700 - Honors Research Project Credits: 3.00
- Machine Intelligence Concentration course - Credit Hours: 3.00 ***
- CS 50000 level - Credit Hours: 3.00 ***
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Science Core Selection - Credit Hours: 3.00 - 4.00

15-17 Credits

World Language Courses

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

Critical Course

The ♦ course is considered critical.

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

Disclaimer

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

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

Computer Science Honors: Software Engineering, BS

About the Program

Students in the Computer Science Honors major, in addition to fulfilling all the requirements for a BS in Computer Science, will complete additional coursework and a research project. Honors students must maintain an overall GPA of 3.25 plus at least a 3.6 in Computer Science and required CSHO courses. The program requirements include additional math coursework, three out of
four selected CS and ECE courses, a research seminar and project, and a graduate level course. It is especially suitable for
students planning on graduate level coursework, though it also offers advantages to students seeking employment.

Students are invited to declare the major if they meet the qualifications after their first semester or after completion of the six core
courses. Students who have been admitted to the Honors College may also join the major. Students may also request to declare
the major if they meet qualifications no later than their seventh semester (student must have at least 2 academic semesters
remaining to accommodate both the research seminar and the research project).

The Software Engineering track is designed to prepare students to become software engineers who:

- understand and can use the principles and techniques of software engineering essential for the design and development
  of large software products,
- are familiar with and can effectively use a variety of tools for software analysis, design, testing, and maintenance, and
- can effectively work in teams and communicate orally and in writing.

Computer Science Website

Computer Science Major Change (CODO) Requirements (Students must first CODO into Computer Science before Honors.)

Degree Requirements

120 Credits Required

Curriculum and Degree Requirements for College of Science

A College of Science degree is conferred when a student successfully completes all requirements in their degree
program. Students will complete coursework or approved experiential learning activities to meet the following three degree
components:

1. Major
2. Science Core Curriculum
3. Electives

Students may use any of the following options to meet College of Science degree requirements:

- Purdue Coursework
- AP, IB, and CLEP credit. The use of AP and IB coursework varies between College of Science degree plans.
- Transfer Credit. Students should consult the Admissions Transfer Credit Resource page for all available transfer
  options.

College of Science degree programs vary widely in their approval and use of the proceeding options and thus students are
strongly encouraged to work closely with their academic advisors and to regularly consult their MyPurduePlan to view the use of
each option in their degree plan.

Most College of Science degree programs contain elective credits students may use to pursue courses that relate to their interests
or which support their major area of study. The elective area of a degree plan may also be used to complete minors, second
majors and certificates such as the Entrepreneurial Certificate. Any Purdue course may be used to meet the elective area of a
student's degree plan.

College of Science Core Requirements

All Students starting Purdue University Fall semester, 2007 or later are required to pursue the 2007 Science Core curriculum.

The College of Science Core Curriculum requires the completion of approved coursework and/or experiential learning
opportunities in the following academic areas:
Earning Core Curricular Requirements through Experience

Students may meet selected core curriculum requirements through approved experiential learning opportunities. Interested students should contact their academic advisor for more information on this option and incorporating experiential learning into their four-year program of study. For more information on earning requirements through experience, please click here.

Computer Science Honors Major Courses (58-63 credits)

Required CS Honors Major Math Courses (7-8 credits)

Must have C or better to meet prerequisite for certain upper level CS courses

- MA 35100 - Elementary Linear Algebra Credits: 3.00
- MA 26100 - Multivariate Calculus Credits: 4.00 or
- MA 27101 - Honors Multivariate Calculus Credits: 5.00

Required CS Major Core Courses (21 credits)

Must have C or better in all courses.

- CS 18000 - Problem Solving And Object-Oriented Programming Credits: 4.00 ♦ (satisfies Computing and Teambuilding for College of Science)
- CS 18200 - Foundations Of Computer Science Credits: 3.00 ♦
- CS 24000 - Programming In C Credits: 3.00 ♦
- CS 25000 - Computer Architecture Credits: 4.00
- CS 25100 - Data Structures And Algorithms Credits: 3.00
- CS 25200 - Systems Programming Credits: 4.00

Software Engineering Concentration (18 credits)

Required Courses

- CS 30700 - Software Engineering I Credits: 3.00
- CS 38100 - Introduction To The Analysis Of Algorithms Credits: 3.00
- CS 40700 - Software Engineering Senior Project Credits: 3.00
- CS 40800 - Software Testing Credits: 3.00
- CS 35200 - Compilers: Principles And Practice Credits: 3.00 or
• CS 35400 - Operating Systems Credits: 3.00

Selective

Choose one course.

• CS 34800 - Information Systems Credits: 3.00
• CS 35100 - Cloud Computing Credits: 3.00
• CS 35200 - Compilers: Principles And Practice Credits: 3.00
• CS 35300 - Principles Of Concurrency And Parallelism Credits: 3.00
• CS 35400 - Operating Systems Credits: 3.00
• CS 37300 - Data Mining And Machine Learning Credits: 3.00
• CS 42200 - Computer Networks Credits: 3.00
• CS 42600 - Computer Security Credits: 3.00
• CS 44800 - Introduction To Relational Database Systems Credits: 3.00
• CS 45600 - Programming Languages Credits: 3.00
• CS 47300 - Web Information Search And Management Credits: 3.00
• CS 48900 - Embedded Systems Credits: 3.00
• CS 49000 - Topics In Computer Sciences For Undergraduates Credits: 1.00 to 5.00
• DSO Distributed Systems
• SWS Software Security
• CS 51000 - Software Engineering Credits: 3.00
• CS 590 - Topics In Computer Sciences Credits: 1.00 to 5.00
• SRS Software Reliability and Security

Software Engineering Senior Project

• The Software Engineering Senior Project (CS 40700) must be completed in the student's last or next-to-last semester.
• It must be a team project involving 4-6 people.
• CS 30700 is a pre-requisite for the Software Engineering Senior Project.

Concentration Notes

• All major required courses, all track requirements and track selectives, and their pre-requisites, regardless of department, must be completed with a grade of C or better.
• No course may be counted for both a required and selective course within the same track.

Required CS Honors - (12-13 credits)

Need CS GPA of 3.60 or better & cumulative GPA of 3.25 and must have a C or better in all courses

• CS 39700 - Honors Seminar Credits: 0.00
• CS 49700 - Honors Research Project Credits: 3.00 (may use for Track Elective - see Track chairperson for approval)
• MA 35301 - Linear Algebra II Credits: 3.00 or
• MA 41600 - Probability Credits: 3.00 or
• MA 51800 - Advanced Discrete Mathematics Credits: 3.00 or
• An approved MA course with course number higher than **MA 35100 - Elementary Linear Algebra Credits: 3.00** or
• An approved STAT course with course number higher than **STAT 51100 - Statistical Methods Credits: 3.00**
• CS 50000 level course (may use for Track Elective - see Track chairperson for approval) - Credit Hours: 3.00
• Three out of the four following courses: CS 35400, CS 35200, CS 38100, ECE 27000. CS 35400, CS 35200, and CS 38100 may be used to meet track requirements if the courses are required or electives for the student's track.

Other Departmental/Program Course Requirements (32-55 credits)

**COLLEGE OF SCIENCE CORE REQUIREMENTS**

^ - Labeled as a Science Core Selection in the four year plan of study

* - Requirement may be met with a zero credit experiential learning option. See your advisor for more information.

**Composition & Presentation**

**Written Communication (3-4 credits)**

Choose one course from the Written Communication list here. (satisfies Written Communication and Information Literacy for core)

**Technical Writing And Presentation* (0-6 credits)**

Students may elect to take one course (COM 21700), a combination of courses, or experiences to meet the TWTP requirement. The list of approved courses and experiences can be found here. (satisfies OC for core)

**Special Note:** Students completing both COM 11400 (elective) and COM 21700 (Technical Writing and Presentation requirement) may use both courses to meet degree requirements.

*Students wishing to meet the Technical Presentation and/or Technical Writing requirement through experience are required to complete the Experiential Learning Contract process.

International Students Only: International students whose primary high school/equivalent instruction was not in English may meet this requirement with a course option only.

**Computing**

*Met with required major coursework.*

**Cultural Diversity (Language & Culture)^* (0-9 credits)**

Choose courses from this list to fulfill each Option below (select courses COULD satisfy Humanities for core).

• Language & Culture Option I
• Language & Culture Option II
• Language & Culture Option III

**General Education^ (9 credits)**
Choose courses from this list to fulfill each Option below (select courses COULD satisfy Behavioral/Social Science for core).

- General Education Option I
- General Education Option II
- General Education Option III

Great Issues In Science (3 credits)

Choose one from this list.

Laboratory Science (6-8 credits)

Choose courses from this list to fulfill each Option below (satisfies Science for core).

- Laboratory Science Option I
- Laboratory Science Option II

Mathematics (8-10 credits)

*(satisfies Quantitative Reasoning for core)*

- MA 16100 - Plane Analytic Geometry And Calculus I **Credits:** 5.00 (must have C or better to meet prerequisite for CS 18200) or
- MA 16500 - Analytic Geometry And Calculus I **Credits:** 4.00 (must have C or better to meet prerequisite for CS 18200)
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits:** 5.00 or
- MA 16600 - Analytic Geometry And Calculus II **Credits:** 4.00

Science Technology and Society^* (0-3 credits)

Choose one from the Science Technology and Society list, excluding those on the College of Science No Count list (satisfies STS for core).

Statistics (3 credits)

- STAT 35000 - Introduction To Statistics **Credits:** 3.00 ♦ or
- STAT 51100 - Statistical Methods **Credits:** 3.00 ♦

Team-Building and Collaboration

*Met with required major coursework.*

Electives (2-30 credits)

Enrollment in freshman seminar course CS 19300 is required with CS 18000. This is not a degree requirement. CS 19700 - Freshman Honors Seminar, CS 29100 - Sophomore Development Seminar, and CS 39100 are optional but recommended.
Grade Requirements

- All major required courses, all track requirements and track selectives, and their pre-requisites, regardless of department, must be completed with a grade of C or better.

GPA Requirements

- 3.6 CS GPA and 3.25 cumulative GPA is required for graduation with the CS Honors degree.

Course Requirements & Notes

- Enrollment in freshman seminar course CS 19300 is required with CS 18000. This is not a degree requirement. CS 29100 - Sophomore Development Seminar and CS 39100 - Junior Resources Seminar are optional but recommended.
- Courses cannot double count between General Education, Culture and Diversity, and Great Issues requirements.

College of Science Pass/No Pass Option Policy

- Only electives and courses at the 50000-level general education requirement may be taken under the pass/no pass option.
- The pass/no pass grade mode may be entered for courses which are not required by a student's major(s), minor(s) or science core curriculum.
- Grade mode Passing is equivalent to at a minimum grade of C- had a letter grade been awarded.
- Students may elect to use the pass/no pass option for no more than 20% of the 124/120 credit requirement for graduation and for no more than two courses per academic year (Fall-Summer).
- The pass/no pass option cannot be elected for a course that has already been completed with a letter grade. University Regulation.
- Students may take elective credit while abroad using the P/NP mode. In the case of universities which only post P/NP, the University will apply a calculation process to determine a letter grade.
- Department of Languages and Cultures P/NP policy and Language Placement results. Students must take advanced coursework for a letter grade to receive credit for lower-level language courses.

College of Science Transfer Credit Policy

College of Science degree programs vary widely in their approval and use of non-Purdue originated credit (AP, IB, CLEP, and transfer credit). Students work closely with their academic advisors and degree plan audits to review the use and approval of each non-Purdue credit option.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost's Website.

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

Civics Literacy Proficiency Requirement

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

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

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

Upper Level Requirement

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

Sample 4-Year Plan

Fall 1st Year

• CS 18000 - Problem Solving And Object-Oriented Programming Credits: 4.00
• MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00 or
• MA 16500 - Analytic Geometry And Calculus I Credits: 4.00
• Science Core Selection - Credit Hours: 3.00-4.00 (English Composition suggested.)
• Elective - Credit Hours: 3.00
• Elective - Credit Hours: 1.00 (CS 19300 suggested.)

15-17 Credits

Spring 1st Year

• CS 18200 - Foundations Of Computer Science Credits: 3.00
• CS 24000 - Programming In C Credits: 3.00
• MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00 or
• MA 16600 - Analytic Geometry And Calculus II Credits: 4.00
• Science Core First-Year Composition Selection - Credit Hours: 3.00-4.00
• Electives - Credit Hours: 1.00 (Recommended CS 19700)
• Electives - Credit Hours: 1.00

15-17 Credits

Fall 2nd Year

• CS 25000 - Computer Architecture Credits: 4.00 ***
• CS 25100 - Data Structures And Algorithms Credits: 3.00 ***
• MA 26100 - Multivariate Calculus Credits: 4.00 or
• MA 27101 - Honors Multivariate Calculus Credits: 5.00
• Science Core Selection - Credit Hours: 3.00 - 4.00 (COM 21700 suggested.)
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Elective - Credit Hours: 3.00

15-17 Credits

Spring 2nd Year

• CS 25200 - Systems Programming Credits: 4.00 ***
• MA 35100 - Elementary Linear Algebra Credits: 3.00 ♦
• Science Core Selection - Credit Hours: 3.00 - 4.00 (COM 21700 suggested.)
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Elective - Credit Hours: 3.00

16-17 Credits

Fall 3rd Year

• MA 35301 - Linear Algebra II Credits: 3.00 *** or
• MA 41600 - Probability Credits: 3.00 *** or
• MA 51800 - Advanced Discrete Mathematics Credits: 3.00 *** or
• An approved MA course with a course number higher than MA 35100 - Elementary Linear Algebra Credits: 3.00 *** or
• An approved MA course with a course number higher than STAT 51100***
• STAT 35000 - Introduction To Statistics Credits: 3.00 ♦ or
• STAT 51100 - Statistical Methods Credits: 3.00
• Software Engineering Concentration course - Credit Hours: 3.00 *** (Suggested CS 35200)
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Elective - Credit Hours: 1.00 (Recommended CS 39100)
• Elective - Credit Hours: 3.00

16-17 Credits
Spring 3rd Year

- Software Engineering Concentration course - Credit Hours: 3.00 *** (Suggested CS 35400)
- Software Engineering Concentration course - Credit Hours: 3.00 ***
- Great Issues In Science - Credit Hours: 3.00
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 3.00

15-16 Credits

Fall 4th Year

- CS 39700 - Honors Seminar Credits: 0.00
- Software Engineering Concentration course - Credit Hours: 3.00 *** (Suggested CS 38100)
- Software Engineering Concentration course - Credit Hours: 3.00 ***
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 3.00

15-17 Credits

Spring 4th Year

- CS 49700 - Honors Research Project Credits: 3.00
- Software Engineering Concentration course - Credit Hours: 3.00 ***
- CS 50000 level - Credit Hours: 3.00 ***
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Science Core Selection - Credit Hours: 3.00 - 4.00

15-17 Credits

Pre-Requisite Information

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

World Language Courses

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

Critical Course

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

Disclaimer

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

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

Computer Science: Machine Intelligence, BS

About the Program

Purdue Computer Science is one of the country's top-ranked programs. Faculty members are shaping the future of information technology through cutting-edge research. Students can take courses that include such topics as graphics and animation, web programming, competitive programming, cryptography and security, networks, software engineering, distributed systems, information systems, artificial intelligence, and bioinformatics.

The flexible curriculum offers students the opportunity to be involved in a dynamic discipline that will continue to grow and to contribute significantly to progress in many other disciplines and ultimately to changes in human society that are nothing short of profound. Students learn communication skills, teamwork, problem-solving skills, and acquire the necessary technical skills for positions in computing throughout society.

Computer Science Website

Computer Science Major Change (CODO) Requirements

Computer Science students begin by taking six core courses that teach them the fundamentals of computer science. Students then take coursework in a concentration, which allows them to deepen their understanding in a specific area. Machine Intelligence is designed to prepare students to work in fields related to management and analysis of data, including areas such as machine learning, information retrieval, and data mining. The track is designed to prepare students to understand, and effectively apply in practice, the principles and techniques of data and knowledge representation, search, as well as learning and reasoning with data.

Degree Requirements

120 Credits Required

Curriculum and Degree Requirements for College of Science

A College of Science degree is conferred when a student successfully completes all requirements in their degree program. Students will complete coursework or approved experiential learning activities to meet the following three degree components:
Students may use any of the following options to meet College of Science degree requirements:

- Purdue Coursework
- AP, IB, and CLEP credit. The use of AP and IB coursework varies between College of Science degree plans.
- Transfer Credit. Students should consult the Admissions Transfer Credit Resource page for all available transfer options.

College of Science degree programs vary widely in their approval and use of the proceeding options and thus students are strongly encouraged to work closely with their academic advisors and to regularly consult their MyPurduePlan to view the use of each option in their degree plan.

Most College of Science degree programs contain elective credits students may use to pursue courses that relate to their interests or which support their major area of study. The elective area of a degree plan may also be used to complete minors, second majors and certificates such as the Entrepreneurial Certificate. Any Purdue course may be used to meet the elective area of a student's degree plan.

College of Science Core Requirements

All Students starting Purdue University Fall semester, 2007 or later are required to pursue the 2007 Science Core curriculum.

The College of Science Core Curriculum requires the completion of approved coursework and/or experiential learning opportunities in the following academic areas:

- Composition and Presentation
- Computing
- Cultural Diversity (Language and Culture)
- General Education
- Great Issues in Science
- Laboratory Science
- Mathematics
- Science Technology and Society
- Statistics
- Teambuilding and Collaboration

Earning Core Curricular Requirements through Experience

Students may meet selected core curriculum requirements through approved experiential learning opportunities. Interested students should contact their academic advisor for more information on this option and incorporating experiential learning into their four-year program of study. For more information on earning requirements through experience, please click here.

Computer Science Major Courses (46-50 credits)

Must have C or better in all courses.

Required CS Major Math Courses (7-8 credits)

Must have C or better in all courses.

- MA 26100 - Multivariate Calculus Credits: 4.00
- MA 27101 - Honors Multivariate Calculus Credits: 5.00
• MA 26500 - Linear Algebra Credits: 3.00 or
• MA 35100 - Elementary Linear Algebra Credits: 3.00

Required CS Major Core Courses (21 credits)

Must have C or better in all courses.

• CS 18000 - Problem Solving And Object-Oriented Programming Credits: 4.00 ♦ (satisfies Computing and Teambuilding requirements for College of Science core)
• CS 18200 - Foundations Of Computer Science Credits: 3.00 ♦
• CS 24000 - Programming In C Credits: 3.00 ♦
• CS 25000 - Computer Architecture Credits: 4.00
• CS 25100 - Data Structures And Algorithms Credits: 3.00
• CS 25200 - Systems Programming Credits: 4.00

Machine Intelligence Concentration (18 credits)

Must have C or better in all courses.

Required Courses for Machine Intell (12 credits)

• CS 37300 - Data Mining And Machine Learning Credits: 3.00
• CS 38100 - Introduction To The Analysis Of Algorithms Credits: 3.00
• CS 47100 - Introduction To Artificial Intelligence Credits: 3.00 or
• CS 47300 - Web Information Search And Management Credits: 3.00
• MA 41600 - Probability Credits: 3.00 or
• STAT 41600 - Probability Credits: 3.00 or
• STAT 51200 - Applied Regression Analysis Credits: 3.00

Selectives (6 credits)

Choose two.

• CS 31400 - Numerical Methods Credits: 3.00
• CS 34800 - Information Systems Credits: 3.00
• CS 35200 - Compilers: Principles And Practice Credits: 3.00
• CS 44800 - Introduction To Relational Database Systems Credits: 3.00
• CS 45600 - Programming Languages Credits: 3.00
• CS 45800 - Introduction To Robotics Credits: 3.00
• CS 47100 - Introduction To Artificial Intelligence Credits: 3.00
• CS 47300 - Web Information Search And Management Credits: 3.00
• CS 48300 - Introduction To The Theory Of Computation Credits: 3.00
• CS 57700 - Natural Language Processing Credits: 3.00
• CS 57800 - Statistical Machine Learning Credits: 3.00
• CS 44000 - Large Scale Data Analytics Credits: 3.00 or
• CS 43900 - Introduction To Data Visualization Credits: 3.00 or
• CS 47500 - Human-Computer Interaction Credits: 3.00
Other Departmental/Program Course Requirements (32-54 credits)

COLLEGE OF SCIENCE CORE REQUIREMENTS

^ - Labeled as a Science Core Selection in the four year plan of study

* - Requirement may be met with a zero credit experiential learning option. See your advisor for more information.

Composition & Presentation

Written Communication (3-4 credits)

Choose one course from this list. (satisfies Written Communication and Information Literacy for core)

Technical Writing And Presentation* (0-6 credits)

Students may elect to take one course (COM 21700), a combination of courses, or experiences to meet the TWTP requirement. The list of approved courses and experiences can be found here (ADD LINK IN ACALOG). (satisfies OC for core)

Special Note: Students completing both COM 11400 (elective) and COM 21700 (Technical Writing and Presentation requirement) may use both courses to meet degree requirements.

*Students wishing to meet the Technical Presentation and/or Technical Writing requirement through experience are required to complete the Experiential Learning Contract process.

International Students Only: International students whose primary high school/equivalent instruction was not in English may meet this requirement with a course option only.

Computing

*Met with required major coursework.*

Cultural Diversity (Language & Culture)^* (0-9 credits)

Choose courses from this list to fulfill each Option below (select courses COULD satisfy Humanities for core).

- Language & Culture Option I
- Language & Culture Option II
- Language & Culture Option III

General Education^ (9 credits)

Choose courses from this list to fulfill each Option below (select courses COULD satisfy Behavioral/Social Science for core).

- General Education Option I
- General Education Option II
- General Education Option III

Great Issues In Science (3 credits)
Choose one from this list.

**Laboratory Science (6-8 credits)**

Choose courses from this list to fulfill each Option below (satisfies Science for core).

- Laboratory Science Option I
- Laboratory Science Option II

**Mathematics (8-10 credits)**

*(satisfies Quantitative Reasoning for core)* Must have C or better.

- MA 16100 - Plane Analytic Geometry And Calculus I **Credits:** 5.00 *or*
- MA 16500 - Analytic Geometry And Calculus I **Credits:** 4.00
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits:** 5.00 *or*
- MA 16600 - Analytic Geometry And Calculus II **Credits:** 4.00

**Science, Technology, and Society** (1-3 credits)

Choose one from the Science Technology and Society list here *(satisfies Science, Technology, Society for core)*

**Statistics (3 credits)**

- STAT 35000 - Introduction To Statistics **Credits:** 3.00 *♦*
- STAT 51100 - Statistical Methods **Credits:** 3.00 *♦*

**Team-Building and Collaboration**

*Met with required major coursework.*

**Electives (16-42 credits)**

*CS 19300 - Tools* Enrollment in freshman seminar course - CS 19300 - Tools is strongly encouraged to be taken with CS 18000. 
*CS 19300 is not a degree requirement. CS 29100 - Sophomore Development Seminar and CS 39100 - Junior Resources Seminar are optional but recommended.*

**Grade Requirements**

- All major required courses, all track requirements and track selectives and their pre-requisites, regardless of department, must be completed with a grade of C or better.

**GPA Requirements**

- 2.0 Major and Graduation GPA required for Bachelor of Science degree.
Course Requirements & Notes

- Non-CS courses and graduate level courses may have additional prerequisites that must be met in order to be eligible to take the course.
- No course can be counted both for a required and selective course within the same track.

College of Science Pass/No Pass Option Policy

- Only electives and courses at the 50000-level general education requirement may be taken under the pass/no pass option.
- The pass/no pass grade mode may be entered for courses which are not required by a student's major(s), minor(s) or science core curriculum.
- Grade mode Passing is equivalent to at a minimum grade of C- had a letter grade been awarded.
- Students may elect to use the pass/no pass option for no more than 20% of the 124/120 credit requirement for graduation and for no more than two courses per academic year (Fall-Summer).
- The pass/no pass option cannot be elected for a course that has already been completed with a letter grade. University Regulation.
- Students may take elective credit while abroad using the P/NP mode. In the case of universities which only post P/NP, the University will apply a calculation process to determine a letter grade.
- Department of Languages and Cultures P/NP policy and Language Placement results. Students must take advanced coursework for a letter grade to receive credit for lower-level language courses.

College of Science Transfer Credit Policy

College of Science degree programs vary widely in their approval and use of non-Purdue originated credit (AP, IB, CLEP, and transfer credit). Students work closely with their academic advisors and degree plan audits to review the use and approval of each non-Purdue credit option.

University Requirements

University Core Requirements

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

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

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

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

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

Upper Level Requirement

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

Sample 4-Year Plan

Fall 1st Year

- CS 18000 - Problem Solving And Object-Oriented Programming Credits: 4.00 ♦ ***
- MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00 or
- MA 16500 - Analytic Geometry And Calculus I Credits: 4.00
- Science Core Selection - Credit Hours: 3.00-4.00 (English Composition suggested.)
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 1.00 (CS 19300 suggested.)

15-17 Credits

Spring 1st Year

- CS 18200 - Foundations Of Computer Science Credits: 3.00 ♦ ***
- CS 24000 - Programming In C Credits: 3.00 ♦ ***
- MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00 or
- MA 16600 - Analytic Geometry And Calculus II Credits: 4.00
- Science Core First-Year Composition Selection - Credit Hours: 3.00-4.00
- Electives - Credit Hours: 1.00 - 3.00

14-18 Credits

Fall 2nd Year

- CS 25000 - Computer Architecture Credits: 4.00 ***
- CS 25100 - Data Structures And Algorithms Credits: 3.00 ***
• MA 26100 - Multivariate Calculus Credits: 4.00 or
• MA 27101 - Honors Multivariate Calculus Credits: 5.00
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Elective - Credit Hours: 1.00 (CS 29100 recommended)

15-17 Credits

Spring 2nd Year

• CS 25200 - Systems Programming Credits: 4.00 ***
• MA 26500 - Linear Algebra Credits: 3.00 or
• MA 35100 - Elementary Linear Algebra Credits: 3.00
• Science Core Selection - Credit Hours: 3.00 - 4.00 (COM 21700 suggested.)
• Science Core Selection - Credit Hours: 3.00
• Elective - Credit Hours: 3.00

16-17 Credits

Fall 3rd Year

• STAT 35000 - Introduction To Statistics Credits: 3.00 ♦ or
• STAT 51100 - Statistical Methods Credits: 3.00 ♦
• Machine Intelligence Concentration course- Credit Hours: 3.00 ***
• Machine Intelligence Concentration course- Credit Hours: 3.00 ***
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Elective - Credit Hours: 1.00 (CS 39100 recommended)
• Elective - Credit Hours: 3.00

16-17 Credits

Spring 3rd Year

• Machine Intelligence Concentration course - Credit Hours: 3.00 ***
• Machine Intelligence Concentration course - Credit Hours: 3.00 ***
• Great Issues In Science Selection - Credit Hours: 3.00
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Elective - Credit Hours: 3.00

15-17 Credits

Fall 4th Year

• Machine Intelligence Concentration course - Credit Hours: 3.00 ***
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Science Core Selection - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 1.00

16-18 Credits

Spring 4th Year

- Machine Intelligence Concentration course - Credit Hours: 3.00 ***
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15-17 Credits

World Language Courses

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

Critical Course

The♦ course is considered critical.

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

Disclaimer

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

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

**Computer Science: Software Engineering, BS**

About the Program
Purdue Computer Science is one of the country's top-ranked programs. Faculty members are shaping the future of information technology through cutting-edge research. Students can take courses that include such topics as graphics and animation, web programming, competitive programming, cryptography and security, networks, software engineering, distributed systems, information systems, artificial intelligence, and bioinformatics.

The flexible curriculum offers students the opportunity to be involved in a dynamic discipline that will continue to grow and to contribute significantly to progress in many other disciplines and ultimately to changes in human society that are nothing short of profound. Students learn communication skills, teamwork, and problem-solving skills and acquire the necessary technical skills for positions in computing throughout society.

Computer Science Website

Computer Science Major Change (CODO) Requirements

Computer Science students begin by taking six core courses that teach them the fundamentals of computer science. Students then take coursework in a concentration, which allows them to deepen their understanding in a specific area.

The Software Engineering track is designed to prepare students to become software engineers who:

- understand and can use the principles and techniques of software engineering essential for the design and development of large software products,
- are familiar with and can effectively use a variety of tools for software analysis, design, testing, and maintenance, and
- can effectively work in teams and communicate orally and in writing.

**Degree Requirements**

**120 Credits Required**

**Curriculum and Degree Requirements for College of Science**

A College of Science degree is conferred when a student successfully completes all requirements in their degree program. Students will complete coursework or approved experiential learning activities to meet the following three degree components:

1. Major
2. Science Core Curriculum
3. Electives

Students may use any of the following options to meet College of Science degree requirements:

- Purdue Coursework
- AP, IB, and CLEP credit. The use of AP and IB coursework varies between College of Science degree plans.
- Transfer Credit. Students should consult the Admissions Transfer Credit Resource page for all available transfer options.

College of Science degree programs vary widely in their approval and use of the proceeding options and thus students are strongly encouraged to work closely with their academic advisors and to regularly consult their MyPurduePlan to view the use of each option in their degree plan.

Most College of Science degree programs contain elective credits students may use to pursue courses that relate to their interests or which support their major area of study. The elective area of a degree plan may also be used to complete minors, second majors and certificates such as the Entrepreneurial Certificate. Any Purdue course may be used to meet the elective area of a student's degree plan.
College of Science Core Requirements

All Students starting Purdue University Fall semester, 2007 or later are required to pursue the 2007 Science Core curriculum.

The College of Science Core Curriculum requires the completion of approved coursework and/or experiential learning opportunities in the following academic areas:

- Composition and Presentation
- Computing
- Cultural Diversity (Language and Culture)
- General Education
- Great Issues in Science
- Laboratory Science
- Mathematics
- Science Technology and Society
- Statistics
- Teambuilding and Collaboration

Earning Core Curricular Requirements through Experience

Students may meet selected core curriculum requirements through approved experiential learning opportunities. Interested students should contact their academic advisor for more information on this option and incorporating experiential learning into their four-year program of study. For more information on earning requirements through experience, please click here.

Computer Science Major Courses (46-50 credits)

Must have a "C" or better in all courses.

Required CS Major Math Courses (7-8 credits)

Must have a "C" or better in all courses.

- MA 26100 - Multivariate Calculus Credits: 4.00 or
- MA 27101 - Honors Multivariate Calculus Credits: 5.00
- MA 26500 - Linear Algebra Credits: 3.00 or
- MA 35100 - Elementary Linear Algebra Credits: 3.00

Required CS Major Core Courses (21 credits)

Must have a "C" or better in all courses.

- CS 18000 - Problem Solving And Object-Oriented Programming Credits: 4.00 ♦ (satisfies Computing and Teambuilding requirements for College of Science core)
- CS 18200 - Foundations Of Computer Science Credits: 3.00 ♦
- CS 24000 - Programming In C Credits: 3.00 ♦
- CS 25000 - Computer Architecture Credits: 4.00
- CS 25100 - Data Structures And Algorithms Credits: 3.00
- CS 25200 - Systems Programming Credits: 4.00

Software Engineering Concentration (18 credits)
Must have a "C" or better in all courses.

Required Courses

Must have a "C" or better in all courses.

- CS 30700 - Software Engineering I Credits: 3.00
- CS 38100 - Introduction To The Analysis Of Algorithms Credits: 3.00
- CS 40700 - Software Engineering Senior Project Credits: 3.00
- CS 40800 - Software Testing Credits: 3.00
- CS 35200 - Compilers: Principles And Practice Credits: 3.00 or
- CS 35400 - Operating Systems Credits: 3.00

Selectives

Must have a "C" or better in all courses. Choose one.

- CS 31100 - Competitive Programming II Credits: 2.00 and
- CS 41100 - Competitive Programming III Credits: 2.00 The combination of CS 31100 and CS 41100 satisfies one selective.
- CS 34800 - Information Systems Credits: 3.00
- CS 35100 - Cloud Computing Credits: 3.00
- CS 35200 - Compilers: Principles And Practice Credits: 3.00
- CS 35300 - Principles Of Concurrency And Parallelism Credits: 3.00
- CS 35400 - Operating Systems Credits: 3.00
- CS 37300 - Data Mining And Machine Learning Credits: 3.00
- CS 42200 - Computer Networks Credits: 3.00
- CS 42600 - Computer Security Credits: 3.00
- CS 44800 - Introduction To Relational Database Systems Credits: 3.00
- CS 45600 - Programming Languages Credits: 3.00
- CS 47300 - Web Information Search And Management Credits: 3.00
- CS 48900 - Embedded Systems Credits: 3.00
- CS 49000 - Topics In Computer Sciences For Undergraduates Credits: 1.00 to 5.00 - Titles: DSO - Distributed Systems; SWS - Software Security
- CS 51000 - Software Engineering Credits: 3.00
- CS 59000 - Topics In Computer Sciences Credits: 1.00 to 5.00 - Title: SRS - Software Reliability and Security

Software Engineering Senior Project

- The Software Engineering Senior Project (CS 40700) must be completed in the student's last or next-to-last semester.
- It must be a team project involving 4-6 people.
- CS 30700 is a pre-requisite for the Software Engineering Senior Project.

Concentration Notes

- No course can be counted both for a required and selective course within the same concentration.
Other Departmental/Program Course Requirements (32-54 credits)

COLLEGE OF SCIENCE CORE REQUIREMENTS

^ - Labeled as a Science Core Selection in the four year plan of study

* - Requirement may be met with a zero credit experiential learning option. See your advisor for more information.

Composition & Presentation

Written Communication (3-4 credits)

Choose one course from the Written Communication list here. (satisfies Written Communication and Information Literacy for core)

Technical Writing And Presentation* (0-6 credits)

Students may elect to take one course (COM 21700), a combination of courses, or experiences to meet the TWTP requirement. The list of approved courses and experiences can be found here. (satisfies OC for core)

Special Note: Students completing both COM 11400 (elective) and COM 21700 (Technical Writing and Presentation requirement) may use both courses to meet degree requirements.

*Students wishing to meet the Technical Presentation and/or Technical Writing requirement through experience are required to complete the Experiential Learning Contract process.

International Students Only: International students whose primary high school/equivalent instruction was not in English may meet this requirement with a course option only.

Computing

Met with required major coursework.

Cultural Diversity (Language & Culture)^* (0-9 credits)

Choose courses from this list to fulfill each Option below (select courses COULD satisfy Humanities for core).

- Language & Culture Option I
- Language & Culture Option II
- Language & Culture Option III

General Education^ (9 credits)

Choose courses from this list to fulfill each Option below (select courses COULD satisfy Behavioral/Social Science for core).

- General Education Option I
- General Education Option II
- General Education Option III
Great Issues In Science (3 credits)

Choose one from this list.

Laboratory Science (6-8 credits)

Choose courses from this list to fulfill each Option below (satisfies Science for core).

- Laboratory Science Option I
- Laboratory Science Option II

Mathematics (8-10 credits)

(satisfies Quantitative Reasoning for core) Must have C or better.

- MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00 or
- MA 16500 - Analytic Geometry And Calculus I Credits: 4.00
- MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00 or
- MA 16600 - Analytic Geometry And Calculus II Credits: 4.00

Science, Technology, and Society^* (1-3 credits)

Choose one from the Science Technology and Society list here (satisfies Science, Technology, Society for core)

Statistics (3 credits)

Must have a C or better in all courses.

- STAT 35000 - Introduction To Statistics Credits: 3.00 ♦ or
- STAT 51100 - Statistical Methods Credits: 3.00 ♦

Team-Building and Collaboration

Met with required major coursework.

Electives (16-42 credits)

CS 19300 - Tools Enrollment in freshman seminar course - CS 19300 - Tools is strongly encouraged to be taken with CS 18000.
CS 19300 is not a degree requirement. CS 29100 - Sophomore Development Seminar and CS 39100 - Junior Resources Seminar are optional but recommended.

Grade Requirements

- All major required courses, all track requirements and track selectives, and their pre-requisites, regardless of department, must be completed with a grade of C or better.

GPA Requirements
• 2.0 Major and Graduation GPA required for Bachelor of Science degree.

College of Science Pass/No Pass Option Policy

• Only electives and courses at the 50000-level general education requirement may be taken under the pass/no pass option.
• The pass/no pass grade mode may be entered for courses which are not required by a student's major(s), minor(s) or science core curriculum.
• Grade mode Passing is equivalent to at a minimum grade of C- had a letter grade been awarded.
• Students may elect to use the pass/no pass option for no more than 20% of the 124/120 credit requirement for graduation and for no more than two courses per academic year (Fall-Summer).
• The pass/no pass option cannot be elected for a course that has already been completed with a letter grade. University Regulation.
• Students may take elective credit while abroad using the P/NP mode. In the case of universities which only post P/NP, the University will apply a calculation process to determine a letter grade.
• Department of Languages and Cultures P/NP policy and Language Placement results. Students must take advanced coursework for a letter grade to receive credit for lower-level language courses.

College of Science Transfer Credit Policy

College of Science degree programs vary widely in their approval and use of non-Purdue originated credit (AP, IB, CLEP, and transfer credit). Students work closely with their academic advisors and degree plan audits to review the use and approval of each non-Purdue credit option.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost's Website.

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

Civics Literacy Proficiency Requirement

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

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

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

Upper Level Requirement

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

Sample 4-Year Plan

Fall 1st Year

• CS 18000 - Problem Solving And Object-Oriented Programming Credits: 4.00 ♦ ***
• MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00 or
• MA 16500 - Analytic Geometry And Calculus I Credits: 4.00
• Science Core Selection - Credit Hours: 3.00-4.00 (English Composition suggested.)
• Elective - Credit Hours: 3.00
• Elective - Credit Hours: 1.00 (CS 19300 suggested.)

15-17 Credits

Spring 1st Year

• CS 18200 - Foundations Of Computer Science Credits: 3.00 ♦ ***
• CS 24000 - Programming In C Credits: 3.00 ♦ ***
• MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00 or
• MA 16600 - Analytic Geometry And Calculus II Credits: 4.00
• Science Core First-Year Composition Selection - Credit Hours: 3.00-4.00
• Electives - Credit Hours: 1.00 - 3.00

14-18 Credits

Fall 2nd Year

• CS 25000 - Computer Architecture Credits: 4.00 ***
• CS 25100 - Data Structures And Algorithms Credits: 3.00 ***
• MA 26100 - Multivariate Calculus Credits: 4.00 or
• MA 27101 - Honors Multivariate Calculus Credits: 5.00
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Elective - Credit Hours: 1.00 (CS 29100 recommended)
15-17 Credits

Spring 2nd Year

- CS 25200 - Systems Programming Credits: 4.00 ***
- MA 26500 - Linear Algebra Credits: 3.00 or
- MA 35100 - Elementary Linear Algebra Credits: 3.00
- Science Core Selection - Credit Hours: 3.00 - 4.00 (COM 21700 suggested.)
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 3.00

16-17 Credits

Fall 3rd Year

- STAT 35000 - Introduction To Statistics Credits: 3.00 ♦ or
- STAT 51100 - Statistical Methods Credits: 3.00 ♦
- Software Engineering Concentration course - Credit Hours: 3.00 ***
- Software Engineering Concentration course - Credit Hours: 3.00 ***
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 1.00 (CS 39100 recommended)
- Elective - Credit Hours: 3.00

16-17 Credits

Spring 3rd Year

- Software Engineering Concentration course - Credit Hours: 3.00 ***
- Software Engineering Concentration course - Credit Hours: 3.00 ***
- Great Issues In Science Selection - Credit Hours: 3.00
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 3.00

15-17 Credits

Fall 4th Year

- Software Engineering Concentration course - Credit Hours: 3.00 ***
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 1.00

16-18 Credits
Spring 4th Year

- Software Engineering Concentration course - Credit Hours: 3.00 ***
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15-17 Credits

World Language Courses

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

Critical Course

The ♦ course is considered critical.

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

Disclaimer

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

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

Computing Infrastructure and Network Engineering Technology, BS

About the Program

The Network Engineering Technology major is part of the Computer and Information Technology program. The Computer and Information Technology program is accredited by the Computing Accreditation Commission of ABET.
The world operates on the back of computers - networks of computers. Whether it is wired or wireless, information must be able to travel the network securely, efficiently and accurately. The network engineering technology major provides the necessary background about hardware and software needs to solve networking problems.

Network Engineering Technology Website

Computer and Information Technology Department Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (60 credits)

A C- GPA is required across all CNIT courses.

Computer and Information Technology Major Courses (48 credits)

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

Computing Infrastructure Selective (6 credits)

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

Information Technology Selectives (6 credits)
Any non-required 30000 level or higher CNIT course or EPICS (EPCS): participation in EPICS requires responsibility for an IT component and CIT faculty approval; CGT courses 30000 level or higher.

At least three credits must be CNIT courses.

CIT Common Core (42 credits)

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

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

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

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

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

- MA 16010 - Applied Calculus I Credits: 3.00

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

- MA 16020 - Applied Calculus II Credits: 3.00

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

- TECH 12000 - Design Thinking In Technology Credits: 3.00

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

Human Cultures: Behavioral/Social Sciences (BSS)

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

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

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

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

Science (SCI)

Three credits required from the Science (SCI) list.

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

Science (SCI) - with Lab Component

Three credits required from the Science (SCI) list.

Verify the course has a lab component when scheduling.

The following courses are typically offered with a lab component:

Accounting Selective - Credit Hours: 3.00

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

Economics Selective - Credit Hours: 3.00

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

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

Communication Selective - Credit Hours: 3.00

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

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

Professional Writing Selective - Credit Hours: 3.00

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

Professional IT Experience Requirement

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

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

Globalization Requirement - Credit Hours: 0.00

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

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

Step 2: Complete CNIT 32000 or CNIT 37100

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

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

Other Departmental /Program Course Requirements (18 credits)

- TLI 11200 - Foundations Of Organizational Leadership Credits: 3.00
- STAT 22500 - Introduction To Probability Models Credits: 3.00
- STAT 30100 - Elementary Statistical Methods Credits: 3.00
- STAT 50100 - Experimental Statistics I Credits: 3.00
- STAT 51100 - Statistical Methods Credits: 3.00
Supplemental List

Click here for Computing Infrastructure and Network Engineering Technology Supplemental Information.

Grade Requirements

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

GPA Requirements

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

Course Requirements and Notes

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

Non-course / Non-credit Requirements

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

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost's Website.

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

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

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

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

Upper Level Requirement

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

Sample 4-Year Plan

Fall 1st Year

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

15 Credits

Spring 1st Year

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

Fall 2nd Year

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

15 Credits

Spring 2nd Year

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

15 Credits

Fall 3rd Year

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

15 Credits

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

**15 Credits**

**Fall 4th Year**

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

**15 Credits**

**Spring 4th Year**

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

**15 Credits**

**Pre-Requisite Information**

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

**Critical Course**
The ♦ course is considered critical.

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

Disclaimer

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

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

Construction Management, BS

About the Program

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

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

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

Accredited by the American Council for Construction Education (ACCE)

Construction Management Website

Construction Management Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (62 credits)

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

Other Departmental/Program Course Requirements (46 credits)

Economics Selective - Credit Hours: 3.00 (satisfies Human Cultures: Humanities for core)
• ECON 21000 - Principles Of Economics Credits: 3.00
• AGEC 21700 - Economics Credits: 3.00
• ECON 25100 - Microeconomics Credits: 3.00
• ECON 25200 - Macroeconomics Credits: 3.00
• MA 15800 - Precalculus - Functions And Trigonometry Credits: 3.00 (satisfies Quantitative Reasoning Selective for core)

Calculus Selective - Credit Hours: 3.00-5.00 (satisfies Quantitative Reasoning Selective for core)
• MA 16010 - Applied Calculus I Credits: 3.00
• MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00
• MA 16500 - Analytic Geometry And Calculus I Credits: 4.00
• MGMT 20000 - Introductory Accounting Credits: 3.00♦ or
• MGMT 21200 - Business Accounting Credits: 3.00
• MGMT 25400 - Legal Foundations Of Business I Credits: 3.00♦ or
• MGMT 45500 - Legal Background For Business I Credits: 3.00
• PHYS 22000 - General Physics Credits: 4.00♦ (satisfies Science for core) or
• PHYS 17200 - Modern Mechanics Credits: 4.00♦ (satisfies Science for core)
• TECH 12000 - Design Thinking In Technology Credits: 3.00♦ (satisfies Information Literacy & Science, Technology and Society for core)

OR
• ENGR 13100 - Transforming Ideas To Innovation I Credits: 2.00 and
• ENGR 13200 - Transforming Ideas To Innovation II Credits: 2.00

Written Communication Selective - Credit Hours: 3.00-4.00
• ENGL 10600 - First Year Composition With Conferences Credits: 4.00
• ENGL 10800 - First Year Composition Credits: 3.00
Intercultural Requirement

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

Electives (12 credits)

- Electives - Credit Hours: 12.00

Optional Concentrations

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

Supplemental List

Click here for Construction Management Supplemental Information.

Grade Requirements

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

GPA Requirements
• 2.0 Graduation GPA required for Bachelor of Science degree.

Construction Work Experience Requirement

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

Pass/No Pass Policy

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

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost’s Website.

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

Civics Literacy Proficiency Requirement

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

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

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

Upper Level Requirement

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

Sample 4-Year Plan

Fall 1st Year

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

14-17 Credits

Spring 1st Year

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

15-17 Credits

Fall 2nd Year

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

16 Credits

Spring 2nd Year

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

15 Credits

Fall 3rd Year

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

15 Credits

Spring 3rd Year

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

17 Credits

Fall 4th Year
- CM 40000 - Construction Capstone I Credits: 6.00
- CM 47500 - Construction Costs Credits: 2.00
- Economics Selective - Credit Hours: 3.00
- ECON 21000 - Principles Of Economics Credits: 3.00
- AGEC 21700 - Economics Credits: 3.00
- ECON 25100 - Microeconomics Credits: 3.00
- ECON 25200 - Macroeconomics Credits: 3.00
- Advanced Communication/English Selective - Credit Hours: 3.00

14 Credits

Spring 4th Year

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

14 Credits

World Language Courses

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

Pre-Requisite Information

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

Critical Course

The ♦ course is considered critical.

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

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.
Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

**Cybersecurity, BS**

**About the Program**

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

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

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

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

Cybersecurity Website

Computer and Information Technology Department Major Change (CODO) Requirements

**Degree Requirements**

**120 Credits Required**

Departmental/Program Major Courses (66 credits)

A C- GPA is required across all CNIT courses

Computer and Information Technology Required Major Courses (57 credits)

**Computer and Information Technology Courses**

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

Cybersecurity Courses
• CNIT 27100 - Cybersecurity Fundamentals II Credits: 3.00
• CNIT 37000 - Introduction To Cryptography Credits: 3.00
• CNIT 37100 - Cyberlaw And Ethics Credits: 3.00
• CNIT 32300 - Basic Cyberforensics Credits: 3.00
• CNIT 42200 - Cyber Criminology Credits: 3.00
• CNIT 45500 - Network Security Credits: 3.00
• CNIT 47000 - Incident Response Management Credits: 3.00
• CNIT 47100 - Vulnerability Analysis And Testing Credits: 3.00

Cybersecurity Selectives (9 credits)
Not all courses will be available every semester.
• CNIT 32200 - Research Methodology And Design Credits: 3.00
• CNIT 41500 - Advanced Coding Security Credits: 3.00
• CNIT 41700 - Critical Infrastructure Security Credits: 3.00
• CNIT 42100 - Mobile Forensics Credits: 3.00
• CNIT 44500 - Advanced Internetwork Routing And Switching Credits: 3.00
• CNIT 45600 - Wireless Security And Management Credits: 3.00
• CNIT 47700 - Blockchain Credits: 3.00
• CNIT 48300 - Applied Machine Learning Credits: 3.00
• CNIT 51100 - Foundations In Homeland Security Studies Credits: 3.00
• CNIT 51200 - Managing Resources And Applications For Homeland Security Credits: 3.00
• CNIT 52300 - File System Forensics Credits: 3.00
• CNIT 52500 - Mobile And Embedded Device Forensics Credits: 3.00
• CNIT 55500 - Advanced Network Security Credits: 3.00
• CNIT 55700 - Advanced Research Topics In Cyber Forensics Credits: 3.00

CIT Common Core (42 credits)

Composition Selective (satisfies Written Communication for core) - Credit Hours: 3.00
• SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity Credits: 3.00 or
• ENGL 10600 - First Year Composition With Conferences Credits: 4.00 or
• ENGL 10800 - First Year Composition Credits: 3.00 or
• HONR 19903 - Interdisciplinary Approaches In Writing Credits: 3.00
Introductory Oral Communication Selective (satisfies Oral Communication for core) - Credit Hours: 3.00

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

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

- MA 16010 - Applied Calculus I Credits: 3.00

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

- MA 16020 - Applied Calculus II Credits: 3.00

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

- TECH 12000 - Design Thinking In Technology Credits: 3.00

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

Human Cultures: Behavioral/Social Sciences (BSS)

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

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

Human Cultures: Humanities (HUM)

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

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

Science(SCI)

Three credits required from the Science(SCI) list.

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

Science (SCI) - with Lab Component

Three credits required from the Science(SCI) list.

Verify the course has a lab component when scheduling.
The following courses are typically offered with a lab component:

**Accounting Selective - Credit Hours: 3.00**

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

**Economics Selective - Credit Hours: 3.00**

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

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

**Communication Selective - Credit Hours: 3.00**

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

**Professional Speaking Selective - Credit Hours: 3.00**

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

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

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

**Professional IT Experience Requirement**

If a student selects the course option, they must enroll in 3 credits total.
Globalization Requirement - Credit Hours: 0.00

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

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

Step 2: Complete CNIT 32000 or CNIT 37100

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

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

Other Departmental /Program Course Requirements (12 credits)

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

Supplemental List

Click here for Cybersecurity Supplemental Information.

Grade Requirements

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

GPA Requirements

- 2.0 Cumulative GPA required for Bachelor of Science degree
- 2.0 Cumulative GPA in all CNIT courses required for Bachelor of Science degree
Course Requirements and Notes

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

Non-course / Non-credit Requirements

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

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost’s Website.

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

Civics Literacy Proficiency Requirement

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

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

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

Upper Level Requirement
• Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (3000+) courses.
• Students should be able to fulfill most, if not all, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

- CNIT 17600 - Information Technology Architectures Credits: 3.00
- CNIT 18200 - System And Organizational Security Credits: 3.00
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity Credits: 3.00 or
- ENGL 10600 - First Year Composition With Conferences Credits: 4.00 or
- ENGL 10800 - First Year Composition Credits: 3.00 or
- HONR 19903 - Interdisciplinary Approaches In Writing Credits: 3.00
- MA 16010 - Applied Calculus I Credits: 3.00
- TECH 12000 - Design Thinking In Technology Credits: 3.00

15 Credits

Spring 1st Year

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

15 Credits

Fall 2nd Year

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

15 Credits
Spring 2nd Year

- CNIT 24200 - System Administration Credits: 3.00
- CNIT 27200 - Database Fundamentals Credits: 3.00
- COM 21000 - Addressing Public Issues Credits: 3.00 or
- COM 21200 - Approaches To The Study Of Interpersonal Communication Credits: 3.00 or
- COM 22400 - Communicating In The Global Workplace Credits: 3.00 or
- COM 25100 - Communication, Information, And Society Credits: 3.00 or
- COM 30300 - Intercultural Communication Credits: 3.00 or
- COM 31400 - Advanced Presentational Speaking Credits: 3.00 or
- COM 31500 - Speech Communication Of Technical Information Credits: 3.00 or
- COM 31800 - Principles Of Persuasion Credits: 3.00 or
- COM 32000 - Small Group Communication Credits: 3.00 or
- COM 32400 - Introduction To Organizational Communication Credits: 3.00 or
- STAT 22500 - Introduction To Probability Models Credits: 3.00 or
- STAT 30100 - Elementary Statistical Methods Credits: 3.00 or
- STAT 50100 - Experimental Statistics I Credits: 3.00 or
- STAT 51100 - Statistical Methods Credits: 3.00 or
- Lab Science Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

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

15 Credits

Spring 3rd Year

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

15 Credits

Fall 4th Year
• CNIT 45500 - Network Security Credits: 3.00
• CNIT 47000 - Incident Response Management Credits: 3.00 Cybersecurity Selective - Credit Hours: 3.00 Cybersecurity Interdisciplinary Selective - Credit Hours: 3.00
• COM 31500 - Speech Communication Of Technical Information Credits: 3.00 or
• COM 32000 - Small Group Communication Credits: 3.00 or
• COM 32500 - Interviewing: Principles And Practice Credits: 3.00 or
• COM 41500 - Discussion Of Technical Problems Credits: 3.00

15 Credits

Spring 4th Year

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

15 Credits

Critical Course

The ♦ course is considered critical.

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

Pre-Requisite Information

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

Disclaimer

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

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

Data Science, BS (CS)
About the Program

Majoring in data science at Purdue will place you at the forefront of an emerging field and prepare you for an exciting career at the intersection of computer science and statistics.

Created jointly by Purdue's Department of Computer Science and Department of Statistics, the data science major will open pathways to careers in virtually every area of society, from healthcare, security and sustainability to education, business and economics.

Curriculum and Degree Requirements for College of Science

A College of Science degree is conferred when a student successfully completes all requirements in their degree program. Students will complete coursework or approved experiential learning activities to meet the following three degree components:

1. Major
2. Science Core Curriculum
3. Electives

Students may use any of the following options to meet College of Science degree requirements:

- Purdue Coursework
- AP, IB, and CLEP credit. The use of AP and IB coursework varies between College of Science degree plans.
- Transfer Credit. Students should consult the Admissions Transfer Credit Resource page for all available transfer options.

College of Science degree programs vary widely in their approval and use of the proceeding options and thus students are strongly encouraged to work closely with their academic advisors and to regularly consult their MyPurduePlan to view the use of each option in their degree plan.

Most College of Science degree programs contain elective credits students may use to pursue courses that relate to their interests or which support their major area of study. The elective area of a degree plan may also be used to complete minors, second majors and certificates such as the Entrepreneurial Certificate. Any Purdue course may be used to meet the elective area of a student's degree plan.

College of Science Core Requirements

All Students starting Purdue University Fall semester, 2007 or later are required to pursue the 2007 Science Core curriculum.

The College of Science Core Curriculum requires the completion of approved coursework and/or experiential learning opportunities in the following academic areas:

- Composition and Presentation
- Computing
- Cultural Diversity (Language and Culture)
- General Education
- Great Issues in Science
- Laboratory Science
- Mathematics
- Science Technology and Society
- Statistics
- Teambuilding and Collaboration

Earning Core Curricular Requirements through Experience
Students may meet selected core curriculum requirements through approved experiential learning opportunities. Interested students should contact their academic advisor for more information on this option and incorporating experiential learning into their four-year program of study. For more information on earning requirements through experience, please click here.

Degree Requirements

120 Credits Required

Data Science Major Courses (47-51 credits)

Must have "C" or better in all courses.

Required Data Science Courses (36-37 credits)

Must have "C" or better in all courses.

- CS 18000 - Problem Solving And Object-Oriented Programming Credits: 4.00 (satisfies Computing, and Team-Building and Collaboration, for College of Science core)
- CS 18200 - Foundations Of Computer Science Credits: 3.00
- CS 25300 - Data Structures And Algorithms For DS/AI Credits: 3.00
- CS 37300 - Data Mining And Machine Learning Credits: 3.00 (must be completed with a grade of C or better prior to the start of the Capstone Experience)
- CS 38003 - Python Programming Credits: 1.00
- CS 44000 - Large Scale Data Analytics Credits: 3.00
- MA 35100 - Elementary Linear Algebra Credits: 3.00
- STAT 35500 - Statistics For Data Science Credits: 3.00 (satisfies Statistics for College of Science core)
- STAT 41600 - Probability Credits: 3.00
- STAT 41700 - Statistical Theory Credits: 3.00
- CS 24200 - Introduction To Data Science Credits: 3.00 or
- STAT 24200 - Introduction To Data Science Credits: 3.00
- MA 26100 - Multivariate Calculus Credits: 4.00 or
- MA 27101 - Honors Multivariate Calculus Credits: 5.00

CS Selectives (6 credits)

Must have "C" or better in all courses. Choose two.

- CS 31100 - Competitive Programming II Credits: 2.00 and
- CS 41100 - Competitive Programming III Credits: 2.00
- CS 31400 - Numerical Methods Credits: 3.00
- CS 35500 - Introduction To Cryptography Credits: 3.00
- CS 43900 - Introduction To Data Visualization Credits: 3.00
- CS 45800 - Introduction To Robotics Credits: 3.00
- CS 47100 - Introduction To Artificial Intelligence Credits: 3.00
- CS 47300 - Web Information Search And Management Credits: 3.00
- CS 47500 - Human-Computer Interaction Credits: 3.00
- CS 30700 - Software Engineering I Credits: 3.00 or
• CS 40800 - Software Testing Credits: 3.00
• CS 34800 - Information Systems Credits: 3.00 or
• CS 44800 - Introduction To Relational Database Systems Credits: 3.00
• CS 38100 - Introduction To The Analysis Of Algorithms Credits: 3.00 or
• CS 48300 - Introduction To The Theory Of Computation Credits: 3.00

Ethics Selective (3 credits)

Must have "C" or better in all courses. Choose one.

• ILS 23000 - Data Science And Society: Ethical Legal Social Issues Credits: 3.00 (satisfies 3.0 credits of GE for College of Science core)
• PHIL 20700 - Ethics For Technology, Engineering, And Design Credits: 3.00 (satisfies Science, Technology & Society for core and 3.0 credits of GE for College of Science core)
• PHIL 20800 - Ethics Of Data Science Credits: 3.00 (must be 3.00 Credit Hour option; satisfies Multidisciplinary Experience and 3.0 credits of GE for College of Science core)

Statistics Selective (3 credits)

Must have "C" or better in all courses. Choose one.

• MA 43200 - Elementary Stochastic Processes Credits: 3.00
• STAT 42000 - Introduction To Time Series Credits: 3.00
• STAT 50600 - Statistical Programming And Data Management Credits: 3.00
• STAT 51200 - Applied Regression Analysis Credits: 3.00
• STAT 51300 - Statistical Quality Control Credits: 3.00
• STAT 51400 - Design Of Experiments Credits: 3.00
• STAT 52200 - Sampling And Survey Techniques Credits: 3.00
• STAT 52500 - Intermediate Statistical Methodology Credits: 3.00

Capstone Experience (3 credits)

Choose one option below.

• STAT 49000 and Data Mine projects/courses do not fulfill the Capstone requirement.
• CS 37300 must be completed with a grade of C or better prior to the start of the Capstone Experience.

Credit Course Options

• CS 49000 - Topics In Computer Science For Undergraduates (Individual Study) - a preapproved unpaid research opportunity in Data Science fulfills the capstone.
• CS 44100 - Data Science Capstone Credits: 3.00

Zero Credit Option

Students choosing a Zero-Credit Capstone Experience Option must complete an additional selective from either the CS Selectives or the Statistics Selectives lists.
• CS 49000 - Topics In Computer Sciences For Undergraduates Credits: 1.00 to 5.00 -- (Individual Study) - a preapproved paid research opportunity in Data Science fulfills the capstone.

Other Departmental/Program Course Requirements (29-52 credits)

COLLEGE OF SCIENCE CORE REQUIREMENTS

^ - Labeled as a Science Core Selection in the four year plan of study

* - Requirement may be met with a zero credit experiential learning option. See your advisor for more information.

Composition & Presentation

Written Communication

Choose one course from the Written Communication list here. (satisfies Written Communication and Information Literacy for core)

Technical Writing And Presentation* (0 or 3 credits)

Students may elect to take one course (COM 21700), a combination of courses, or experiences to meet the TWTP requirement. The list of approved courses and experiences can be found here. (satisfies OC for core)

Special Note: Students completing both COM 11400 (elective) and COM 21700 (Technical Writing and Presentation requirement) may use both courses to meet degree requirements.

*Students wishing to meet the Technical Presentation and/or Technical Writing requirement through experience are required to complete the Experiential Learning Contract process.

International Students Only: International students whose primary high school/equivalent instruction was not in English may meet this requirement with a course option only.

Computing

Met with required major coursework.

Cultural Diversity (Language & Culture)^* (0-9 credits)

Choose courses from this list to fulfill each Option below (select courses COULD satisfy Humanities for core).

• Language & Culture Option I
• Language & Culture Option II
• Language & Culture Option III

General Education^ (6 credits)

Choose courses from this list to fulfill each Option below (select courses COULD satisfy Behavioral/Social Science for core).

• General Education Option I (Met with required major coursework)
• General Education Option II
• General Education Option III

Great Issues In Science (3 credits)

Choose one from this list.

Laboratory Science (6-8 credits)

Choose courses from this list to fulfill each Option below (satisfies Science for core).

• Laboratory Science Option I
• Laboratory Science Option II

Mathematics (8-10 credits)

(satisfies Quantitative Reasoning for core) Must have C or better.

• MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00 or
• MA 16500 - Analytic Geometry And Calculus I Credits: 4.00
• MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00 or
• MA 16600 - Analytic Geometry And Calculus II Credits: 4.00

Science, Technology, & Society^* (3 credits)

Choose one from the Science, Technology, and Society list. (satisfies STS for core)

Statistics

Met with required major coursework.

Team-Building and Collaboration

Met with required major coursework.

Electives (17-44 credits)

Enrollment in freshman seminar course - CS 19300 - Tools is strongly encouraged to be taken with CS 18000. CS 19300 is not a degree requirement. CS 29100 - Sophomore Development Seminar and CS 39100 are optional but recommended.

Grade Requirements

• For this degree, all major required courses, all major electives (selectives), and their pre-requisites, regardless of department, must be completed with a grade of C or better.

GPA Requirements
• 2.0 Major and Graduation GPA required for Bachelor of Science degree.

College of Science Pass/No Pass Option Policy

• Only electives and courses at the 50000-level general education requirement may be taken under the pass/no pass option.
• The pass/no pass grade mode may be entered for courses which are not required by a student's major(s), minor(s) or science core curriculum.
• Grade mode Passing is equivalent to at a minimum grade of C- had a letter grade been awarded.
• Students may elect to use the pass/no pass option for no more than 20% of the 124/120 credit requirement for graduation and for no more than two courses per academic year (Fall-Summer).
• The pass/no pass option cannot be elected for a course that has already been completed with a letter grade. University Regulation.
• Students may take elective credit while abroad using the P/NP mode. In the case of universities which only post P/NP, the University will apply a calculation process to determine a letter grade.
• Department of Languages and Cultures P/NP policy and Language Placement results. Students must take advanced coursework for a letter grade to receive credit for lower-level language courses.

College of Science Transfer Credit Policy

College of Science degree programs vary widely in their approval and use of non-Purdue originated credit (AP, IB, CLEP, and transfer credit). Students work closely with their academic advisors and degree plan audits to review the use and approval of each non-Purdue credit option.

Computer Science Transfer Credit Policy

• Equivalent 10000 and 20000-level Computer Science (CS) transfer credit courses (including credit from regional campuses) may be used to meet degree requirements if those courses were taken prior to admission to the Purdue West Lafayette Data Science, B.S. CS program.
• CS transfer credit at the 30000-40000-level may not be used to meet degree requirements. As exception to this policy is the application of pre-approved Study Abroad coursework.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost's Website.

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

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

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

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

Upper Level Requirement

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

Sample 4-Year Plan

Fall 1st Year

- CS 18000 - Problem Solving And Object-Oriented Programming Credits: 4.00 *
- MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00 or
- MA 16500 - Analytic Geometry And Calculus I Credits: 4.00
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Elective - Credit Hour: 1.00 (CS 19300 strongly recommended)
- Elective - Credit Hour: 1.00
- Electives - Credit Hours: 3.00

16-18 Credits

Spring 1st Year

- CS 18200 - Foundations Of Computer Science Credits: 3.00 *
- CS 38003 - Python Programming Credits: 1.00
- MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00 or
- MA 16600 - Analytic Geometry And Calculus II Credits: 4.00
- Science Core First Year Composition Selection - Credit Hours: 3.00 - 4.00
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Electives - Credit Hours: 1.00

15-18 Credits
Fall 2nd Year

- STAT 35500 - Statistics For Data Science Credits: 3.00
- CS 24200 - Introduction To Data Science Credits: 3.00 or
- STAT 24200 - Introduction To Data Science Credits: 3.00
- MA 26100 - Multivariate Calculus Credits: 4.00 or
- MA 27101 - Honors Multivariate Calculus Credits: 5.00
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 1.00 - 3.00

14-18 Credits

Spring 2nd Year

- CS 25300 - Data Structures And Algorithms For DS/Al Credits: 3.00
- MA 35100 - Elementary Linear Algebra Credits: 3.00
- STAT 41600 - Probability Credits: 3.00
- Ethics Selective - Credit Hours: 3.00
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 1.00 - 2.00

16-18 Credits

Fall 3rd Year

- CS 37300 - Data Mining And Machine Learning Credits: 3.00
- STAT 41700 - Statistical Theory Credits: 3.00
- COM 21700 - Science Writing And Presentation Credits: 3.00
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 3.00

15-16 Credits

Spring 3rd Year

- CS Selective - Credit Hours 3.00
- Statistics Selective - Credit Hours: 3.00
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Science Core Selection - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 3.00

15-17 Credits

Fall 4th Year
• CS 44000 - Large Scale Data Analytics Credits: 3.00
• CS Selective - Credit Hours: 3.00
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Elective - Credit Hours: 3.00
• Elective - Credit Hours: 3.00
• Elective - Credit Hours: 1.00 - 3.00

16-17 Credits

Spring 4th Year

• Capstone Experience/Course - Credit Hours: 0.00 - 3.00
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Science Core Selection - Credit Hours: 3.00 - 4.00
• Elective - Credit Hours: 3.00
• Elective - Credit Hours: 3.00
• Elective - Credit Hours: 1.00

13-18 Credits

Pre-Requisite Information

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

World Language Courses

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

Critical Course

The ♦ course is considered critical.

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

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.
Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

### Electrical Engineering Technology, BS

**About the Program**

The Electrical Engineering Technology major is part of the Electrical Engineering Technology program. The electrical engineering technology program is accredited by the Engineering Technology Accreditation Commission of ABET, https://www.abet.org, under the commission's general criteria and program criteria for Electrical/Electronic(s) Engineering Technology and similarly named programs.

When you study electrical engineering technology, you study the lifeblood of today's technology: electronics and computers. Electronics technology is a part of most everything society relies on, from air conditioning to airplanes, and from trains to televisions. And because technology is constantly evolving, you will be engaged in learning methods that will help you adapt to and embrace new technologies and their uses.

Students in this program can apply to participate in a five-year combined bachelor's/master's degree program in electrical engineering technology.

Electrical Engineering Technology Website

School of Engineering Technology Major Change (CODO) Requirements

**Degree Requirements**

**120 Credits Required**

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

**Required Major Courses (55 credits)**

- **ENGT 18200 - Gateway To Engineering Technology** Credits: 4.00
- **ECET 17700 - Data Acquisition And Systems Control** Credits: 3.00
- **ECET 17900 - Introduction To Digital Systems** Credits: 3.00
- **ECET 22700 - DC And Pulse Electronics** Credits: 3.00
- **ECET 22900 - Concurrent Digital Systems** Credits: 3.00
- **ECET 27000 - Electronics Prototype Development And Construction** Credits: 3.00
- **ECET 27400 - Wireless Communications** Credits: 3.00
- **ECET 27700 - AC And Power Electronics** Credits: 3.00
- **ECET 27900 - Embedded Digital Systems** Credits: 3.00
- **ECET 37600 - Electrical Energy Systems** Credits: 3.00

- ECET Advanced Analysis Selective - Credit Hours: 3.00
- ECET Selectives - Credit Hours: 12.00
- Senior Capstone I Selective - Credit Hours: 3.00
Senior Capstone II Selective - Credit Hours: 3.00

Other Departmental/Program Course Requirements (62 credits)

- TECH 12000 - Design Thinking In Technology Credits: 3.00 (satisfies Information Literacy and Science, Technology & Society for core)
  Intro to C Programming Selective (3 credits)
- CNIT 10500 - Introduction To C Programming Credits: 3.00 (preferred) or
- CS 15900 - C Programming Credits: 3.00
  Applied Calculus I Selective (3 credits) - satisfies Quantitative Reasoning for core
- MA 16010 - Applied Calculus I Credits: 3.00 (preferred) or
- MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00 or
- MA 16500 - Analytic Geometry And Calculus I Credits: 4.00
  Applied Calculus II Selective (4 credits)
- MA 16020 - Applied Calculus II Credits: 3.00 (preferred) or
- MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00 or
- MA 16600 - Analytic Geometry And Calculus II Credits: 4.00
  General Physics I Selective (4 credits) - satisfies Science for core
- PHYS 22000 - General Physics Credits: 4.00 (preferred) or
- PHYS 17200 - Modern Mechanics Credits: 4.00
  General Physics II Selective (3-4 credits) - satisfies Science for core
- PHYS 22100 - General Physics Credits: 4.00 (preferred) or
- PHYS 24100 - Electricity And Optics Credits: 3.00 or
- PHYS 27200 - Electric And Magnetic Interactions Credits: 4.00
  Statistics Selective (3 credits)
- STAT 22500 - Introduction To Probability Models Credits: 3.00 or
- STAT 30100 - Elementary Statistical Methods Credits: 3.00
  English Composition Selective (3-4 credits) - satisfies Written Communication for core
- ENGL 10600 - First Year Composition With Conferences Credits: 4.00 or
- ENGL 10800 - First Year Composition Credits: 3.00 or
- HONR 19903 - Interdisciplinary Approaches In Writing Credits: 3.00 or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity Credits: 3.00
  Written Communication Selective (3 credits)
- ENGL 20500 - Introduction To Creative Writing Credits: 3.00 or
- ENGL 30400 - Advanced Composition Credits: 3.00 or
- ENGL 42000 - Business Writing Credits: 3.00 or
- ENGL 42100 - Technical Writing Credits: 3.00 or
- ENGL 42400 - Writing For High Technology Industries Credits: 3.00
  Freshman Speech Selective (3 credits) - satisfies Oral Communication for core
- COM 11400 - Fundamentals Of Speech Communication Credits: 3.00 or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World Credits: 3.00
  Industrial Economics Selective (3 credits)
- AGEC 33000 - Management Methods For Agricultural Business Credits: 3.00 or
- AGEC 35200 - Quantitative Techniques For Firm Decision Making Credits: 3.00 or
- IET 33400 - Economic Analysis For Technology Systems Credits: 3.00 or
- MGMT 20000 - Introductory Accounting Credits: 3.00 or
- MGMT 21200 - Business Accounting Credits: 3.00
- **Business Selective** - Credit Hours: 3.00
- **General Education Selectives**: 12.00
- **Global/Professional Selective** - Credit Hours: 3.00
- **Human Cultures: Humanities** requirement for core - Credit Hours: 3.00
- **Human Cultures: Behavioral/Social Sciences** requirement for core (can be met either through a General Education or Business Selective) - Credit Hours: 3.00
- **General Education Selective** - Credit Hours: 3.00
- **General Education Selective** - Credit Hours: 3.00
- **Oral Communication Selective** - Credit Hours: 3.00
- **Technical Selectives** (9 additional credit hours of technical courses, including additional ECET courses) - Credit Hours 9.00
- **Intercultural Requirement** - 0.0 Credit Hours
- **Professional Requirement** - 0.0 Credit Hours

**Elective (3 credits)**

- Any non-remedial course.

**Supplemental List**

Click here for Electrical Engineering Technology Supplemental Information.

**Professional Experience**

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response. See supplemental information for approved experiences.

**Grade Requirements**

- Students must earn a "D-" or better in all courses.
- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.

**GPA Requirements**

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

**Course Requirements and Notes**

- Human Cultures Behavioral/Social Science for University Core may be selected to satisfy either the Business Selective or a General Education Selective requirement.
• Senior Capstone Selective I/II and 12 hours of ECET lab-based courses at the 300-level or higher must be taken at Purdue University West Lafayette and/or Polytechnic Statewide.

Non-course / Non-credit Requirements

• Intercultural Requirement (ungraded) must be completed.
• Professional Requirement (ungraded) must be completed.
• Professional and Intercultural requirements will be satisfied by completion of experiences, assessments, and courses that are pre-approved by the ECET Curriculum Subcommittee. Approved courses may fulfill other degree requirements.
• Choose from list: Refer to the Electrical Engineering Technology Supplemental Information for a complete list of selectives and requirements (including ungraded requirements).

Pass/No Pass Policy

• Pass/no pass grading allowed for General Education Selectives and Electives (up to 15 hrs).

Transfer Credit Policy

• Transfer credit from other institutions, including courses taken as dual or concurrent credit in high school, and credit from testing such as Advanced Placement and International Baccalaureate that are an exact match for Purdue courses, may be applied to degree requirements.
• For undistributed credit to be applied to degree requirements, the course or courses will need to be evaluated by the ECET Curriculum Committee for approval. Additional approvals will be required for courses to meet University Core Curriculum requirements. In both cases approval is not automatic.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost's Website.

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

Civics Literacy Proficiency Requirement

The Civics Literacy Proficiency activities are designed to develop civic knowledge of Purdue students in an effort to graduate a more informed citizenry. For more information visit the Civics Literacy Proficiency website.
Students will complete the Proficiency by passing a test of civic knowledge, and completing one of three paths:

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

**Upper Level Requirement**

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

**Additional Information**

- The Electrical Engineering Technology (EETC) major is within the Electrical Engineering Technology program.

**Sample 4-Year Plan**

**Fall 1st Year**

- ENGT 18200 - Gateway To Engineering Technology **Credits:** 4.00
- TECH 12000 - Design Thinking In Technology **Credits:** 3.00

  **Applied Calculus I Selective:**
  - MA 16010 - Applied Calculus I **Credits:** 3.00 (preferred) or
  - MA 16500 - Analytic Geometry And Calculus I **Credits:** 4.00 or
  - MA 16100 - Plane Analytic Geometry And Calculus I **Credits:** 5.00

  **Intro to C Programming Selective:**
  - CNIT 10500 - Introduction To C Programming **Credits:** 3.00 (preferred) or
  - CS 15900 - C Programming **Credits:** 3.00

  **English Composition Selective:**
  - ENGL 10600 - First Year Composition With Conferences **Credits:** 4.00 or
  - ENGL 10800 - First Year Composition **Credits:** 3.00 or
  - SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00

**16 Credits**

**Spring 1st Year**

- ECET 17700 - Data Acquisition And Systems Control **Credits:** 3.00
• ECET 17900 - Introduction To Digital Systems Credits: 3.00

Applied Calculus II Selective:
• MA 16020 - Applied Calculus II Credits: 3.00 (preferred) or
• MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00 or
• MA 16600 - Analytic Geometry And Calculus II Credits: 4.00

General Physics I Selective:
• PHYS 22000 - General Physics Credits: 4.00 (preferred) or
• PHYS 17200 - Modern Mechanics Credits: 4.00

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

16 Credits

Fall 2nd Year

• ECET 22700 - DC And Pulse Electronics Credits: 3.00 ♦
• ECET 22900 - Concurrent Digital Systems Credits: 3.00

General Physics II Selective:
• PHYS 22100 - General Physics Credits: 4.00 (preferred) or
• PHYS 24100 - Electricity And Optics Credits: 3.00
  or
• PHYS 27200 - Electric And Magnetic Interactions Credits: 4.00

Written Communication Selective:
• ENGL 20500 - Introduction To Creative Writing Credits: 3.00 or
• ENGL 30400 - Advanced Composition Credits: 3.00 or
• ENGL 42000 - Business Writing Credits: 3.00 or
• ENGL 42100 - Technical Writing Credits: 3.00 or
• ENGL 42400 - Writing For High Technology Industries Credits: 3.00
• General Education Selective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

• ECET 27000 - Electronics Prototype Development And Construction Credits: 3.00
• ECET 27400 - Wireless Communications Credits: 3.00
• ECET 27700 - AC And Power Electronics Credits: 3.00 ♦
• General Education Selective - Credit Hours: 3.00
• Oral Communication Selective - Credit Hours: 3.00

15 Credits
Fall 3rd Year

- ECET 37600 - Electrical Energy Systems Credits: 3.00
- ECET Advanced Analysis Selective - Credit Hours: 3.00
- ECET Selective - Credit Hours: 3.00
- Global/Professional Selective - Credit Hours: 3.00

Statistics Selective:
- STAT 22500 - Introduction To Probability Models Credits: 3.00 or
- STAT 30100 - Elementary Statistical Methods Credits: 3.00

15 Credits

Spring 3rd Year

- ECET 27900 - Embedded Digital Systems Credits: 3.00
- ECET Selective - Credit Hours: 3.00
- Business Selective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00

Industrial Economics Selective:
- AGEC 33000 - Management Methods For Agricultural Business Credits: 3.00 or
- AGEC 35200 - Quantitative Techniques For Firm Decision Making Credits: 3.00 or
- IET 33400 - Economic Analysis For Technology Systems Credits: 3.00 or
- MGMT 20000 - Introductory Accounting Credits: 3.00 or
- MGMT 21200 - Business Accounting Credits: 3.00

15 Credits

Fall 4th Year

- Senior Capstone I Selective - Credit Hours: 3.00
- ECET Selective - Credit Hours: 3.00
- General Education Selective - Credit Hours: 3.00

- Technical Selective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- Senior Capstone II Selective - Credit Hours: 3.00
- ECET Selective - Credit Hours: 3.00
- General Education Selective - Credit Hours: 3.00
12 Credits

Pre-Requisite Information

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

Critical Course

The ♦ course is considered critical.

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

Disclaimer

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

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

Interior Architecture, BS (Indianapolis Only)

About the Program

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

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (78 credits)

- ARCH 11700 - Construction Drafting And CAD Credits: 3.00
- ARCH 12000 - Introduction To Construction Drafting With Building Information Modeling (BIM) Credits: 3.00
- ARCH 15500 - Residential Construction Credits: 3.00
- ARCH 21000 - History Of Architecture I Credits: 3.00
• ARCH 22200 - Commercial Construction Credits: 3.00
• ARCH 22300 - 3D Architectural Modeling I Credits: 3.00
• ARCH 32300 - 3D Architectural Modeling II Credits: 3.00
• ARCH 32500 - Building Science & Energy Credits: 3.00
• INT 10300 - Introduction To Interior Design Credits: 3.00
• INT 12400 - Space Planning For Interiors Credits: 3.00
• INT 12500 - Color And Lighting Of Interiors Credits: 3.00
• INT 15100 - Textiles For Interiors Credits: 3.00
• INT 20200 - Interior Materials And Applications Credits: 3.00
• INT 20400 - History Of Interiors And Furniture I Credits: 3.00
• INT 22400 - Residential Interior Design Studio Credits: 3.00
• INT 22600 - Commercial Interiors I Credits: 3.00
• INT 30200 - Three-Dimensional Design Credits: 3.00
• INT 30400 - History Of Interiors And Furniture II Credits: 3.00
• INT 32400 - Residential II: Housing Design Credits: 3.00
• INT 32600 - Commercial Interior Design Studio II Credits: 3.00
• INT 42600 - Evidence-Based Design Credits: 3.00
• INT 42800 - Interior Design Capstone Design Project Credits: 3.00
• INT 45200 - Interior Building Systems Credits: 3.00
• INT 45300 - Business Practices Of Interior Design Credits: 3.00
• INT 48000 - Senior Portfolio Credits: 3.00
• INT 49500 - Sustainable Design In Engineering And Technology Credits: 3.00

Other Departmental/Program Course Requirements (42 credits)

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

Supplemental List

Click here for Construction Management & Interior Architecture Supplemental Information.

Grade Requirements
• A grade of "C" or higher must be obtained in all INTR and ARCH courses in order to progress in the program.
• Any course taken at Purdue can be attempted no more than three times (inclusive of W, WF, WN, and IF).

GPA Requirements

• 2.0 Graduation GPA required for Bachelor of Science degree.

Pass/No Pass Policy

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

Transfer Credit Policy

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

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost’s Website.

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

Civics Literacy Proficiency Requirement

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

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

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

Upper Level Requirement
• Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (3000+) courses.
• Students should be able to fulfill most, if not all, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.

Sample 4-Year Plan

Fall 1st Year

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

15 Credits

Spring 1st Year

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

15 Credits

Fall 2nd Year

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

15 Credits

Spring 2nd Year

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

Fall 3rd Year

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

15 Credits

Spring 3rd Year

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

15 Credits

Fall 4th Year

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

15 Credits

Spring 4th Year

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

15 Credits
World Language Courses

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

Pre-Requisite Information

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

Critical Course

The ♦ course is considered critical.

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

Disclaimer

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

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

Mechanical Engineering Technology, BS

About the Program

The Mechanical Engineering Technology major is part of the Mechanical Engineering Technology program. The mechanical engineering technology program is accredited by the Engineering Technology Accreditation Commission of ABET, https://www.abet.org, under the commission's general criteria and program criteria for Mechanical Engineering Technology and similarly named programs.

The careers of mechanical engineering technology graduates take them to a variety of employers (e.g. Rockwell Automation, Fender Guitars, Lockheed Martin, Caterpillar) yet they have many skills in common: problem-solving, leadership and teamwork. The program focuses on the methods, materials, machinery and manpower necessary to effectively operate in a manufacturing environment. You'll learn how to manage people, machines, and production resources to ensure maximum efficiency and safety.
Degree Requirements

120 Credits Required

Departmental/Program Major Courses (120 credits)

Required Major Courses (59 credits)

- MET 10200 - Production Design And Specifications Credits: 3.00
- MET 11100 - Applied Statics Credits: 3.00
- MET 14300 - Materials And Processes I Credits: 3.00
- MET 14400 - Materials And Processes II Credits: 3.00
- MET 21100 - Applied Strength Of Materials Credits: 4.00
- MET 21300 - Dynamics Credits: 3.00
- MET 22000 - Heat And Power Credits: 3.00
- MET 23000 - Fluid Power Credits: 3.00
- MET 24500 - Manufacturing Systems Credits: 3.00
- MET 28400 - Introduction To Industrial Controls Credits: 3.00
- MET 31400 - Applications Of Machine Elements Credits: 3.00
- MET 32000 - Applied Thermodynamics Credits: 3.00
- ENGT 18200 - Gateway To Engineering Technology Credits: 4.00
- ENGT 48000 - Engineering Technology Capstone I Credits: 3.00
- ENGT 48100 - Engineering Technology Capstone II Credits: 3.00
- Professional Requirement - Credit Hours: 0.00
- Intercultural Requirement - Credit Hours: 0.00

MET Selectives (12 credits included within major credits)

- MET Elective or approved Focus Area elective - Credit Hours: 9.00
- Technical Selective or approved Focus Area Selective - Credit Hours: 3.00

Other Departmental/Program Course Requirements (61 credits)

- CHM 11100 - General Chemistry Credits: 3.00
- MA 16010 - Applied Calculus I Credits: 3.00 (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II Credits: 3.00
- PHYS 22000 - General Physics Credits: 4.00 (satisfies Science for core)
- PHYS 22100 - General Physics Credits: 4.00 (satisfies Science for core)
- ECET 22400 - Electronic Systems Credits: 3.00
- STAT 30100 - Elementary Statistical Methods Credits: 3.00
• TECH 12000 - Design Thinking In Technology **Credits:** 3.00 (satisfies Information Literacy and Science, Technology & Society for core)
• IET 33400 - Economic Analysis For Technology Systems **Credits:** 3.00
  **Freshman Composition Selective** (satisfies Written Communication for core)
• ENGL 10600 - First Year Composition With Conferences **Credits:** 4.00 or
• ENGL 10800 - First Year Composition **Credits:** 3.00 or
• SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity **Credits:** 3.00 or
• HONR 19903 - Interdisciplinary Approaches In Writing **Credits:** 3.00
  **Computer Graphics Technology Selective**
• CGT 11000 - Technical Graphics Communications **Credits:** 3.00 or
• ENGT 10500 - Industrial Technology Introduction To Design **Credits:** 3.00 or
• MFET 10301 - Geometric Modeling Applications **Credits:** 3.00 or
• MFET 16300 - Graphical Communication And Spatial Analysis **Credits:** 2.00
  **Freshman Speech Selective** (satisfies Oral Communication for Core)
• COM 11400 - Fundamentals Of Speech Communication **Credits:** 3.00 or
• SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World **Credits:** 3.00
  **Communications Selective**
• COM 31500 - Speech Communication Of Technical Information **Credits:** 3.00 or
• COM 32000 - Small Group Communication **Credits:** 3.00 or
• COM 41500 - Discussion Of Technical Problems **Credits:** 3.00 or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills **Credits:** 3.00
  **Technical Writing Selective**
• ENGL 42000 - Business Writing **Credits:** 3.00 or
• ENGL 42100 - Technical Writing **Credits:** 3.00 or
• ENGL 42400 - Writing For High Technology Industries **Credits:** 3.00
• Economics/Finance Selective - Credit Hours 3.00
• Programming Selective - Credit Hours 3.00
• General Education Human Cultures: Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• General Education Human Cultures: Behavior/Social Sciences (satisfies Human Cultures: Behavioral Sciences for core) - Credit Hours: 3.00
• Global/Professional Selective - Credit Hours: 3.00
• Technical/Management Selective (TECH/MGMT Selective) - Credit Hours: 3.00
  • Course is a Management Selective. If ECET 38001 is the Global/Professional Selective then a Technical Selective is allowed.

**Supplemental List**

Click here for Mechanical Engineering Technology Supplemental Information.

**Optional Concentrations**

• Computer-Aided Design Technology Concentration for Mechanical Engineering Technology
• Fabrication and Welding Technology Concentration for Mechanical Engineering Technology
• Mechanics Concentration for Mechanical Engineering Technology
• Powertrains Concentration for Mechanical Engineering Technology
Professional Requirement

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response. See supplemental information for approved experiences.

Grade Requirements

- Students must earn a "D-" or better in all courses unless otherwise noted.

GPA Requirements

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

Course Requirements and Notes

- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.

Non-course / Non-credit Requirements

- Complete a Professional Requirement.
- Complete an Intercultural Requirement.

Pass/No Pass Policy

- MET does not allow P/NP grading for any classes that are used to meet degree requirements, all degree requirements must be taken for a grade.

Transfer Credit Policy

Transfer credit from other institutions, including courses taken as dual or concurrent credit in high school, and credit from testing such as Advanced Placement and International Baccalaureate that are an exact match for Purdue courses, may be applied to degree requirements.

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

University Requirements

University Core Requirements
For a complete listing of University Core Course Selectives, visit the Provost's Website.

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

Civics Literacy Proficiency Requirement

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

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

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

Upper Level Requirement

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

Sample 4-Year Plan

Fall 1st Year

Freshman Speech Selective
- COM 11400 - Fundamentals Of Speech Communication Credits: 3.00 or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World Credits: 3.00
- ENGT 18200 - Gateway To Engineering Technology Credits: 4.00
- MA 16010 - Applied Calculus I Credits: 3.00 (Preferred) or
- MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00 or
- MA 16500 - Analytic Geometry And Calculus I Credits: 4.00
- MET 14400 - Materials And Processes II Credits: 3.00

Technical Graphics Selective
- MFET 10301 - Geometric Modeling Applications Credits: 3.00 or
- CGT 11000 - Technical Graphics Communications Credits: 3.00 or
• MFET 16300 - Graphical Communication And Spatial Analysis Credits: 2.00 or
• ENGT 10500 - Industrial Technology Introduction To Design Credits: 3.00

15 Credits

Spring 1st Year

Freshman Composition Selective
• ENGL 10600 - First Year Composition With Conferences Credits: 4.00 or
• ENGL 10800 - First Year Composition Credits: 3.00 or
• HONR 19903 - Interdisciplinary Approaches In Writing Credits: 3.00 or
• SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity Credits: 3.00
• MA 16020 - Applied Calculus II Credits: 3.00 (Preferred) or
• MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00 or
• MA 16600 - Analytic Geometry And Calculus II Credits: 4.00
• MET 11100 - Applied Statics Credits: 3.00
• MET 14300 - Materials And Processes I Credits: 3.00
• TECH 12000 - Design Thinking In Technology Credits: 3.00

15 Credits

Fall 2nd Year

• ECET 22400 - Electronic Systems Credits: 3.00
• MET 21100 - Applied Strength Of Materials Credits: 4.00 ●
• PHYS 22000 - General Physics Credits: 4.00 (Preferred) or
• PHYS 17200 - Modern Mechanics Credits: 4.00
• Programming Selective - Credit Hours: 3.00

14 Credits

Spring 2nd Year

• MET 10200 - Production Design And Specifications Credits: 3.00 ●
• MET 21300 - Dynamics Credits: 3.00
• MET 28400 - Introduction To Industrial Controls Credits: 3.00
• PHYS 22100 - General Physics Credits: 4.00 (Preferred) or
• PHYS 24100 - Electricity And Optics Credits: 3.00
• Humanities Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

• CHM 11100 - General Chemistry Credits: 3.00 (Preferred) or
- CHM 11500 - General Chemistry Credits: 4.00
- MET 23000 - Fluid Power Credits: 3.00
- MET 22000 - Heat And Power Credits: 3.00
- MET 24500 - Manufacturing Systems Credits: 3.00
- STAT 30100 - Elementary Statistical Methods Credits: 3.00

15 Credits

Spring 3rd Year

- MET 32000 - Applied Thermodynamics Credits: 3.00
- MET 31400 - Applications Of Machine Elements Credits: 3.00
- Economics/Finance Selective - Credit Hours: 3.00
- Global/Professional Selective - Credit Hours: 3.00
- MET Elective or Approved Focus Area Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

  Technical Writing Selective
  - ENGL 42100 - Technical Writing Credits: 3.00 or
  - ENGL 42400 - Writing For High Technology Industries Credits: 3.00 or
  - ENGL 42000 - Business Writing Credits: 3.00
  - IET 33400 - Economic Analysis For Technology Systems Credits: 3.00
  - ENGT 48000 - Engineering Technology Capstone I Credits: 3.00
  - MET Elective or Approved Focus Area Elective - Credit Hours: 3.00
  - Technical/Management (TECH/MGMT) Selective - Credit Hours: 3.00
    - Course is a Management Selective. If ECET 38001 is the Global/Professional Selective then a Technical Selective is allowed.

15 Credits

Spring 4th Year

  Communications Selective
  - COM 32000 - Small Group Communication Credits: 3.00 or
  - COM 31500 - Speech Communication Of Technical Information Credits: 3.00 or
  - COM 41500 - Discussion Of Technical Problems Credits: 3.00 or
  - EDPS 31500 - Collaborative Leadership: Interpersonal Skills Credits: 3.00
  - ENGT 48100 - Engineering Technology Capstone II Credits: 3.00
  - MET Elective or approved Focus Area elective - Credit Hours: 3.00
  - Technical Selective or approved Focus Area elective - Credit Hours: 3.00
  - Behavioral Social Science Selective - Credit Hours: 3.00

15 Credits
Pre-Requisite Information

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

Critical Course

The ♦ course is considered critical.

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

Disclaimer

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

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

Organizational Leadership, BS

About the Program

With a major in organizational leadership, you will focus on leadership and innovation to develop skills as a leader for national and global technology enterprises. The broad curricula will help you learn how to lead in a variety of scenarios, from innovative technology organizations to global teams and organizational change. You will also take courses to understand how policies and law affect technology innovation and influence global technology and organizational leadership.

The Organizational Leadership major is part of the Organizational Leadership program. The Organizational Leadership program is accredited by the Association of Technology, Management, and Applied Engineering Commission of ATMAE, www.atmae.org.

Organizational Leadership Website

Organizational Leadership Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Department/Program Major Courses (57 credits)
• TLI 10000 - Organizational Leadership Career Orientation Credits: 1.00 *
• TLI 11200 - Foundations Of Organizational Leadership Credits: 3.00 **
• TLI 15200 - Business Principles For Organizational Leadership Credits: 3.00 *
• TLI 20000 - Organization Leadership Career Exploration Credits: 1.00 *
• TLI 21300 - Project Management Credits: 3.00 *
• TLI 30000 - Organizational Leadership Career Transition Credits: 1.00
• TLI 31400 - Leading Innovation In Organizations Credits: 3.00
• TLI 31500 - New Product Development Credits: 3.00 or
• TECH 34000 - Prototyping Technology For People Credits: 3.00
• TLI 45800 - Leadership For Competitive Advantage Credits: 3.00
• OLS 34600 - Critical Thinking And Ethics Credits: 3.00 ♦
• OLS 37500 - Training Methods Credits: 3.00
• OLS 37800 - Labor And Management Relations Credits: 3.00
• OLS 38600 - Leadership For Organizational Change Credits: 3.00 *
• OLS 38800 - Leadership Through Teams Credits: 3.00
• OLS 45000 - Advanced Project Management Credits: 3.00
• OLS 45400 - Gender And Diversity In Management Credits: 3.00
• OLS 47700 - Conflict Management Credits: 3.00
• OLS 48400 - Leadership Strategies For Quality And Productivity Credits: 3.00
• OLS 48700 - Leadership Philosophy Credits: 3.00
• OLS 58300 - Coaching And Mentoring In Organizations Credits: 3.00
• IET 41400 - Financial Analysis For Technology Systems Credits: 3.00 or
• MGMT 30400 - Introduction To Financial Management Credits: 3.00
• Globalization Experience - Credit Hours: 0.00

Other Departmental Courses (54-55 credits)

• ENGL 42100 - Technical Writing Credits: 3.00
• PSY 12000 - Elementary Psychology Credits: 3.00 *(satisfies Human Cultures: Behavioral Social Sciences for core)
• PSY 27200 - Introduction To Industrial-Organizational Psychology Credits: 3.00
• STAT 11300 - Statistics And Society Credits: 3.00
• STAT 30100 - Elementary Statistical Methods Credits: 3.00 *
• TECH 12000 - Design Thinking In Technology Credits: 3.00 *(satisfies both Information Literacy and Science, Technology and Society for core)
• TECH 22000 - Designing Technology For People Credits: 3.00
• TECH 33000 - Technology And The Global Society Credits: 3.00
• SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World Credits: 3.00 or
• COM 11400 - Fundamentals Of Speech Communication Credits: 3.00 *(satisfies Oral Communication for core)
• MA 15800 - Precalculus - Functions And Trigonometry Credits: 3.00 *(satisfies Quantitative Reasoning for core)
• MGMT 20000 - Introductory Accounting Credits: 3.00 or
• MGMT 21200 - Business Accounting Credits: 3.00
• ECON 21000 - Principles Of Economics Credits: 3.00 or
• AGEC 21700 - Economics Credits: 3.00 or
• ECON 25100 - Microeconomics Credits: 3.00 or
• ECON 25200 - Macroeconomics Credits: 3.00
• Written Communication Selective - Credit Hours: 3.00-4.00 *(satisfies Written Communication for core)*
• Humanities Selective - Credit Hours: 3.00 *(satisfies Human Cultures: Humanities for core)*
• Science Foundation Selective - Credit Hours: 3.00 *(satisfies Science for core)*
• Science Foundation Selective - Credit Hours: 3.00 *(satisfies Science for core)*
• Specialization Selective - Credit Hours: 3.00
• Specialization Selective - Credit Hours: 3.00

**Electives (8-9 credits)**

**Supplemental List**

Click here for Organizational Leadership Supplemental Information.

**Grade Requirements**

• * A grade of C- or better must be earned to meet prerequisite requirements.

• ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, I AND IF).

**GPA Requirements**

• 2.0 Graduation GPA required for Bachelor of Science degree.

**Pass/No Pass Policy**

• OLSV does not allow Pass/No Pass grading for any classes that are required to meet degree requirements. Pass/No Pass grading is allowed for Free Electives only.

**University Requirements**

**University Core Requirements**

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

• Human Cultures: Behavioral/Social Science (BSS)
• Human Cultures: Humanities (HUM)
• Information Literacy (IL)
• Oral Communication (OC)
• Quantitative Reasoning (QR)
• Science #1 (SCI)
Civics Literacy Proficiency Requirement

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

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

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

Upper Level Requirement

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

Sample 4-Year Plan

Fall 1st Year

- TLI 10000 - Organizational Leadership Career Orientation Credits: 1.00 *
- TLI 11200 - Foundations Of Organizational Leadership Credits: 3.00 *
- TECH 12000 - Design Thinking In Technology Credits: 3.00
- MA 15800 - Precalculus - Functions And Trigonometry Credits: 3.00
- Written Communication Selective - Credit Hours: 3.00
- Humanities Selective - Credit Hours: 3.00

16-17 Credits

Spring 1st Year

- PSY 12000 - Elementary Psychology Credits: 3.00
- STAT 11300 - Statistics And Society Credits: 3.00
- TLI 15200 - Business Principles For Organizational Leadership Credits: 3.00 *
- COM 11400 - Fundamentals Of Speech Communication Credits: 3.00 or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World Credits: 3.00
- Science Foundation Selective - Credit Hours: 3.00
15 Credits

Fall 2nd Year

- STAT 30100 - Elementary Statistical Methods Credits: 3.00 *
- PSY 27200 - Introduction To Industrial-Organizational Psychology Credits: 3.00
- TECH 22000 - Designing Technology For People Credits: 3.00
- Specialization Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- TLI 20000 - Organization Leadership Career Exploration Credits: 1.00 *
- OLS 38600 - Leadership For Organizational Change Credits: 3.00 *
- TLI 21300 - Project Management Credits: 3.00 *
- AGE 21700 - Economics Credits: 3.00 or
- ECON 21000 - Principles Of Economics Credits: 3.00 or
- ECON 25100 - Microeconomics Credits: 3.00 or
- ECON 25200 - Macroeconomics Credits: 3.00
- MGMT 20000 - Introductory Accounting Credits: 3.00 or
- MGMT 21200 - Business Accounting Credits: 3.00
- Science Foundation Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- TLI 30000 - Organizational Leadership Career Transition Credits: 1.00
- OLS 37500 - Training Methods Credits: 3.00
- TECH 33000 - Technology And The Global Society Credits: 3.00
- TLI 31400 - Leading Innovation In Organizations Credits: 3.00
- TLI 31500 - New Product Development Credits: 3.00 or
- TECH 34000 - Prototyping Technology For People Credits: 3.00
- Specialization Selective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

- OLS 34600 - Critical Thinking And Ethics Credits: 3.00
- OLS 37800 - Labor And Management Relations Credits: 3.00
- OLS 38800 - Leadership Through Teams Credits: 3.00
- TLI 45800 - Leadership For Competitive Advantage Credits: 3.00
14-15 Credits

Fall 4th Year

- OLS 45400 - Gender And Diversity In Management Credits: 3.00
- OLS 47700 - Conflict Management Credits: 3.00
- OLS 48700 - Leadership Philosophy Credits: 3.00
- OLS 58300 - Coaching And Mentoring In Organizations Credits: 3.00
- IET 41400 - Financial Analysis For Technology Systems Credits: 3.00 or
- MGMT 30400 - Introduction To Financial Management Credits: 3.00

15 Credits

Spring 4th Year

- OLS 48400 - Leadership Strategies For Quality And Productivity Credits: 3.00
- OLS 45000 - Advanced Project Management Credits: 3.00
- ENGL 42100 - Technical Writing Credits: 3.00
- Elective - Credit Hours: 3.00

12 Credits

Pre-Requisite Information

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

Critical Course

The ♦ course is considered critical.

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

Disclaimer

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

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

About the Program

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

Themed Entertainment Design at Purdue University in Indianapolis

Themed Entertainment Design Major Change (CODO) Requirements

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (76 credits)

Required Major Courses (49 credits)

- CGT 11200 - Sketching For Visualization And Communication Credits: 3.00
- CGT 11600 - Geometric Modeling For Visualization And Communication Credits: 3.00
- CGT 11700 - Illustrating For Visualization And Communication Credits: 3.00
- CGT 11800 - Fundamentals Of Imaging Technology Credits: 3.00
- CGT 12300 - Animation Foundations Credits: 3.00
- CGT 14700 - Visual Effects Introduction Credits: 3.00
- CGT 20400 - Introduction To Themed Attraction Design Credits: 3.00
- CGT 20500 - Portfolio Review Credits: 0.00
- CGT 25001 - Computer Graphics Professional Practices I Credits: 1.00
- CGT 25100 - Principles Of Creative Design Credits: 3.00
- CGT 30505 - Portfolio II Credits: 0.00
- CGT 31300 - Digital Painting I For Computer Graphics Credits: 3.00
- CGT 31700 - Planning And Communicating Themed Attraction Design Credits: 3.00
- CGT 32800 - Business Of Themed Entertainment Credits: 3.00
- CGT 36700 - Previsualization In Themed Entertainment Credits: 3.00
- CGT 40500 - Senior Portfolio Review Credits: 0.00
- CGT 40700 - Current And Future Trends In Themed Attraction Design Credits: 3.00
- CGT 44200 - Production For Computer Animation Credits: 3.00
- CGT 45001 - Computer Graphics Professional Practices II Credits: 1.00
- CGT Globalization Selective - Credit Hours: 3.00

CGT Entertainment Selectives (15 credits)

- CGT Entertainment Selectives - Credit Hours: 15.00
Technical Selectives (12 credits)

- Technical Selectives - Credit Hours: 12.00

Other Departmental/Program Course Requirements (41 credits)

- MA 15800 - Precalculus - Functions And Trigonometry Credits: 3.00 (satisfies Quantitative Reasoning for core)
- MA 16010 - Applied Calculus I Credits: 3.00 (satisfies Quantitative Reasoning for core)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity Credits: 3.00 (satisfies Written Communication and Information Literacy for core)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World Credits: 3.00 (satisfies Oral Communication for core)
- PHYS 22000 - General Physics Credits: 4.00 (satisfies Science #1 for core)
- Advanced English Selective - Credit Hours: 3.00
- Human Cultures: Humanities Selective for core - Credit Hours: 3.00
- Human Cultures: Behavioral/Social Science Selective for core - Credit Hours: 3.00
- Humanities Selective - Credit Hours: 3.00
- Humanities Selective - Credit Hours: 3.00
- Science, Tech, & Society Selective for core - Credit Hours: 3.00
- Science #2 Selective for core - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00

Elective (4 credits)

- Elective - Credit Hours: 4.00

Supplemental Information

Click here for Animation And Visual Effects & Themed Entertainment Design Supplemental Information

GPA Requirements

- 2.00 Graduation GPA required for Bachelor of Science degree.

Non-course / Non-credit Requirements

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

Transfer Credit Policy

- CGT adheres to the admissions office Transfer Credit Course Equivalency Guide.
Pass/No Pass Policy

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

Grade Requirements

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

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost's Website.

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

Civics Literacy Proficiency Requirement

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

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

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

Upper Level Requirement

- Resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree. These courses are expected to be at least junior-level (30000+) courses.
- Students should be able to fulfill most, if not all, of these credits within their major requirements; there should be a clear pathway for students to complete any credits not completed within their major.
Sample 4-Year Plan

Fall 1st Year

- CGT 11200 - Sketching For Visualization And Communication Credits: 3.00
- CGT 11700 - Illustrating For Visualization And Communication Credits: 3.00
- CGT 11800 - Fundamentals Of Imaging Technology Credits: 3.00
- CGT 12300 - Animation Foundations Credits: 3.00
- MA 15800 - Precalculus - Functions And Trigonometry Credits: 3.00

15 Credits

Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication Credits: 3.00
- CGT 20400 - Introduction To Themed Attraction Design Credits: 3.00
- CGT 25100 - Principles Of Creative Design Credits: 3.00
- MA 16010 - Applied Calculus I Credits: 3.00
- CGT Globalization Selective - Credit Hours: 3.00

15 Credits

Fall 2nd Year

- CGT 14700 - Visual Effects Introduction Credits: 3.00
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity Credits: 3.00
- CGT Entertainment Selective - Credit Hours: 3.00
- Human Cultures: Humanities Selective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- CGT 20500 - Portfolio Review Credits: 0.00
- CGT 31700 - Planning And Communicating Themed Attraction Design Credits: 3.00
- CGT 32800 - Business Of Themed Entertainment Credits: 3.00
- CGT 25001 - Computer Graphics Professional Practices I Credits: 1.00
- PHYS 22000 - General Physics Credits: 4.00
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World Credits: 3.00
- Advanced English Selective - Credit Hours: 3.00

17 Credits
Fall 3rd Year

- CGT 44200 - Production For Computer Animation Credits: 3.00
- CGT 36700 - Previsualization In Themed Entertainment Credits: 3.00
- CGT Entertainment Selective - Credit Hours: 3.00
- Science #2 Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- CGT 30505 - Portfolio II Credits: 0.00
- CGT 31300 - Digital Painting I For Computer Graphics Credits: 3.00
- CGT Entertainment Selective - Credit Hours: 3.00
- CGT Entertainment Selective - Credit Hours: 3.00
- Human Cultures: Behavior/Social Sciences (BSS) Selective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- CGT 40700 - Current And Future Trends In Themed Attraction Design Credits: 3.00
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I Credits: 2.00
- CGT Entertainment Selective - Credit Hours: 3.00
- Science, Technology & Society (STS) Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

14 Credits

Spring 4th Year

- CGT 45001 - Computer Graphics Professional Practices II Credits: 1.00
- CGT 40500 - Senior Portfolio Review Credits: 0.00
- Humanities Selective - Credit Hours: 3.00
- Humanities Selective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00
- Elective - Credit Hours: 4.00

14 Credits

Pre-Requisite Information

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

The ♦ course is considered critical.

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

Disclaimer

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

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

Bachelor of Science in Biomedical Engineering

Biomedical Engineering, BSBME

About the Program

The Biomedical Engineering program is accredited by the Engineering Accreditation Commission of ABET.

Students in Biomedical Engineering learn to apply tools from engineering and life sciences to design solutions for challenges in human biology, medicine, and healthcare delivery.

Biomedical Engineering students complete coursework in math, physics, chemistry and the life science in combination with engineering principles and design courses to understand the physical and chemical properties of human tissues, computational modeling and analyses, molecular transport, biomechanics, human physiology, and biomedical systems and instrumentation. Essential experiential and practical training includes small group problem-based learning, study abroad programs, internships with a broad range of medically related companies, research in faculty labs, and engineering design projects to solve real medical needs.

The home for the Weldon School of Biomedical Engineering is a state-of-the-art building specifically designed to enhance both teaching and research. The $25-million, 91,000-square-foot facility accommodates the continued growth of biomedical engineering in the 21st century.

Programs of focus and faculty expertise include imaging, instrumentation, engineered biomaterials and biomechanics, and quantitative cellular and systems engineering.

For more information, please refer to the Purdue BME website.

Biomedical Engineering Major Change (CODO) Requirements

Degree Requirements
130 Credits Required

Biomedical Engineering Major Requirements (67-71 credits)

All major required courses below are included in the calculation of the BME major GPA requirement: 2.0

Biomedical Engineering Major Required Courses (43 credits)

- BME 21400 - Introduction To Biomechanical Analysis Credits: 3.00 ♦
- BME 21401 - Biomechanical Analysis Laboratory Credits: 1.00 ♦
- BME 22000 - Biomolecules: Structure, Function, And Engineering Applications Credits: 3.00
- BME 23100 - Bioinstrumentation and Circuit Theory Credits: 3.00
- BME 23101 - Bioinstrumentation and Circuit Theory Lab Credits: 1.00 ♦
- BME 25600 - Physiological Modeling In Human Health Credits: 3.00
- BME 28000 - Frontiers In Biomedical Engineering Credits: 1.00 ♦
- BME 32000 - Introduction To Biomaterials Science And Engineering Credits: 3.00
- BME 32001 - Biomolecules And Biomaterials Laboratory Credits: 1.00 ♦
- BME 38000 - Professionalization In Biomedical Engineering Credits: 2.00 ♦
- BME 38900 - Junior Experimental Design Laboratory Credits: 2.00 ♦
- BME 39000 - Professional Development And Design In Biomedical Engineering Credits: 2.00 ♦
- BME 48901 - Senior Design Project Lab Credits: 3.00 ♦ and
- BME 49000 - Professional Elements Of Design Credits: 1.00 ♦
  OR
- BME 49101 - Biomedical Engineering Design Credits: 2.00 ♦ and
- BME 49200 - Biomedical Engineering Design II Credits: 3.00 ♦
- BME 20200 - Thermodynamics In Biomedical Engineering Credits: 3.00 or
- ME 20000 - Thermodynamics I Credits: 3.00
  BME Depth Area Selectives - Credit Hours: 9.00 (see supplemental Information)
  - Primary Depth Area I - Credit Hours: 3.00
  - Primary Depth Area II - Credit Hours: 3.00
  - Secondary Depth Area - Credit Hours: 3.00

Other Major Required Courses (24-28 credits)

- BIOL 23000 - Biology Of The Living Cell Credits: 3.00
- CHM 11600 - General Chemistry Credits: 4.00 or
- CHM 13600 - General Chemistry Honors Credits: 4.00
- CS 15900 - C Programming Credits: 3.00 or
- CS 17600 - Data Engineering In Python Credits: 3.00 or
- CS 18000 - Problem Solving And Object-Oriented Programming Credits: 4.00
- MA 26100 - Multivariate Calculus Credits: 4.00 ♦ or
- MA 27101 - Honors Multivariate Calculus Credits: 5.00 ♦
- MA 26200 - Linear Algebra And Differential Equations Credits: 4.00 ♦
  OR
- MA 26500 - Linear Algebra Credits: 3.00 ♦ and
- MA 26600 - Ordinary Differential Equations Credits: 3.00 ♦
- PHYS 24100 - Electricity And Optics Credits: 3.00 ♦ or
- PHYS 27200 - Electric And Magnetic Interactions Credits: 4.00 ♦
- STAT 35000 - Introduction To Statistics Credits: 3.00 or
- STAT 51100 - Statistical Methods Credits: 3.00 or
- BME 32200 - Probability, Statistics, And Applications In Biomedical Engineering Credits: 3.00

Engineering First-Year Requirements for BME Students

- BME students are highly encouraged to take CHM 11600 or CHM 13600 as their Science Selective in First Year Engineering.
- Both CHM 11600 or CS 15900 (or their respective equivalents) are required for BME students.

Engineering Requirements for First Year (29-39 credits)

All courses in this area must have a C- or higher

Requirement #1 - Intro to Engineering I (2-4 credits)
- ENGR 13100 - Transforming Ideas To Innovation I Credits: 2.00
OR
- ENGR 16100 - Honors Introduction To Innovation And The Physical Science Of Engineering Design I Credits: 4.00
OR
- EPCS 11100 - First Year Participation In EPICS I Credits: 1.00 and
- EPCS 12100 - First Year Participation In EPICS II Credits: 1.00
OR
- VIP 17911 - First Year Participation In Vertically Integrated Projects (VIP) I Credits: 1.00 and
- VIP 17912 - First Year Participation In Vertically Integrated Projects (VIP) II Credits: 1.00
OR
- ENGR 13000 - Transforming Ideas To Innovation, EPICS/VIP

Requirement #2 - Intro to Engineering II (2-4 credits)
- ENGR 13000 - Transforming Ideas To Innovation, EPICS/VIP Credits: 4.00 or
- ENGR 13200 - Transforming Ideas To Innovation II Credits: 2.00 or
- ENGR 13300 - Transforming Ideas To Innovation, EPICS/VIP Credits: 2.00 or
- ENGR 16200 - Honors Introduction To Innovation And The Physical Science Of Engineering Design II Credits: 4.00

Requirement #3 - Calculus I (4-5 credits) - satisfies Quantitative Resoning for core
- MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00 or
- MA 16500 - Analytic Geometry And Calculus I Credits: 4.00

Requirement #4: Calculus II (4-5 credits)
- MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00 or
- MA 16600 - Analytic Geometry And Calculus II Credits: 4.00

Requirement #5: Chemistry (4-6 credits) - satisfies Science #1 for core
- CHM 11500 - General Chemistry Credits: 4.00 or
- CHM 11510 - General Chemistry I Credits: 3.00
AND
- CHM 11520 - General Chemistry I - Laboratory Credits: 1.00 or
• CHM 11530 - General Chemistry I - Virtual Laboratory Credits: 1.00
  OR
• CHM 11100 - General Chemistry Credits: 3.00 and
• CHM 11200 - General Chemistry Credits: 3.00

Requirement #6: Physics (4 credits) - satisfies Science #2 for core
• PHYS 17200 - Modern Mechanics Credits: 4.00
  OR
  ENGR 16100 - Honors Introduction To Innovation And The Physical Science Of Engineering Design I and
  ENGR 16200 - Honors Introduction To Innovation And The Physical Science Of Engineering Design II

Requirement #7: First-Year Engineering Selective (3-4 credits)
• CHM 11600 - General Chemistry Credits: 4.00 or
• CS 15900 - C Programming Credits: 3.00 or
• BIOL 11000 - Fundamentals Of Biology I Credits: 4.00 or
• BIOL 11100 - Fundamentals Of Biology II Credits: 4.00

Requirement #8: Written and Oral Communication (6-7 credits) - could satisfy Written Communication, Information Literacy or Oral Communication for core
• Written Communication - Credit Hours: 3.00-4.00 (satisfies Written Communication for core)
• Oral Communication - Credit Hours: 3.00 (satisfies Oral Communication for core)
  OR
• SCLA 11000 - Language And Cultural Exchange I: Self In Context Credits: 3.00
• SCLA 11100 - Language And Cultural Exchange II: Texts And Contexts Credits: 3.00

Other Departmental Course Requirements (45 credits)

Engineering First Year Requirements - CHM 11600 or CS 15900 should be chosen.

Life Science Selectives - Credit Hours: 6.00
• Life Science Selective I - Credit Hours: 3.00
• Life Science Selective II - Credit Hours: 3.00

Technical Engineering Selectives - Credit Hours: 15.00
• Technical Engineering Selective I - Credit Hours: 3.00
• Technical Engineering Selective II - Credit Hours: 3.00
• Technical Engineering Selective III (Quantitative Breadth) - Credit Hours: 3.00
• Technical Engineering Selective IV (Data Science focused Quantitative Breadth) - Credit Hours: 3.00
• Technical Engineering Selective V (BME 40000-49999) - Credit Hours: 3.00 (except BME 49800)

Ethics/Policy Healthcare Selective - Credit Hours: 3.00

General Education Selectives - Credit Hours: 21.00
• General Education I - Credit Hours: 3.00
• General Education II - Credit Hours: 3.00
• General Education III - Credit Hours: 3.00
• General Education IV - Credit Hours: 3.00
• General Education V - Credit Hours: 3.00 (30000+ level/Upper level)
• General Education VI - Credit Hours: 3.00 (30000+ level/Upper level)
• General Education VII - Credit Hours: 3.00
(General Education for Written & Oral Communication may be met in First-Year Engineering - Credit Hours: 6.00-7.00)

UCC requirements may be met in this area.

*See Supplemental Information for requirements.*

**Supplemental List**

Biomedical Engineering Supplemental Information

**GPA Requirements**

- A minimum Graduation Index and BME Major GPA of at least 2.0 is required to qualify for graduation with a BSBME.

**Pass/No Pass Policy**

BME does not allow students to use courses with Pass/No Pass grades.

**Transfer Credit Policy**

Transfer credit including pass/no pass and undistributed credit can be used for the appropriate category at departmental discretion.

**University Requirements**

**University Core Requirements**

For a complete listing of University Core Course Selectives, visit the Provost’s Website.

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

**Civics Literacy Proficiency Requirement**

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

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

Upper Level Requirement

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

Sample First-Year Engineering Plan of Study

Fall 1st Year

• Requirement #1 - Intro to Engineering - Credit Hours: 2.00-4.00
• Requirement #3 - Calculus I - Credit Hours: 4.00-5.00
• Requirement #5 - Chemistry - Credit Hours: 4.00-6.00
• Requirement #8 - Written or Oral Communication - Credit Hours: 3.00-4.00

13-19 Credits

Spring 1st Year

• Requirement #2 - Intro to Engineering II - Credit Hours: 2.00-4.00
• Requirement #4 - Calculus II - Credit Hours: 4.00-5.00
• Requirement #6 - Physics - Credit Hours: 4.00
• Requirement #7 - First-Year Engineering Selective - Credit Hours: 3.00-4.00
• Requirement #8 - Written or Oral Communication - Credit Hours: 3.00-4.00

16-21 Credits

Sample Biomedical Engineering Plan of Study

Fall 2nd Year

• BIOL 23000 - Biology Of The Living Cell Credits: 3.00
• BME 21400 - Introduction To Biomechanical Analysis Credits: 3.00
• BME 21401 - Biomechanical Analysis Laboratory Credits: 1.00
• BME 28000 - Frontiers In Biomedical Engineering Credits: 1.00
• CS 15900 - C Programming Credits: 3.00 or
• CS 17600 - Data Engineering In Python Credits: 3.00 or
- CS 18000 - Problem Solving And Object-Oriented Programming **Credits**: 4.00
- MA 26100 - Multivariate Calculus **Credits**: 4.00 or
- MA 27101 - Honors Multivariate Calculus **Credits**: 5.00
- PHYS 24100 - Electricity And Optics **Credits**: 3.00 or
- PHYS 27200 - Electric And Magnetic Interactions **Credits**: 4.00

18-21 Credits

Spring 2nd Year

- BME 22000 - Biomolecules: Structure, Function, And Engineering Applications **Credits**: 3.00
- BME 23100 - Bioinstrumentation and Circuit Theory **Credits**: 3.00
- BME 23101 - Bioinstrumentation and Circuit Theory Lab **Credits**: 1.00
- BME 25600 - Physiological Modeling In Human Health **Credits**: 3.00
- BME 20200 - Thermodynamics In Biomedical Engineering **Credits**: 3.00 or
- ME 20000 - Thermodynamics I **Credits**: 3.00
- MA 26200 - Linear Algebra And Differential Equations **Credits**: 4.00
  OR
- MA 26500 - Linear Algebra **Credits**: 3.00 and
- MA 26600 - Ordinary Differential Equations **Credits**: 3.00

17-19 Credits

Fall 3rd Year

- BME 32000 - Introduction To Biomaterials Science And Engineering **Credits**: 3.00
- BME 32001 - Biomolecules And Biomaterials Laboratory **Credits**: 1.00
- BME 38000 - Professionalization In Biomedical Engineering **Credits**: 2.00
- STAT 35000 - Introduction To Statistics **Credits**: 3.00 or
- STAT 51100 - Statistical Methods **Credits**: 3.00 or
- BME 32200 - Probability, Statistics, And Applications In Biomedical Engineering **Credits**: 3.00
- Primary Depth Area I - Credit Hours: 3.00
- Secondary Depth Area - Credit Hours: 3.00
- General Education Selective I - Credit Hours: 3.00

18 Credits

Spring 3rd Year

- BME 38900 - Junior Experimental Design Laboratory **Credits**: 2.00
- BME 39000 - Professional Development And Design In Biomedical Engineering **Credits**: 2.00
- Primary Depth Area II - Credit Hours: 3.00
- Ethics and Policy Healthcare Selective - Credit Hours: 3.00
- Life Science Selective – Credit Hours: 3.00
• Technical Engineering Selective (Quantitative Breadth) - Credit Hours: 3.00

16 Credits

Fall 4th Year

• BME 48901 - Senior Design Project Lab Credits: 3.00
• BME 49000 - Professional Elements Of Design Credits: 1.00
• BME 49101 - Biomedical Engineering Design Credits: 2.00
• Technical Engineering Selective - Credit Hours: 3.00
• Technical Engineering Selective - Credit Hours: 3.00
• General Education Selective - Credit Hours: 3.00
• General Education Selective - Credit Hours: 3.00

16 Credits

Spring 4th Year

• BME 49200 - Biomedical Engineering Design II Credits: 3.00
• Technical Engineering Selective (Quantitative Breadth/Data Science) - Credit Hours: 3.00
• Technical Engineering Selective - Credit Hours: 3.00
• Life Science Selective II - Credit Hours: 3.00
• General Education Selective - Credit Hours: 3.00
• General Education Selective - Credit Hours: 3.00

15 Credits

Pre-Requisite Information

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

Critical Course

The ♦ course is considered critical.

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

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. Consultation with an advisor may result in an altered plan customized for an individual student. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.
Comparative information about Purdue University and other U.S. educational institutions is also available through the College Navigator tool, provided by the National Center for Education Statistics, and through the U.S. Department of Education College Scorecard.

**Bachelor of Science in Computer Engineering**

**Computer Engineering, BSCMPE**

**About the Program**

The Computer Engineering program is accredited by the Engineering Accreditation Commission of ABET.

Electrical and Computer engineering encompasses all areas of research, development, design, and operation of electrical and electronic systems and their components, including software. Emphasis in such varied areas as bioengineering, circuit theory, communication sciences, computers and automata, control systems, electromagnetic fields, energy sources and systems, and materials and electronic devices is available. Two degree programs are offered by the School: Bachelor of Science in Electrical Engineering (BSEE) and Bachelor of Science in Computer Engineering (BSCmpE).

Engineers in both fields must have a strong background in mathematics and physics, a broad base in the humanities, and a command of the English language in order to provide the scope of knowledge essential for optimum professional growth. The curriculum offered by the School of Electrical and Computer Engineering meets these objectives.

Graduates from the School of Electrical and Computer Engineering are sought after by all major industries. Electrical engineers hold many unusual and challenging positions in the aerospace, chemical, nuclear, automotive, medical, metallurgical, textile, railway, petroleum, and other basically non-electrical industries, as well as in computers, electronics, communications, power, and other electrical industries. Their professional roles span industrial activity, research, development, design, production, marketing, operation, field testing, and maintenance of many types of equipment for government, industry, farm, and home.

Two degree programs are offered by the school:

- **Electrical Engineering** encompasses the development, design, research, and operation of electrical and electronic systems and components. Disciplines include VLSI and circuit design, communication and signal processing, computer engineering, automatic control, fields and optics, energy sources and systems, and microelectronics and nanotechnology.

- **Computer Engineering** is a specialization within electrical and computer engineering offering an in-depth education in both hardware and software aspects of modern computer systems.

- **Electrical and Computer Engineering** provides students with a versatile education that will prove valuable looking toward a professional future. Along with problem-solving and design skills, students develop a strong foundation in math, science, and core electrical/computer engineering fundamentals. This skillset prepares them for research and development positions in industry, management, sales, teaching, medical school, and law school.

- **At Birck Nanotechnology Center**, engineers and scientists conduct research in emerging fields where new materials and tiny structures are built atom by atom or molecule by molecule.

Electrical and Computer Engineering website

Electrical and Computer Engineering Major Change (CODO) Requirements

**Degree Requirements**
125 Credits Required

Computer Engineering Required Major Courses (53 credits)

An overall 2.00 cumulative GPA or better for Required Major courses. (Some courses have minimum grade requirements for prerequisites.)

Required Core Courses (30 credits)

- ECE 20001 - Electrical Engineering Fundamentals I Credits: 3.00 (minimum grade of C)
- ECE 20007 - Electrical Engineering Fundamentals I Lab Credits: 1.00
- ECE 20002 - Electrical Engineering Fundamentals II Credits: 3.00 (minimum grade of C)
- ECE 26400 - Advanced C Programming Credits: 3.00 (minimum grade of C)
- ECE 20875 - Python For Data Science Credits: 3.00
- ECE 27000 - Introduction To Digital System Design Credits: 4.00 (minimum grade of C)
- ECE 30100 - Signals And Systems Credits: 3.00
- ECE 30200 - Probabilistic Methods In Electrical And Computer Engineering Credits: 3.00
- ECE 36200 - Microprocessor Systems And Interfacing Credits: 4.00
- ECE 36800 - Data Structures Credits: 3.00

Required Seminars (3 credits)

- ECE 29401 - Electrical And Computer Engineering Sophomore Seminar Credits: 1.00
- ECE 39401 - Professional Communications And Diversity Credits: 1.00
- ECE 49401 - Professional Communication Capstone Credits: 1.00

Senior Design Requirement - Choose One Option (4 credits)

The CmpE Core Requirements listed above must be completed before taking Senior Design.

Option 1:

- ECE 47700 - Digital Systems Senior Project Credits: 4.00

Option 2:

- ECE 49022 - Electrical Engineering Senior Design Projects Credits: 4.00

Option 3:

Must be taken in each of 2 consecutive semesters.

- EPCS 41200 - Senior Design Participation In EPICS Credits: 2.00

Option 4:
Must be taken in 2 consecutive semesters.

- VIP 47921 - Senior Design Participation In Vertically Integrated Projects (VIP) I Credits: 2.00
- VIP 47922 - Senior Design Participation In Vertically Integrated Projects (VIP) II Credits: 2.00

Computer Engineering Selectives (16 credits)

Select from the following list so that total credits for Required Major Courses is at least 53.

- ECE 30834 - Fundamentals Of Computer Graphics Credits: 3.00
- ECE 33700 - ASIC Design Laboratory Credits: 2.00
- ECE 40400 - Introduction To Computer Security Credits: 3.00
- ECE 43700 - Computer Design And Prototyping Credits: 4.00
- ECE 46100 - Software Engineering Credits: 3.00
- ECE 46900 - Operating Systems Engineering Credits: 4.00
- ECE 46300 - Introduction To Computer Communication Networks Credits: 3.00 or
- ECE 50863 - Computer Network Systems Credits: 3.00
- ECE 46800 - Introduction To Compilers And Translation Engineering Credits: 4.00 or
- ECE 57300 - Compilers And Translator Writing Systems Credits: 3.00
- ECE 40862 - Software For Embedded Systems Credits: 3.00 or
- ECE 56800 - Embedded Systems Credits: 3.00
- ECE 47300 - Introduction To Artificial Intelligence Credits: 3.00 or
- ECE 57000 - Artificial Intelligence Credits: 3.00
- Computer Engineering "Special Content" courses - Maximum of 6 credits (See Computer Engineering "Special Content" Courses in Additional Requirements)

Optional Concentrations

- Artificial Intelligence and Machine Learning Concentration for Computer Engineering
- Computer Systems Concentration in Computer Engineering
- Microelectronics and Semiconductor Concentration for Computer Engineering
- Software Engineering Concentration for Computer Engineering

Other Department/Program Course Requirements (72 credits)

If pursuing Bachelor of Science in Computer Engineering, CS 15900 - Prog Appl for Engineers is required to graduate, but not required to complete the First Year Engineering program.

First-Year Engineering Requirements (29-39 credits)

Click here for First-Year Engineering requirements.

- Requirement #1 - Intro to Engineering I (2-4 credits)
- Requirement #2 - Intro to Engineering II (2-4 credits)
- Requirement #3 - Calculus I (4-5 credits) (satisfies Quantitative Reasoning for core)
- Requirement #4 - Calculus II (4-5 credits) (satisfies Quantitative Reasoning for core)
- Requirement #5 - Chemistry I (4-6 credits) (satisfies Science #1 for core)
• Requirement #6 - Physics (4 credits) *(satisfies Science #2 for core)*
• Requirement #7 - First-Year Engineering Selective (3-4 credits)
• Requirement #8 - Written and Oral Communication (6-7 credits) *(could satisfy Written Communication, Information Literacy or Oral Communication for core)*

General Engineering Requirement (3-6 credits)

C Programming (0-3 credits)

*Required only if CS 15900 not taken as the FYE Science Selective.*

• CS 15900 - C Programming Credits: 3.00 (minimum grade of C-)

Engineering Breadth Selective - Choose One (3 credits)

• AAE 20300 - Aeromechanics I Credits: 3.00
• ABE 20100 - Material And Energy Balances In Biological Engineering Credits: 4.00
• CE 29700 - Basic Mechanics I (Statics) Credits: 3.00
• CE 35000 - Introduction To Environmental And Ecological Engineering Credits: 3.00
• CE 35500 - Engineering Environmental Sustainability Credits: 3.00
• CHE 20500 - Chemical Engineering Calculations Credits: 4.00
• EEE 35000 - Introduction To Environmental And Ecological Engineering Credits: 3.00
• EEE 35500 - Engineering Environmental Sustainability Credits: 3.00
• IE 33500 - Operations Research - Optimization Credits: 3.00
• IE 33600 - Operations Research - Stochastic Models Credits: 3.00
• ME 20000 - Thermodynamics I Credits: 3.00
• ME 27000 - Basic Mechanics I Credits: 3.00
• ME 41300 - Noise Control Credits: 3.00
• MSE 23000 - Structure And Properties Of Materials Credits: 3.00
• NUCL 20000 - Introduction to Nuclear Engineering Credits: 3.00

Mathematics Requirement - Choose One Option (13-14 credits)

*Calculus I and II must be completed as part of the First Year Engineering Requirements.*

Option 1 (13 credits)

• MA 26100 - Multivariate Calculus Credits: 4.00 (minimum grade of C-)
• MA 26600 - Ordinary Differential Equations Credits: 3.00
• MA 26500 - Linear Algebra Credits: 3.00
• ECE 36900 - Discrete Mathematics For Computer Engineering Credits: 3.00

Option 2 (14 credits)
• MA 26100 - Multivariate Calculus Credits: 4.00 (minimum grade of C-)
• MA 26200 - Linear Algebra And Differential Equations Credits: 4.00
• ECE 36900 - Discrete Mathematics For Computer Engineering Credits: 3.00
  Advanced Math Selective - Choose One (3 credits)
• MA 30300 - Differential Equations And Partial Differential Equations For Engineering And The Sciences Credits: 3.00
• MA 35100 - Elementary Linear Algebra Credits: 3.00
• MA 38500 - Introduction To Logic Credits: 3.00
• MA 42500 - Elements Of Complex Analysis Credits: 3.00
• MA 51000 - Vector Calculus Credits: 3.00
• CS 31400 - Numerical Methods Credits: 3.00

Science Requirement (4-8 credits)

*Physics I and General Chemistry are part of the First Year Engineering Requirements. If an FYE Science Selective other than CS 15900 is selected, it will satisfy the ECE Science Selective requirement below.

• PHYS 27200 - Electric And Magnetic Interactions Credits: 4.00
  ECE Science Selective - Choose One
• BIOL 11000 - Fundamentals Of Biology I Credits: 4.00
• BIOL 11100 - Fundamentals Of Biology II Credits: 4.00
• BIOL 12100 - Biology I: Diversity, Ecology, And Behavior Credits: 2.00 and
• BIOL 13500 - First Year Biology Laboratory Credits: 2.00
• BIOL 13100 - Biology II: Development, Structure, And Function Of Organisms Credits: 3.00
• CHM 11600 - General Chemistry Credits: 4.00
• PHYS 31000 - Intermediate Mechanics Credits: 4.00
• PHYS 32200 - Intermediate Optics Credits: 3.00
• PHYS 34400 - Introduction To Quantum Science Credits: 4.00

ECE General Education Requirement (17-18 credits)

• General Education I (Human Cultures: Humanities) - Credit Hours: 3.00 (satisfies Human Cultures: Humanities for core)
• General Education II (satisfies Human Cultures: Behavioral/Social Science for core) - Credit Hours: 3.00
• General Education III (satisfies Science, Technology & Society for core) - Credit Hours: 3.00
• General Education IV - Credit Hours: 3.00
• General Education V - Credit Hours: 3.00
• General Education VI - Credit Hours: 3.00

* C- or better required in all General Education Requirement Courses

• 6 of 24 credits must be Upper level courses (Non-Introductory: At least 6 credits must be 30000-level or above (or from courses with a required pre-requisite in the same department.)
• 12 of 24 must be taken from College of Liberal Arts, the Krannert School of Management, and/or the Honors College provided such courses are not focused primarily on engineering, technology, the natural sciences, or mathematics.
24 credits total of General Education Courses Required

6-7 credits are taken in First-Year Engineering

- General Education - FYE Requirement #8 (Written Communication) - Credit Hours: 3.00-4 credits (satisfies Written Communication for core)

- General Education - FYE Requirement #8 (Oral Communication) Credit Hours: 3.00 (satisfies Oral Communication for core)

Electives (0-2 credits)

- Elective - Credit Hours: 0.00-2.00

- Choose additional coursework to bring total credits to the minimum 125 required for the BSCMPE degree. Students should carefully select these courses to complement their personal interests and their academic record.

- All courses, except those specifically identified on the Electrical and Computer Engineering No Count List.

Supplemental Lists

- Electrical and Computer Engineering General Education
- Computer Engineering "Special Content" Courses

GPA Requirements

- An overall GPA of 2.0 or higher in the Required Major Courses is required.

Pass/No Pass Policy

- The pass/no pass (P/NP) grade option, if available, may be used for courses taken to satisfy the ECE General Education and Complementary Elective Requirements. The P/NP grade option cannot be used for courses applied towards the Required Major Courses, General Engineering Requirement, Mathematics Requirement, and the Science Requirement (unless P/NP is the only allowed grade option for that course).

Transfer Credit Policy

- All 30000-level and above courses applied towards the Required Major Courses must be completed at the Purdue West Lafayette campus.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost's Website.

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

Civics Literacy Proficiency Requirement

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

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

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

Upper Level Requirement

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

Sample First-Year Engineering Plan of Study

Fall 1st Year

• Requirement #1 - Intro to Engineering - Credit Hours: 2.00-4.00
• Requirement #3 - Calculus I - Credit Hours: 4.00-5.00
• Requirement #5 - Chemistry - Credit Hours: 4.00-6.00
• Requirement #8 - Written or Oral Communication - Credit Hours: 3.00-4.00

13-19 Credits

Spring 1st Year

• Requirement #2 - Intro to Engineering II - Credit Hours: 2.00-4.00
• Requirement #4 - Calculus II - Credit Hours: 4.00-5.00
• Requirement #6 - Physics - Credit Hours: 4.00
• Requirement #7 - First-Year Engineering Selective - Credit Hours: 3.00-4.00
• Requirement #8 - Written or Oral Communication - Credit Hours: 3.00-4.00
16-21 Credits

Sample Computer Engineering Plan of Study

Combined with two semesters for FYE above, the following is an example of a 4-year plan that satisfies the BSCMPE degree requirements.

Fall 2nd Year

- ECE 29401 - Electrical And Computer Engineering Sophomore Seminar Credits: 1.00
- ECE 20001 - Electrical Engineering Fundamentals I Credits: 3.00
- ECE 20007 - Electrical Engineering Fundamentals I Lab Credits: 1.00
- ECE 26400 - Advanced C Programming Credits: 3.00
- ECE 36900 - Discrete Mathematics For Computer Engineering Credits: 3.00
- MA 26100 - Multivariate Calculus Credits: 4.00
  C Programming (if not taken in FYE)
- CS 15900 - C Programming Credits: 3.00

16-19 Credits

Spring 2nd Year

- ECE 20002 - Electrical Engineering Fundamentals II Credits: 3.00
- ECE 20875 - Python For Data Science Credits: 3.00
- ECE 27000 - Introduction To Digital System Design Credits: 4.00
  Mathematics Requirement
- MA 26600 - Ordinary Differential Equations Credits: 3.00 or
- MA 26200 - Linear Algebra And Differential Equations Credits: 4.00
- Foundational General Education I (Human Cultures: Humanities) - Credit Hours: 3.00

16-17 Credits

Fall 3rd Year

- ECE 30100 - Signals And Systems Credits: 3.00
- ECE 36200 - Microprocessor Systems And Interfacing Credits: 4.00
- ECE 36800 - Data Structures Credits: 3.00
- ECE 39401 - Professional Communications And Diversity Credits: 1.00
- ECE Science Selective - Credit Hours: 0.00-4.00
- Foundational General Education II (Human Cultures: Behavioral/Social Science) - Credit Hours: 3.00

14-18 Credits

Spring 3rd Year
• ECE 30200 - Probabilistic Methods In Electrical And Computer Engineering Credits: 3.00
• PHYS 27200 - Electric And Magnetic Interactions Credits: 4.00
• Computer Engineering Selectives - Credit Hours: 7.00
• Foundational General Education III (Science, Technology, and Society) - Credit Hours: 3.00

16 Credits

Fall 4th Year

Senior Design Requirement Option I
• ECE 47700 - Digital Systems Senior Project Credits: 4.00
• MA 26500 - Linear Algebra Credits: 3.00 or
• Advanced Math Selective - Credit Hours: 3.00
• Computer Engineering Selectives - Credit Hours: 3.00
• General Education IV - Credit Hours: 3.00
• Elective - Credit Hour: 0.00-3.00

13-16 Credits

Spring 4th Year

• ECE 49401 - Professional Communication Capstone Credits: 1.00
• Computer Engineering Selectives - Credit Hours: 6.00
• Engineering Breadth Selective - Credit Hours: 3.00
• General Education V - Credit Hours: 3.00
• General Education VI - Credit Hours: 3.00
• Elective - Credit Hours: 0.00-2.00

16-18 Credits

Pre-Requisite Information

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

Critical Course

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

Disclaimer

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

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

Bachelor of Science in Mechanical Engineering

Mechanical Engineering, BSME

About the Program

The mechanical engineering technology program is accredited by the Engineering Technology Accreditation Commission of ABET, https://www.abet.org, under the commission's general criteria and program criteria for Mechanical Engineering Technology and similarly named programs.

Program Educational Objectives and Outcomes

The School of Mechanical Engineering offers coursework leading to the Bachelor of Science in Mechanical Engineering (B.S.ME).

The program educational objectives of the School of Mechanical Engineering are to matriculate graduates who conduct themselves in a responsible, professional and ethical manner (citizenship), and who upon the years following graduation, are committed to:

1. Professional Practice
   - Actively embracing leadership roles in the practice of engineering in industry and government organizations (including both traditional and emerging technical areas).
   - Conducting research and development across disciplines (via graduate study or industry) to advance technology and foster innovation in order to compete successfully in the global economy.
   - Applying their engineering problem-solving skills to less-traditional career paths (e.g., law, medicine, business, education, start-up ventures, public policy, etc.).

2. Professional Development
   - Actively participating in ongoing professional development opportunities (conferences, workshops, short courses, graduate education, etc.).
   - Updating and adapting their core knowledge and abilities to compete in the ever-changing global enterprise.
   - Developing new knowledge and skills to pursue new career opportunities.

3. Professional Outreach
• Serving as ambassadors for the engineering profession, inspiring others to develop a passion for engineering.
• Exchanging and applying knowledge to create new opportunities that advance society and solve a variety of technical and social problems.
• Advancing entrepreneurial ventures and fostering activities that support sustainable economic development to enhance the quality of life of people in the state, across the country and around the world.

In order for students to achieve these objectives, the program of study should satisfy the comprehensive set of student outcomes as outlined below.

**School of Mechanical Engineering Student Outcomes**

The program should provide students with a solid technical foundation for their careers. The graduates of the School of Mechanical Engineering will have demonstrated the following:

1. **Engineering fundamentals**: an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. **Engineering design**: an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. **Communications skills**: an ability to communicate effectively with a range of audiences.
4. **Ethical/Professional responsibilities**: an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgements, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. **Teamwork skills**: an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. **Experimental skills**: an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions.
7. **Knowledge acquisition**: an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

**Mechanical Engineering Program Description**

To achieve the above stated objectives and outcomes, the School of Mechanical Engineering has developed a comprehensive, integrated curriculum to provide students with a broad base on which to build an engineering career. It is founded on basic sciences, including physics, chemistry and mathematics; computer science and computer graphics; and oral and written communications skills.

To this foundation, a core of engineering science and design courses are added in three main curriculum stems: mechanical sciences (statics, dynamics, mechanics of materials, and structures and properties of materials), information technologies (electric circuits and electronics, instrumentation, system modeling and controls), and thermal-fluid sciences (thermodynamics, fluid mechanics and heat transfer).

Throughout the core curriculum, students gain extensive laboratory and computer experience via modern facilities in all basic areas of the discipline. In addition, the curriculum provides an integrated innovation, design and entrepreneurship experience. This experience - which begins with a sophomore-level cornerstone course and culminates with a senior-level capstone course - emphasizes innovation, problem-solving, leadership, teamwork, communication skills, practical hands-on experience with various product design processes and entrepreneurship. Students then specialize by selecting three ME electives that provide additional depth in one or more main stems of the curriculum. Students can further specialize with 9 credit hours of technical/professional electives in engineering, mathematics, natural sciences, select management courses or individualized project courses (ME 49800/ME 49900).

Just as design experiences are integrated throughout the mechanical engineering curriculum, so too are opportunities to communicate technical information, both orally and in writing. Students experience a variety of communications opportunities in progressing through the mechanical engineering program.

As a freshman, each student is required to take both oral and written communication courses. These courses lay the foundation for future oral and written communications. In the sophomore seminar course (ME 29000), students learn how to create
professional documents and correspondence (e.g., resumes, letters, memos, etc.), develop personal interview skills, learn the basics of Web publishing and develop a global engineering professional profile. In ME 26300, the cornerstone design course, student teams prepare formal design reports, give oral presentations and maintain individual design notebooks. The communications experiences culminate in the capstone design course (ME 46300), in which student teams prepare presentations and reports for the sponsors of their selected design projects and compete in an innovation competition.

A major feature of the curriculum is the flexible 39-credit-hour elective program, of which 24 credit hours are taken during the senior year. This allows for a program with considerable breadth while also permitting the depth and specialization in an area of the student's professional interests.

Because of the wide scope of activities in which the mechanical engineer is engaged and because of the broad spectrum of student interests, mechanical engineering graduates may choose either to enter the profession immediately after receiving their bachelor's degree or go directly to graduate school. In either case, the curriculum provides a firm foundation for continuing education and fosters a commitment to lifelong learning, whether it is as a member of the engineering profession, through formal graduate work or through independent study.

Visit the School of Mechanical Engineering website for more current information about the undergraduate programs.

Scholarships

The School of Mechanical Engineering sponsors a broad array of need-based and merit-based scholarships. Eligible candidates (incoming sophomores through senior mechanical engineering students) are invited in mid-spring to submit applications for consideration. To qualify, students are required to have a scholastic index of 2.8 or better on a 4.0 scale. Awards range from $500 to $10,000 and total more than $1 million. This scholarship money is in addition to the University's Trustees and Presidential scholarships in Mechanical Engineering, which, when fully funded, will include more than 350 awards worth a total of more than $2 million.

Professional Student Organizations and Activities

Student organizations provide valuable opportunities for students to enhance organizational, communication, teamwork and leadership skills. Students also are strongly encouraged to become involved in one or more extracurricular activities. Student organizations specific to mechanical engineering include the American Society of Mechanical Engineers (ASME), the Purdue Mechanical Engineering Ambassadors (PMEA), Pi Tau Sigma (the Mechanical Engineering Honor Society) and the Society of Automotive Engineers (SAE).

Professional Practice Program with Industry or Governmental Organizations

The professional practice programs enable qualified students to obtain experiences related to their specific engineering discipline with selected employers while completing the requirements of their undergraduate degree. Students can participate in an Industry Co-op Certificate and an Extensive Industry Co-op Certificate or an internship program. The Office Professional Practice also offers the GEARE program, which combines domestic and international work experiences, a design project component and an opportunity to study abroad.

For more information, visit the Office of Professional Practice website.

Honors Program

An honors program is available for outstanding mechanical engineering undergraduate students. The Honors program utilizes the mechanical engineering, technical, general education and elective requirements for the B.S.ME degree in a way that is consistent with the honors designation. Admission to the Honors program is by selection for any student meeting the minimum admission requirements for the First-Year Engineering Honors program. Students not in the First-Year Engineering Honors program can apply for admission into the Honors program by completing an honors application and meeting the required cumulative GPA for admission.

Completion of the Honors program requires earning a required minimum number of honor points (credit hours) earned in one of the following manners:
- Take honors courses (including the sophomore and junior honors seminar sequence).
- Complete honors experiences (e.g., study abroad, special work experiences, etc.).
- Take honors strategic initiative courses (defined by the College of Engineering).

Successful completion of the minimum number of honors points will earn a student a certificate and his/her transcript will read, "Bachelor of Science Mechanical Engineering - Honors Program Awarded at West Lafayette."

More details on the Honors program can be found on the ME website.

Study Abroad

Global competency skills are a major focus in the School of Mechanical Engineering. By graduation, roughly 40 percent of ME graduates have international experience (as compared to about 3 percent nationally in engineering). The School of Mechanical Engineering has developed an extensive and multi-faceted study abroad program that ranges from an extensive eight-month experience abroad to a three-week stint abroad. This staged program allows students to pick and choose the program that best fits their requirements and timing. Additional information can be found on the ME Global Programs website.

Registration for the Fundamentals of Engineering Examination

Mechanical engineering seniors are strongly encouraged to take the first step to becoming registered professional engineers (PEs) by registering and successfully completing the Fundamentals of Engineering (FE) examination, also called the Engineer in Training (EIT) exam. Seniors can register to take the FE exam at the West Lafayette campus in their senior year prior to graduation. Announcements appear periodically throughout the semester to alert students to this opportunity. The FE exam can be taken daily at Purdue in the months of January/February, April/May, July/August, and October/November. To aid seniors in their preparation for the exam, Chi Epsilon, the Civil Engineering Honor Society organizes annual faculty-taught review sessions on key topics covered on the FE exam. Also, a simple internet search of FE Review Sessions can provide valuable review information available at a student's convenience. Typically, 95 to 100 percent of graduating mechanical engineering seniors registered to take the FE exam pass the exam on the first attempt.

After passing the FE exam and completing four years of engineering experience after graduation, an engineer is typically eligible to take the professional engineering (PE) licensing examination. Specific information about the EIT exam is available on the School of Mechanical Engineering home page. Questions about the FE Exam or the process to become a registered professional engineer should be directed to the Associate Head of the School of Mechanical Engineering.

Undergraduate Research Opportunities

In addition to the traditional classroom experience, students in the School of Mechanical Engineering have the opportunity to conduct cutting-edge research in one of the thirteen ME Research Areas listed below:
- Acoustics and Noise Control
- Bioengineering
- Combustion
- Design
- Fluid Mechanics and Propulsion
- Heat Transfer
- Heating, Ventilation, Air Conditioning and Refrigeration
- Manufacturing and Materials Processing
- Mechanics and Vibrations
- Nanotechnology
Students discover firsthand how research contributes to the advancement of human knowledge. They experience a change of pace from formal classroom activities and gain valuable hands-on skills applicable to both research and non-research careers. In addition, students develop their knowledge of the research process and tools used by professional researchers and increase their proficiencies in technical communication. Such experiences help students connect their summer experience with their future goals, with particular focus on post-graduate education. Learn more about ME Faculty directed research opportunities by visiting the ME Undergraduate Research Opportunities webpage. https://engineering.purdue.edu/ME/Undergraduate/ResearchOpportunities

Interested students are strongly encouraged to consider participation in the Summer Undergraduate Research Fellowship (SURF) Program or the Discovery Park Undergraduate Research Internship (DURI) Program.

**Preparation for Graduate Study**

The School of Mechanical Engineering also offers graduate work leading to the degrees of Master of Science (M.S.), for students with non-engineering degrees; Master of Science in Engineering (M.S.E), for students with non-mechanical engineering degrees; Master of Science in mechanical engineering (M.S.ME), for students with B.S.ME degrees; and the Doctor of Philosophy (Ph.D.).

The regular undergraduate curriculum (and the honors undergraduate program) provide a strong foundation for graduate study, and students who complete either of the programs with appropriate academic records are encouraged to pursue graduate work. Many graduates have continued their education by pursuing advanced studies in engineering, business, law, medicine, dentistry and public policy.

For answers to your questions about graduate study, visit the Mechanical Engineering Graduate Office in the Mechanical Engineering Building, Room 1003, call 765-494-5730, email MEgradoffice@purdue.edu or visit the ME website.

**Combined B.S.ME/M.S.ME Program**

A combined B.S.ME/M.S.ME program is available for outstanding mechanical engineering undergraduate students. This program is anticipated to take approximately five years to complete (with the M.S.ME non-thesis option) and result in receiving both the B.S.ME and M.S.ME degrees.

The B.S.ME/M.S.ME program is a mechanism for:

1. Providing a seamless transition from the B.S.ME to the M.S.ME program.
2. Participating in a directed project in their area of interest.
3. Stimulating interest in graduate study and research/academic careers.
4. Allowing for special recognition of high levels of academic achievement.

The B.S.ME/M.S.ME program requires students to take 12 hours of graduate coursework toward their B.S.ME professional elective requirement. This same 12 hours likewise count toward the M.S.ME degree.

Interested students typically apply as an “internal ME applicant” in the second half of their junior year after completion of 81 hours of coursework in the undergraduate program with a cumulative undergraduate GPA of 3.2 or higher. If a GPA of 3.0 has been maintained and grades of “B” or better are received in the first two graduate courses (typically in the seventh semester), the student will be asked to formally apply to the Purdue Graduate School at the beginning of his or her eighth semester of the senior year.
Complete details of the combined B.S.ME/M.S.ME program can be found on the Web. Questions about this information should be emailed to MEgradoffice@purdue.edu.

School of Mechanical Engineering

Mechanical Engineering Major Change (CODO) Requirements

Degree Requirements

128 Credits Required

Mechanical Engineering Major Requirements (67-68 credits)

Mechanical Engineering Major Courses (37 credits)

- ME 20000 - Thermodynamics I Credits: 3.00 ♦
- ME 27000 - Basic Mechanics I Credits: 3.00 ♦
- ME 26300 - Introduction To Mechanical Engineering Design, Innovation And Entrepreneurship Credits: 3.00 ♦
- ME 27400 - Basic Mechanics II Credits: 3.00 ♦
- ME 29000 - Global Engineering Professional Seminar Credits: 1.00 ♦ (satisfies Science, Technology & Society for core)
- ME 30800 - Fluid Mechanics Credits: 3.00 ♦
- ME 30801 - Fluid Mechanics Laboratory Credits: 1.00 ♦
- ME 31500 - Heat And Mass Transfer Credits: 4.00 ♦
- ME 32300 - Mechanics Of Materials Credits: 3.00 ♦
- ME 32301 - Mechanics Of Materials Laboratory Credits: 1.00 ♦
- ME 35400 - Machine Design Credits: 3.00 ♦
- ME 36500 - Measurement And Control Systems I Credits: 3.00 ♦
- ME 37500 - Measurement And Control Systems II Credits: 3.00 ♦
- ME 46300 - Engineering Design Credits: 3.00 ♦

Other Departmental Required Courses (21-22 credits)

The courses listed below are also included in Major GPA calculation.

- ECE 20001 - Electrical Engineering Fundamentals I Credits: 3.00 ♦
- ECE 20007 - Electrical Engineering Fundamentals I Lab Credits: 1.00 ♦
- MA 26100 - Multivariate Calculus Credits: 4.00 ♦
- MA 26200 - Linear Algebra And Differential Equations Credits: 4.00 ♦
- MA 30300 - Differential Equations And Partial Differential Equations For Engineering And The Sciences Credits: 3.00 ♦
- MSE 23000 - Structure And Properties Of Materials Credits: 3.00 ♦
- PHYS 24100 - Electricity And Optics Credits: 3.00 ♦ or
- PHYS 27200 - Electric And Magnetic Interactions Credits: 4.00 ♦

Engineering Requirements for First Year (29-39 credits)
All courses in this area must have a C- or higher

**Requirement #1 - Intro to Engineering I** (2-4 credits)
- ENGR 13100 - Transforming Ideas To Innovation I **Credits:** 2.00
  OR
- ENGR 16100 - Honors Introduction To Innovation And The Physical Science Of Engineering Design I **Credits:** 4.00
  OR
- EPCS 11100 - First Year Participation In EPICS I **Credits:** 1.00 and
- EPCS 12100 - First Year Participation In EPICS II **Credits:** 1.00
  OR
- VIP 17911 - First Year Participation In Vertically Integrated Projects (VIP) I **Credits:** 1.00 and
- VIP 17912 - First Year Participation In Vertically Integrated Projects (VIP) II **Credits:** 1.00
  OR
- ENGR 13000 - Transforming Ideas To Innovation, EPICS/VIP

**Requirement #2 - Intro to Engineering II** (2-4 credits)
- ENGR 13000 - Transforming Ideas To Innovation, EPICS/VIP **Credits:** 4.00 or
- ENGR 13200 - Transforming Ideas To Innovation II **Credits:** 2.00 or
- ENGR 13300 - Transforming Ideas To Innovation, EPICS/VIP **Credits:** 2.00 or
- ENGR 16200 - Honors Introduction To Innovation And The Physical Science Of Engineering Design II **Credits:** 4.00

**Requirement #3 - Calculus I** (4-5 credits) - satisfies Quantitative Resoning for core
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits:** 5.00 or
- MA 16500 - Analytic Geometry And Calculus I **Credits:** 4.00

**Requirement #4: Calculus II** (4-5 credits)
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits:** 5.00 or
- MA 16600 - Analytic Geometry And Calculus II **Credits:** 4.00

**Requirement #5: Chemistry** (4-6 credits) - satisfies Science #1 for core
- CHM 11500 - General Chemistry **Credits:** 4.00 or
- CHM 11510 - General Chemistry I **Credits:** 3.00
  AND
- CHM 11520 - General Chemistry I - Laboratory **Credits:** 1.00 or
- CHM 11530 - General Chemistry I - Virtual Laboratory **Credits:** 1.00
  OR
- CHM 11100 - General Chemistry **Credits:** 3.00 and
- CHM 11200 - General Chemistry **Credits:** 3.00

**Requirement #6: Physics** (4 credits) - satisfies Science #2 for core
- PHYS 17200 - Modern Mechanics **Credits:** 4.00
  OR
  ENGR 16100 - Honors Introduction To Innovation And The Physical Science Of Engineering Design I and
  ENGR 16200 - Honors Introduction To Innovation And The Physical Science Of Engineering Design II

**Requirement #7: First-Year Engineering Selective** (3-4 credits)
- CHM 11600 - General Chemistry **Credits:** 4.00 or
- CS 15900 - C Programming **Credits:** 3.00 or
- BIOL 11000 - Fundamentals Of Biology I **Credits:** 4.00 or
- BIOL 11100 - Fundamentals Of Biology II **Credits:** 4.00
Requirement #8: Written and Oral Communication (6-7 credits) - could satisfy Written Communication, Information Literacy or Oral Communication for core

- Written Communication - Credit Hours: 3.00-4.00 (satisfies Written Communication for core)
- Oral Communication - Credit Hours: 3.00 (satisfies Oral Communication for core)

OR

- SCLA 11000 - Language And Cultural Exchange I: Self In Context Credits: 3.00
- SCLA 11100 - Language And Cultural Exchange II: Texts And Contexts Credits: 3.00

Other Program/Department Requirements (58-68 credits)

Mechanical Engineering Electives (9 credits)

- ME Elective I - Credit Hours: 3.00
- ME Elective II - Credit Hours: 3.00
- ME Elective III - Credit Hours: 3.00

Note: Any ME 30000, 40000, 50000 Level Course (Includes any ME Course not used to fulfill Major Course requirements.) These courses are not included in the major GPA calculation

Other Departmental Requirements (14 credits)

- MFET 16300 - Graphical Communication And Spatial Analysis Credits: 2.00
- Economics Selective - Credit Hours: 3.00 (satisfies Human Cultures: Behavioral/Social Science for core)
- ECON 25100 - Microeconomics Credits: 3.00 or
- ECON 25200 - Macroeconomics Credits: 3.00
- Technical Electives (9 credits) - see supplemental information for list of courses
  - Technical Elective I - Credit Hours: 3.00
  - Technical Elective II - Credit Hours: 3.00
  - Technical Elective III - Credit Hours: 3.00

General Education Requirement (15 credits)

- General Education-I - Credit Hours: 3.00
- General Education-II - Credit Hours: 3.00
- General Education-III - Credit Hours: 3.00
- General Education-IV - Credit Hours: 3.00
- World & Cultural Affairs Selective - Credit Hours: 3.00 (satisfies Human Cultures: Humanities for core)

See supplemental information for specific requirements and list of courses

Supplemental List

Click here for Mechanical Engineering Supplemental Information

Elective (3 credits)
Elective - Credit Hours: 3.00  See supplemental information no count list for information on courses that do not count.

Supplemental List

Click here for Mechanical Engineering Supplemental Information

Grade Requirements

• MA courses must have C- or above

GPA Requirements

• 2.0 Graduation GPA required for Bachelor of Science degree
• Minimum 2.0 ME Core GPA (ME Core courses for GPA include: ME 20000, 26300, 27000, 27400, 29000, 30800, 30801, 31500, 32300, 35400, 35401, 36500, 37500, 46300. In addition to the ME core classes, the following courses are also included the ME core GPA: MA 26100, 26200 (26500/26600), 30300; PHYS 24100/27200; ECE 20001, 20007; and MSE 23000.)

Course Requirements and Notes

• Non-Introductory/Upper level courses = 30000+ level course or courses with required pre-requisite in the same department.

Non-course / Non-credit Requirements

• Milestone One: Refer to the College of Engineering Enrollment Management Policy for guaranteed admission to Mechanical Engineering after the completion of the FYE program - https://engineering.purdue.edu/Engr/InfoFor/CurrentStudents/enrollment-policy.
• Milestone Two: At the time of degree completion, milestones of a minimum 2.0 ME Core GPA, minimum 2.0 cumulative GPA, completion of a senior exit survey, and applying for graduation should be met. (2.0 Graduation GPA required for Bachelor of Science degree)

Pass/No Pass Policy

• All courses to satisfy the Bachelors of Science in Mechanical Engineering degree (128 credit hours) must be taken for a letter grade. Pass/No pass grades will not be accepted to meet degree requirements.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost's Website.

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

Civics Literacy Proficiency Requirement

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

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

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

Upper Level Requirement

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

Sample First-Year Engineering Plan of Study

Fall 1st Year

• Requirement #1 - Intro to Engineering - Credit Hours: 2.00-4.00
• Requirement #3 - Calculus I - Credit Hours: 4.00-5.00
• Requirement #5 - Chemistry - Credit Hours: 4.00-6.00
• Requirement #8 - Written or Oral Communication - Credit Hours: 3.00-4.00

13-19 Credits

Spring 1st Year

• Requirement #2 - Intro to Engineering II - Credit Hours: 2.00-4.00
• Requirement #4 - Calculus II - Credit Hours: 4.00-5.00
• Requirement #6 - Physics - Credit Hours: 4.00
• Requirement #7 - First-Year Engineering Selective - Credit Hours: 3.00-4.00
• Requirement #8 - Written or Oral Communication - Credit Hours: 3.00-4.00
16-21 Credits

Mechanical Engineering Program Requirements

**Milestone One:** After the completion of two semesters, students should have met a 3.2 GPA/EAI or a holistic review for admission to Mechanical Engineering. *See notes section for more information*

**Fall 2nd Year**

- ME 20000 - Thermodynamics | Credits: 3.00 ♦
- ME 27000 - Basic Mechanics | Credits: 3.00 ♦
- ME 29000 - Global Engineering Professional Seminar | Credits: 1.00
- MFET 16300 - Graphical Communication And Spatial Analysis | Credits: 2.00 ♦
- MA 26100 - Multivariate Calculus | Credits: 4.00
- PHYS 24100 - Electricity And Optics | Credits: 3.00 ♦ or
- PHYS 27200 - Electric And Magnetic Interactions | Credits: 4.00 ♦

16-17 Credits

**Spring 2nd Year**

- ME 26300 - Introduction To Mechanical Engineering Design, Innovation And Entrepreneurship | Credits: 3.00
- ME 27400 - Basic Mechanics II | Credits: 3.00
- MA 26200 - Linear Algebra And Differential Equations | Credits: 4.00
- ECE 20001 - Electrical Engineering Fundamentals I | Credits: 3.00 ♦
- ECE 20007 - Electrical Engineering Fundamentals I Lab | Credits: 1.00 ♦
- General Education Elective I - Credit Hours: 3.00

17 Credits

**Fall 3rd Year**

- ME 30800 - Fluid Mechanics | Credits: 3.00
- ME 32300 - Mechanics Of Materials Credits: 3.00
- ME 32301 - Mechanics Of Materials Laboratory Credits: 1.00
- ME 36500 - Measurement And Control Systems I Credits: 3.00
- MA 30300 - Differential Equations And Partial Differential Equations For Engineering And The Sciences Credits: 3.00
- General Education Elective II - Credit Hours: 3.00

16 Credits

Spring 3rd Year

- ME 30801 - Fluid Mechanics Laboratory Credits: 1.00
- ME 35400 - Machine Design Credits: 3.00
- ME 37500 - Measurement And Control Systems II Credits: 3.00
- Mechanical Engineering Elective I - Credit Hours: 3.00
- Technical Elective I - Credit Hours: 3.00
- General Education Elective III - Credit Hours: 3.00

16 Credits

Fall 4th Year

- ME 31500 - Heat And Mass Transfer Credits: 4.00
- MSE 23000 - Structure And Properties Of Materials Credits: 3.00
- ME Elective II - Credit Hours: 3.00
- Technical Elective II - Credit Hours: 3.00
- World Culture Elective - Credit Hours: 3.00

16 Credits

Spring 4th Year

Milestone Two: see information in the notes section.
• ME 46300 - Engineering Design Credits: 3.00
• Economics Selective - Credit Hours: 3.00
• ME Elective III - Credit Hours: 3.00
• Technical Elective III - Credit Hours: 3.00
• General Education Elective IV - Credit Hours: 3.00
• Elective - Credit Hours: 3.00

18 Credits

Critical Course

The ♦ course is considered critical.

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

Disclaimer

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

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

Motorsports Engineering, BSMSTE (Indianapolis Only)

About the Program

The Motorsports Engineering program is accredited by the Engineering Accreditation Commission of ABET.

Motorsports Engineering Program Educational Objectives

The program educational objectives of the Motorsports Engineering Program are to integrate engineering and life science principles into a comprehensive curriculum that produces graduates who can achieve the following career and professional accomplishments, if desired:

1. Meet expectations of employers in Motorsports Engineering and related fields
2. Achieve recognition and/or advancement consistent with their education
3. Continue growth in professional knowledge through additional education, certification, or licensing

Motorsports Engineering Program Student Outcomes

The program should provide students with a solid technical foundation for their careers. Graduates of the Motorsports Engineering Program within the School of Mechanical Engineering will have demonstrated the following:
1. **Engineering fundamentals**: an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

2. **Engineering design**: an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

3. **Communications skills**: an ability to communicate effectively with a range of audiences.

4. **Ethical/Professional responsibilities**: an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgements, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

5. **Teamwork skills**: an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

6. **Experimental skills**: an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions.

7. **Knowledge acquisition**: an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

**Motorsports Engineering Program Description**

Engineering opportunities in the motorsports industry are growing and expected to continue to grow at a rapid pace. Indiana and North Carolina are recognized as the leading national motorsports economies with England, Germany and Italy representing the industry internationally. Indianapolis, IN with its ties to the Indianapolis 500 and the U.S Nationals is considered the international focal point for American Indycar open-wheel racing and NHRA professional drag racing. Tier 1, tier 2, and tier 3 businesses have developed in the local area to support the growing demands of the racing community in both professional and amateur motorsports. It is estimated that there are over 400 motorsports related firms in the Indianapolis region including companies that produce engines, brakes, dampers, springs and other racing products. The Performance Racing Industry, PRI, based in Speedway, IN, holds their annual industry convention in Indianapolis for current and future employees of the industry to create new business and networking opportunities.

The Motorsports Engineering Program was created and approved in May 2008 to support the engineering growth of the motorsports industry. The program supports a 4-year Bachelor of Science Degree in Motorsports Engineering, a 5-year dual degree in Motorsports and Mechanical Engineering and graduate engineering education opportunities in the School of Mechanical Engineering's graduate school. The program aims to prepare graduates for careers in both the motorsports and the automotive industry. Engineering skills developed within this program have cross-pollinated into the aerospace industry. The core program focuses on teaching the fundamentals of engineering which include hands-on projects that involve analytical design, practical design, and manufacturing of actual systems for motorsports.

The Motorsports Engineering Program achieves the above stated educational objectives and student outcomes through a comprehensive, integrated curriculum which provides students with a broad base on which students can build an engineering career. The program is founded on basic sciences, including physics, chemistry and mathematics; computer science and computer graphics; and oral and written communication skills.

To this foundation, a core of engineering science and design courses are added in three main curriculum stems: mechanical sciences (statics, dynamics, mechanics of materials, vehicle dynamics, and motorsports design), information technologies (electric circuits and electronics, instrumentation, system modeling and controls, and race engineering), and thermal-fluid sciences (thermodynamics, fluid mechanics, and aerodynamics).

Throughout the core curriculum, students gain extensive laboratory and computer experience via modern facilities in all basic areas of the discipline. In addition, the curriculum provides an integrated innovation, design and entrepreneurship experience. This experience - which begins with a sophomore-level cornerstone course and culminates with a senior-level capstone course - emphasizes innovation, problem-solving, leadership, teamwork, communication skills, practical hands-on experience with various product design processes, and entrepreneurship. Students then specialize by selecting two MSPE electives that provide additional depth in one or more main stems of the curriculum. Students can further specialize with 6 credit hours of technical/professional electives in motorsports engineering, mechanical engineering, mathematics, selected management courses or individualized project courses.
Just as design experiences are integrated throughout the motorsports engineering curriculum, so too are opportunities to communicate technical information, both orally and in writing. Students experience a variety of communications opportunities while progressing through the motorsports engineering program.

As a freshman, each student is required to take both oral and written communication courses. These courses lay the foundation for future oral and written communications. In the sophomore seminar course (MSPE 29000), students learn how to create professional documents and correspondence (e.g., resumes, letters, memos, etc.), develop personal interview skills, learn the basics of Web publishing, and develop a global engineering professional profile. In MSPE 32000, the cornerstone design course, students prepare formal design reports, give oral presentations, and maintain individual design notebooks. The communications experiences culminate in the capstone design course (MSPE 41400), in which student teams prepare presentations and reports for the sponsors of their selected design projects and compete in an innovation competition.

A major feature of the curriculum is the flexible 39-credit-hour elective program, of which 18 credit hours are taken during the senior year. This allows for a program with considerable breadth while also permitting the depth and specialization in an area of the student's professional interests.

Because of the wide scope of activities in which the motorsports engineer is engaged and because of the broad spectrum of student interests, motorsports engineering graduates may choose either to enter the profession immediately after receiving their bachelor's degree or go directly to graduate school. In either case, the curriculum provides a firm foundation for continuing education and fosters a commitment to lifelong learning, whether as a member of the engineering profession, through formal graduate work or through independent study.

Visit the School of Mechanical Engineering website for more current information about the undergraduate programs.

**Professional Student Organizations and Activities**

Student organizations provide valuable opportunities for students to enhance organizational, communication, teamwork and leadership skills. Students also are strongly encouraged to become involved in one or more extracurricular activities. Student organizations specific to mechanical engineering include the American Society of Mechanical Engineers (ASME), the Purdue Mechanical Engineering Ambassadors (PMEA), Pi Tau Sigma (the Mechanical Engineering Honor Society) and the Society of Automotive Engineers (SAE).

**Professional Practice Program with Industry or Governmental Organizations**

The professional practice programs enable qualified students to obtain experiences related to their specific engineering discipline with selected employers while completing the requirements of their undergraduate degree. Students can participate in a five-session co-op, a three-session co-op, the flex co-op, or an internship program. The Professional Practice Office (OPP) also offers the GEARE program, which combines domestic and international work experiences, a design project component and an opportunity to study abroad.

For more information, visit the Office of Professional Practice website.

**Honors Program**

An honors program is available for outstanding motorsports engineering undergraduate students. The honors program is a mechanism for:

- Participating in small enrollment, targeted courses.
- Participating in a directed project in their area of interest.
- Stimulating interest in graduate study and research/academic careers.
- Developing a community of honors scholars.
- Allowing for special recognition of high levels of academic achievement.

The Honors program utilizes the motorsports engineering, technical, general education and elective requirements for the B.S. MSPE degree in a way that is consistent with the honors designation. Admission to the Honors program is by selection for any
student meeting the minimum admission requirements for the First-Year Engineering Honors program. Students not in the First-Year Engineering Honors program can apply for admission into the Honors program by completing an honors application and meeting the required cumulative GPA for admission.

Completion of the Honors program requires earning a required minimum number of honor points (credit hours) earned in one of the following manners:

- Take honors courses (including the sophomore and junior honors seminar sequence).
- Complete honors experiences (e.g., study abroad, special work experiences, etc.).
- Take honors strategic initiative courses (defined by the College of Engineering).

Successful completion of the minimum number of honors points will earn a student a certificate and his/her transcript will read, "Bachelor of Science Motorsports Engineering - Honors Program Awarded at West Lafayette.”

More details on the Honors program can be found on the ME website.

**Undergraduate Research Opportunities**

In addition to the traditional classroom experience, students in the School of Mechanical Engineering have the opportunity to conduct cutting-edge research in one of the thirteen ME Research Areas listed below:

- Acoustics and Noise Control
- Bioengineering
- Combustion
- Design
- Fluid Mechanics and Propulsion
- Heat Transfer
- Heating, Ventilation, Air Conditioning and Refrigeration
- Manufacturing and Materials Processing
- Mechanics and Vibrations
- Motorsports Engineering
- Nanotechnology
- Robotics
- Solid Mechanics
- Systems, Measurement and Control

Students discover first-hand how research contributes to the advancement of human knowledge. They experience a change of pace from formal classroom activities and gain valuable hands-on skills applicable to both research and non-research careers. In addition, students develop their knowledge of the research process and tools used by professional researchers and increase their proficiencies in technical communication. Such experiences help students connect their summer experience with their future goals, with particular focus on post-graduate education. Learn more about ME Faculty directed research opportunities by visiting the ME Undergraduate Research Opportunities webpage. [https://engineering.purdue.edu/ME/Undergraduate/ResearchOpportunities](https://engineering.purdue.edu/ME/Undergraduate/ResearchOpportunities)

Interested students are strongly encouraged to consider participation in the Summer Undergraduate Research Fellowship (SURF) Program or the Discovery Park Undergraduate Research Internship (DURI) Program.

**Preparation for Graduate Study**

The School of Mechanical Engineering also offers graduate work leading to the degrees of Master of Science (M.S.), for students with non-engineering degrees; Master of Science in Engineering (M.S.E), for students with non-mechanical engineering degrees; Master of Science in mechanical engineering (M.S.ME), for students with B.S.ME degrees; and the Doctor of Philosophy (Ph.D.).

The regular undergraduate curriculum (and the honors undergraduate program) provide a strong foundation for graduate study, and students who complete either of the programs with appropriate academic records are encouraged to pursue graduate work.
Many graduates have continued their education by pursuing advanced studies in engineering, business, law, medicine, dentistry and public policy.

For answers to your questions about graduate study, visit the Mechanical Engineering Graduate Office in the Mechanical Engineering Building, Room 1003, call 765-494-5730, MEgradoffice@purdue.edu or visit the ME website.

**Combined B.S.MSPE/B.S.ME Program**

A combined B.S.MSPE/B.S.ME Dual Degree Program is available for outstanding Motorsports engineering undergraduate students. This combined program is anticipated to take approximately five years to complete and result in receiving both the B.S.MSPE and the B.S.ME degrees.

The B.S.MSPE/B.S.ME Dual Degree is a mechanism for providing interested MSPE students with a broader ME background to open up additional career paths beyond the Motorsports sector. Interested students typically apply as an "internal MSPE candidate" by at least the beginning of their junior year. A cumulative GPA of at least a 3.2 is required to pursue the Dual Degree.

Complete details of the combined B.S.MSPE/B.S.ME program can be found on the Web.

A combined B.S.MSPE/M.S.ME program is available for outstanding Motorsports Engineering undergraduate students. This program is anticipated to take approximately five years to complete (with the M.S.ME non-thesis option) and result in receiving both the B.S.MSPE and M.S.ME degrees.

The B.S.MSPE/M.S.ME program is a mechanism for:

A. Providing a seamless transition from the B.S.MSPE to the M.S.ME program.
B. Participating in a directed project in their area of interest.
C. Stimulating interest in graduate study and research/academic careers.
D. Allowing for special recognition of high levels of academic achievement.

The B.S.MSPE/M.S.ME program requires students to take 12 hours of graduate coursework toward their B.S.MSPE technical elective requirement. This same 12 hours likewise count toward the M.S.ME degree. Interested students typically apply as an "internal ME applicant" in the second half of their junior year after completion of 81 hours of coursework in the undergraduate program with a cumulative undergraduate GPA of 3.2 or higher. If a GPA of 3.0 has been maintained and grades of "B" or better are received in the first two graduate courses (typically in the seventh semester), the student will be asked to formally apply to the Purdue Graduate School at the beginning of his or her eighth semester of the senior year.

Complete details of the combined B.S.ME/M.S.ME program can be found on the Web. Questions about this information should be emailed to MEgradoffice@purdue.edu.

School of Mechanical Engineering

Mechanical Engineering Major Change (CODO) Requirements

**Degree Requirements**

**128 Credits Required**

Motorsports Engineering Major Requirements (66 credits)

Motorsports Engineering Major Courses (32 credits)
- MSPE 29000 - Motorsports Engineering Seminar Credits: 1.00
- MSPE 29700 - Computer Model For Motorsports Credits: 1.00
- MSPE 29701 - Computer Modeling For Motorsports Credits: 2.00
- MSPE 29800 - Programming And Computer Modeling For Motorsports Credits: 2.00
- MSPE 31700 - Motorsports Practicum II Credits: 1.00
- MSPE 32000 - Motorsports Design I Credits: 3.00
- MSPE 35000 - Computer Aided Design And Manufacturing Credits: 3.00
- MSPE 41400 - Motorsports Design II Credits: 3.00
- MSPE 41700 - Motorsports Practicum III Credits: 1.00
- MSPE 42600 - Internal Combustion Engines Credits: 3.00
- MSPE 47200 - Vehicle Dynamics Credits: 3.00
- MSPE 48200 - Motorsports Aerodynamics Credits: 3.00

**Motorsports Engineering Selectives - Credit Hours: 6.00**

- MSPE Elective I - Credit Hours: 3.00
- MSPE Elective II - Credit Hours: 3.00

**Note:** Any MSPE 40000, 50000 Level Course (Includes any MSPE Course not utilized to fulfill Major Course requirements.)

**Mechanical Engineering Major Courses (29 credits)**

- ME 20000 - Thermodynamics I Credits: 3.00 ♦
- ME 27000 - Basic Mechanics I Credits: 3.00 ♦
- ME 27400 - Basic Mechanics II Credits: 3.00
- ME 30800 - Fluid Mechanics Credits: 3.00
- ME 30801 - Fluid Mechanics Laboratory Credits: 1.00
- ME 32300 - Mechanics Of Materials Credits: 3.00
- ME 32301 - Mechanics Of Materials Laboratory Credits: 1.00
- ME 36500 - Measurement And Control Systems I Credits: 3.00
- ME 37500 - Measurement And Control Systems II Credits: 3.00

**Motorsports Engineering or Mechanical Engineering Selective – Credit Hours: 6.00**

- MSPE or ME Selective I - Credit Hours: 3.00
- MSPE or ME Selective II – Credit Hours: 3.00

**Note:** Any MSPE 40000, MSPE 50000 or ME 30000, 40000, 50000 Level Course (Includes any MSPE or ME Course not used to fulfill Major Course requirements.)

**Other Departmental Course Requirements (33 credits)**

**Other Departmental Required Courses (21 credits)**

- ECE 20001 - Electrical Engineering Fundamentals I Credits: 3.00 ♦
- ECE 20007 - Electrical Engineering Fundamentals I Lab Credits: 1.00 ♦
- MA 26100 - Multivariate Calculus Credits: 4.00
- MA 26200 - Linear Algebra And Differential Equations Credits: 4.00
  **Economics Selective** - Credit Hours: 3.00 (satisfies Human Cultures: Behavioral/Social Science for core)
- ECON 25100 - Microeconomics Credits: 3.00 or
- ECON 25200 - Macroeconomics Credits: 3.00
Advances Math Selective - Credit Hours: 3.00
World & Cultural Affairs (satisfies Human Cultures: Humanities for core) - Credit Hours: 3.00

General Education Requirement (12 credits)

- General Education I - Credit Hours: 3.00
- General Education II - Credit Hours: 3.00
- General Education III - Credit Hours: 3.00
- General Education IV - Credit Hours: 3.00

See supplemental information for specific requirements and list of courses

Supplemental List

Click here for Mechanical Engineering Supplemental Information

Grade Requirements

- MA courses must have C- or above

GPA Requirements

- 2.0 Graduation GPA required for Bachelor of Science degree
- Minimum 2.0 ME Core GPA
  - ME Core courses for GPA include: ME 20000, 26300, 27000, 27400, 29000, 30800, 30801, 31500, 32300, 35400, 35401, 36500, 37500, 46300. In addition to the ME core classes, the following courses are also included the ME core GPA: MA 26100, 26200 (26500/26600), 30300; PHYS 24100/27200; ECE 20001, 20007; and MSE 23000.

Pass/No Pass Policy

- All courses to satisfy the Bachelors of Science in Mechanical Engineering degree (128 credit hours) must be taken for a letter grade. Pass/No pass grades will not be accepted to meet degree requirements.

University Requirements

University Core Requirements

For a complete listing of University Core Course Selectives, visit the Provost's Website.

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

Civics Literacy Proficiency Requirement

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

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

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

Upper Level Requirement

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

Sample First-Year Engineering Plan of Study

Fall 1st Year

• Requirement #1 - Intro to Engineering - Credit Hours: 2.00-4.00
• Requirement #3 - Calculus I - Credit Hours: 4.00-5.00
• Requirement #5 - Chemistry - Credit Hours: 4.00-6.00
• Requirement #8 - Written or Oral Communication - Credit Hours: 3.00-4.00

13-19 Credits

Spring 1st Year

• Requirement #2 - Intro to Engineering II - Credit Hours: 2.00-4.00
• Requirement #4 - Calculus II - Credit Hours: 4.00-5.00
• Requirement #6 - Physics - Credit Hours: 4.00
• Requirement #7 - First-Year Engineering Selective - Credit Hours: 3.00-4.00
• Requirement #8 - Written or Oral Communication - Credit Hours: 3.00-4.00

16-21 Credits

Engineering Requirements for First Year (29-39 credits)
All courses in this area must have a C- or higher

**Requirement #1 - Intro to Engineering I** (2-4 credits)
- ENGR 13100 - Transforming Ideas To Innovation I **Credits:** 2.00
  OR
- ENGR 16100 - Honors Introduction To Innovation And The Physical Science Of Engineering Design I **Credits:** 4.00
  OR
- EPCS 11100 - First Year Participation In EPICS I **Credits:** 1.00
  OR
- EPCS 12100 - First Year Participation In EPICS II **Credits:** 1.00
  OR
- VIP 17911 - First Year Participation In Vertically Integrated Projects (VIP) I **Credits:** 1.00
  OR
- VIP 17912 - First Year Participation In Vertically Integrated Projects (VIP) II **Credits:** 1.00
  OR
- ENGR 13000 - Transforming Ideas To Innovation, EPICS/VIP

**Requirement #2 - Intro to Engineering II** (2-4 credits)
- ENGR 13000 - Transforming Ideas To Innovation, EPICS/VIP **Credits:** 4.00 or
- ENGR 13200 - Transforming Ideas To Innovation II **Credits:** 2.00 or
- ENGR 13300 - Transforming Ideas To Innovation II, EPICS/VIP **Credits:** 2.00 or
- ENGR 16200 - Honors Introduction To Innovation And The Physical Science Of Engineering Design II **Credits:** 4.00

**Requirement #3 - Calculus I** (4-5 credits) - satisfies Quantitative Reasoning for core
- MA 16100 - Plane Analytic Geometry And Calculus I **Credits:** 5.00 or
- MA 16500 - Analytic Geometry And Calculus I **Credits:** 4.00

**Requirement #4: Calculus II** (4-5 credits)
- MA 16200 - Plane Analytic Geometry And Calculus II **Credits:** 5.00 or
- MA 16600 - Analytic Geometry And Calculus II **Credits:** 4.00

**Requirement #5: Chemistry** (4-6 credits) - satisfies Science #1 for core
- CHM 11500 - General Chemistry **Credits:** 4.00 or
- CHM 11510 - General Chemistry I **Credits:** 3.00
  AND
- CHM 11520 - General Chemistry I - Laboratory **Credits:** 1.00 or
- CHM 11530 - General Chemistry I - Virtual Laboratory **Credits:** 1.00 or
- CHM 11100 - General Chemistry **Credits:** 3.00 and
- CHM 11200 - General Chemistry **Credits:** 3.00

**Requirement #6: Physics** (4 credits) - satisfies Science #2 for core
- PHYS 17200 - Modern Mechanics **Credits:** 4.00
  OR
  ENGR 16100 - Honors Introduction To Innovation And The Physical Science Of Engineering Design I and
  ENGR 16200 - Honors Introduction To Innovation And The Physical Science Of Engineering Design II

**Requirement #7: First-Year Engineering Selective** (3-4 credits)
- CHM 11600 - General Chemistry **Credits:** 4.00 or
- CS 15900 - C Programming **Credits:** 3.00 or
- BIOL 11000 - Fundamentals Of Biology I **Credits:** 4.00 or
- BIOL 11100 - Fundamentals Of Biology II **Credits:** 4.00
Requirement #8: Written and Oral Communication (6-7 credits) - could satisfy Written Communication, Information Literacy or Oral Communication for core

- Written Communication - Credit Hours: 3.00-4.00 (satisfies Written Communication for core)
- Oral Communication - Credit Hours: 3.00 (satisfies Oral Communication for core)

OR

- SCLA 11000 - Language And Cultural Exchange I: Self In Context Credits: 3.00
- SCLA 11100 - Language And Cultural Exchange II: Texts And Contexts Credits: 3.00

Motorsports Engineering Program Requirements

Milestone One: After the completion of two semesters, students should have met a 3.2 GPA/EAI or a holistic review for admission to Mechanical Engineering. See notes section for more information

Fall 2nd Year

- ME 20000 - Thermodynamics I Credits: 3.00 ♦
- ME 27000 - Basic Mechanics I Credits: 3.00 ♦
- MA 26100 - Multivariate Calculus Credits: 4.00
- MSPE 29000 - Motorsports Engineering Seminar Credits: 1.00
- MSPE 29800 - Programming And Computer Modeling For Motorsports Credits: 2.00
- General Education II - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- ECE 20001 - Electrical Engineering Fundamentals I Credits: 3.00 ♦
- ECE 20007 - Electrical Engineering Fundamentals I Lab Credits: 1.00 ♦
- ME 27400 - Basic Mechanics II Credits: 3.00
- MSPE 29700 - Computer Model For Motorsports Credits: 1.00
- MSPE 29701 - Computer Modeling For Motorsports Credits: 2.00
- MA 26200 - Linear Algebra And Differential Equations Credits: 4.00
- World Cultural Elective - Credit Hours: 3.00

17 Credits

Fall 3rd Year

- ME 30800 - Fluid Mechanics Credits: 3.00
- ME 32300 - Mechanics Of Materials Credits: 3.00
- ME 32301 - Mechanics Of Materials Laboratory Credits: 1.00
- ME 36500 - Measurement And Control Systems I Credits: 3.00
• MSPE 35000 - Computer Aided Design And Manufacturing **Credits:** 3.00
• MSPE 47200 - Vehicle Dynamics **Credits:** 3.00

16 Credits

**Spring 3rd Year**

• ME 30801 - Fluid Mechanics Laboratory **Credits:** 1.00
• ME 37500 - Measurement And Control Systems II **Credits:** 3.00
• MSPE 31700 - Motorsports Practicum II **Credits:** 1.00
• MSPE 32000 - Motorsports Design I **Credits:** 3.00
• Advanced Math Selective - Credit Hours: 3.00
• Economics Selective - Credit Hours: 3.00
• General Education Selective I - Credit Hours: 3.00

17 Credits

**Fall 4th Year**

• MSPE 41700 - Motorsports Practicum III **Credits:** 1.00
• MSPE 42600 - Internal Combustion Engines **Credits:** 3.00
• MSPE 48200 - Motorsports Aerodynamics **Credits:** 3.00
• MSPE Technical Elective I - Credit Hours: 3.00
• MSPE or ME Technical Elective I - Credit Hours: 3.00
• General Elective III - Credit Hours: 3.00

16 Credits

**Spring 4th Year**

• MSPE 41400 - Motorsports Design II **Credits:** 3.00
• MSPE Technical Elective II - Credit Hours: 3.00
• MSPE or ME Technical Elective II - Credit Hours: 3.00
• General Education Elective IV - Credit Hours: 3.00

12 Credits

**Critical Course**

The ♦ course is considered critical.

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

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

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

Certificate

Extensive Industry Co-op Certificate

About the Certificate

The extensive Industry Co-op Certificate is awarded to students who have gained 18 months or more of full-time work experience related to their academic field of study. Students will register for a cooperative education course during each academic term for which they are engaged in full-time work with an employer. Students are required to complete five work terms. Students should have a progressive experience, with multiple work terms occurring at the same employer. Students may change employers one time. Students must complete all necessary requirements specific to their academic discipline.

Course Requirement

Five sequential courses with the same prefix must be taken to complete the Extensive Industry Co-op Program Certificate.

College of Agriculture

- AGEC 29199 - Cooperative Experience I Credits: 0.00
- AGEC 29299 - Cooperative Experience II Credits: 0.00
- AGEC 39399 - Cooperative Experience III Credits: 0.00
- AGEC 39499 - Extensive Cooperative Experience IV Credits: 0.00
- AGEC 39599 - Extensive Cooperative Experience V Credits: 0.00
- AGR 29199 - Cooperative Experience I Credits: 0.00
- AGR 29299 - Cooperative Experience II Credits: 0.00
- AGR 39399 - Cooperative Experience III Credits: 0.00
- AGR 39499 - Extensive Cooperative Experience IV Credits: 0.00
- AGR 39599 - Extensive Cooperative Experience V Credits: 0.00
- AGRY 29199 - Cooperative Experience I Credits: 0.00
- AGRY 29299 - Cooperative Experience II Credits: 0.00
- AGRY 39399 - Cooperative Experience III Credits: 0.00
- AGRY 39499 - Extensive Cooperative Experience IV Credits: 0.00
- AGRY 39599 - Extensive Cooperative Experience V Credits: 0.00
- ASM 29199 - Cooperative Experience I Credits: 0.00
- ASM 29299 - Cooperative Experience II Credits: 0.00
- ASM 39399 - Cooperative Experience III Credits: 0.00
- ASM 39499 - Extensive Cooperative Experience IV Credits: 0.00
• ASM 39599 - Extensive Cooperative Experience V Credits: 0.00
• ENTM 29199 - Cooperative Experience I Credits: 0.00
• ENTM 29299 - Cooperative Experience II Credits: 0.00
• ENTM 39399 - Cooperative Experience III Credits: 0.00
• ENTM 39499 - Extensive Cooperative Experience IV Credits: 0.00
• ENTM 39599 - Extensive Cooperative Experience V Credits: 0.00
• FNR 29199 - Cooperative Experience I Credits: 0.00
• FNR 29299 - Cooperative Experience II Credits: 0.00
• FNR 39399 - Cooperative Experience III Credits: 0.00
• FNR 39499 - Extensive Cooperative Experience IV Credits: 0.00
• FNR 39599 - Extensive Cooperative Experience V Credits: 0.00
• FS 29199 - Cooperative Experience I Credits: 0.00
• FS 29299 - Cooperative Experience II Credits: 0.00
• FS 39399 - Cooperative Experience III Credits: 0.00
• FS 39499 - Extensive Cooperative Experience IV Credits: 0.00
• FS 39599 - Extensive Cooperative Experience V Credits: 0.00
• HORT 29199 - Cooperative Experience I Credits: 0.00
• HORT 29299 - Cooperative Experience II Credits: 0.00
• HORT 39399 - Cooperative Experience III Credits: 0.00
• HORT 39499 - Extensive Cooperative Experience IV Credits: 0.00
• HORT 39599 - Extensive Cooperative Experience V Credits: 0.00
• LA 29199 - Cooperative Experience I Credits: 0.00
• LA 29299 - Cooperative Experience II Credits: 0.00
• LA 39399 - Cooperative Experience III Credits: 0.00
• LA 39499 - Extensive Cooperative Experience IV Credits: 0.00
• LA 39599 - Extensive Cooperative Experience V Credits: 0.00

College of Engineering

• AAE 29199 - Cooperative Experience I Credits: 0.00
• AAE 29299 - Cooperative Experience II Credits: 0.00
• AAE 39399 - Cooperative Experience III Credits: 0.00
• AAE 39499 - Extensive Cooperative Experience IV Credits: 0.00
• AAE 39599 - Extensive Cooperative Experience V Credits: 0.00
• ABE 29199 - Cooperative Experience I Credits: 0.00
• ABE 29299 - Cooperative Experience II Credits: 0.00
• ABE 39399 - Cooperative Experience III Credits: 0.00
• ABE 39499 - Extensive Cooperative Experience IV Credits: 0.00
• ABE 39599 - Extensive Cooperative Experience V Credits: 0.00
• BME 29199 - Cooperative Experience I Credits: 0.00
• BME 29299 - Cooperative Experience II Credits: 0.00
• BME 39399 - Cooperative Experience III Credits: 0.00
• BME 39499 - Extensive Cooperative Experience IV Credits: 0.00
• BME 39599 - Extensive Cooperative Experience V Credits: 0.00
• CE 29199 - Cooperative Experience I Credits: 0.00
• CE 29299 - Cooperative Experience II Credits: 0.00
• CE 39399 - Cooperative Experience III Credits: 0.00
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 39499</td>
<td>Extensive Cooperative Experience IV</td>
<td>0.00</td>
</tr>
<tr>
<td>CE 39599</td>
<td>Extensive Cooperative Experience V</td>
<td>0.00</td>
</tr>
<tr>
<td>CHE 29199</td>
<td>Cooperative Experience I</td>
<td>0.00</td>
</tr>
<tr>
<td>CHE 29299</td>
<td>Cooperative Experience II</td>
<td>0.00</td>
</tr>
<tr>
<td>CHE 39399</td>
<td>Cooperative Experience III</td>
<td>0.00</td>
</tr>
<tr>
<td>CHE 39499</td>
<td>Extensive Cooperative Experience IV</td>
<td>0.00</td>
</tr>
<tr>
<td>CHE 39599</td>
<td>Extensive Cooperative Experience V</td>
<td>0.00</td>
</tr>
<tr>
<td>ECE 29199</td>
<td>Cooperative Experience I</td>
<td>0.00</td>
</tr>
<tr>
<td>ECE 29299</td>
<td>Cooperative Experience II</td>
<td>0.00</td>
</tr>
<tr>
<td>ECE 39399</td>
<td>Cooperative Experience III</td>
<td>0.00</td>
</tr>
<tr>
<td>ECE 39499</td>
<td>Extensive Cooperative Experience IV</td>
<td>0.00</td>
</tr>
<tr>
<td>ECE 39599</td>
<td>Extensive Cooperative Experience V</td>
<td>0.00</td>
</tr>
<tr>
<td>EEE 29199</td>
<td>Cooperative Experience I</td>
<td>0.00</td>
</tr>
<tr>
<td>EEE 29299</td>
<td>Cooperative Experience II</td>
<td>0.00</td>
</tr>
<tr>
<td>EEE 39399</td>
<td>Cooperative Experience III</td>
<td>0.00</td>
</tr>
<tr>
<td>EEE 39499</td>
<td>Extensive Cooperative Experience IV</td>
<td>0.00</td>
</tr>
<tr>
<td>EEE 39599</td>
<td>Extensive Cooperative Experience V</td>
<td>0.00</td>
</tr>
<tr>
<td>ENGR 29199</td>
<td>Cooperative Experience I</td>
<td>0.00</td>
</tr>
<tr>
<td>ENGR 29299</td>
<td>Cooperative Experience II</td>
<td>0.00</td>
</tr>
<tr>
<td>ENGR 39399</td>
<td>Cooperative Experience III</td>
<td>0.00</td>
</tr>
<tr>
<td>ENGR 39499</td>
<td>Extensive Cooperative Experience IV</td>
<td>0.00</td>
</tr>
<tr>
<td>ENGR 39599</td>
<td>Extensive Cooperative Experience V</td>
<td>0.00</td>
</tr>
<tr>
<td>IDE 29199</td>
<td>Cooperative Experience I</td>
<td>0.00</td>
</tr>
<tr>
<td>IDE 29299</td>
<td>Cooperative Experience II</td>
<td>0.00</td>
</tr>
<tr>
<td>IDE 39399</td>
<td>Cooperative Experience III</td>
<td>0.00</td>
</tr>
<tr>
<td>IDE 39499</td>
<td>Extensive Cooperative Experience IV</td>
<td>0.00</td>
</tr>
<tr>
<td>IDE 39599</td>
<td>Extensive Cooperative Experience V</td>
<td>0.00</td>
</tr>
<tr>
<td>IE 29199</td>
<td>Cooperative Experience I</td>
<td>0.00</td>
</tr>
<tr>
<td>IE 29299</td>
<td>Cooperative Experience II</td>
<td>0.00</td>
</tr>
<tr>
<td>IE 39399</td>
<td>Cooperative Experience III</td>
<td>0.00</td>
</tr>
<tr>
<td>IE 39499</td>
<td>Extensive Cooperative Experience IV</td>
<td>0.00</td>
</tr>
<tr>
<td>IE 39599</td>
<td>Extensive Cooperative Experience V</td>
<td>0.00</td>
</tr>
<tr>
<td>ME 29199</td>
<td>Cooperative Experience I</td>
<td>0.00</td>
</tr>
<tr>
<td>ME 29299</td>
<td>Cooperative Experience II</td>
<td>0.00</td>
</tr>
<tr>
<td>ME 39399</td>
<td>Cooperative Experience III</td>
<td>0.00</td>
</tr>
<tr>
<td>ME 39499</td>
<td>Extensive Cooperative Experience IV</td>
<td>0.00</td>
</tr>
<tr>
<td>ME 39599</td>
<td>Extensive Cooperative Experience V</td>
<td>0.00</td>
</tr>
<tr>
<td>MSE 29199</td>
<td>Cooperative Experience I</td>
<td>0.00</td>
</tr>
<tr>
<td>MSE 29299</td>
<td>Cooperative Experience II</td>
<td>0.00</td>
</tr>
<tr>
<td>MSE 39399</td>
<td>Cooperative Experience III</td>
<td>0.00</td>
</tr>
<tr>
<td>MSE 39499</td>
<td>Extensive Cooperative Experience IV</td>
<td>0.00</td>
</tr>
<tr>
<td>MSE 39599</td>
<td>Extensive Cooperative Experience V</td>
<td>0.00</td>
</tr>
<tr>
<td>NUCL 29199</td>
<td>Cooperative Experience I</td>
<td>0.00</td>
</tr>
<tr>
<td>NUCL 29299</td>
<td>Cooperative Experience II</td>
<td>0.00</td>
</tr>
<tr>
<td>NUCL 39399</td>
<td>Cooperative Experience III</td>
<td>0.00</td>
</tr>
<tr>
<td>NUCL 39499</td>
<td>Extensive Cooperative Experience IV</td>
<td>0.00</td>
</tr>
<tr>
<td>NUCL 39599</td>
<td>Extensive Cooperative Experience V</td>
<td>0.00</td>
</tr>
</tbody>
</table>
College of Health and Human Sciences

- NUR 29199 - Cooperative Experience I  Credits: 0.00
- NUR 29299 - Cooperative Experience II  Credits: 0.00
- NUR 39399 - Cooperative Experience III  Credits: 0.00
- NUR 39499 - Extensive Cooperative Experience IV  Credits: 0.00
- NUR 39599 - Extensive Cooperative Experience V  Credits: 0.00
- PSY 29199 - Cooperative Experience I  Credits: 0.00
- PSY 29299 - Cooperative Experience II  Credits: 0.00
- PSY 39399 - Cooperative Experience III  Credits: 0.00
- PSY 39499 - Extensive Cooperative Experience IV  Credits: 0.00
- PSY 39599 - Extensive Cooperative Experience V  Credits: 0.00

College of Liberal Arts

- AD 29199 - Cooperative Experience I  Credits: 0.00
- AD 29299 - Cooperative Experience II  Credits: 0.00
- AD 39399 - Cooperative Experience III  Credits: 0.00
- AD 39499 - Extensive Cooperative Experience IV  Credits: 0.00
- AD 39599 - Extensive Cooperative Experience V  Credits: 0.00
- COM 29199 - Cooperative Experience I  Credits: 0.00
- COM 29299 - Cooperative Experience II  Credits: 0.00
- COM 39399 - Cooperative Experience III  Credits: 0.00
- COM 39499 - Extensive Cooperative Experience IV  Credits: 0.00
- COM 39599 - Extensive Cooperative Experience V  Credits: 0.00

School of Management

- ECON 29199 - Cooperative Experience I  Credits: 0.00
- ECON 29299 - Cooperative Experience II  Credits: 0.00
- ECON 39399 - Cooperative Experience III  Credits: 0.00
- ECON 39499 - Extensive Cooperative Experience IV  Credits: 0.00
- ECON 39599 - Extensive Cooperative Experience V  Credits: 0.00
- MGMT 29199 - Cooperative Experience I  Credits: 0.00
- MGMT 29299 - Cooperative Experience II  Credits: 0.00
- MGMT 39399 - Cooperative Experience III  Credits: 0.00
- MGMT 39499 - Extensive Cooperative Experience IV  Credits: 0.00
- MGMT 39599 - Extensive Cooperative Experience V  Credits: 0.00

College of Pharmacy

- PHRM 29199 - Cooperative Experience I  Credits: 0.00
- PHRM 29299 - Cooperative Experience II  Credits: 0.00
- PHRM 39399 - Cooperative Experience III  Credits: 0.00
- PHRM 39499 - Extensive Cooperative Experience IV  Credits: 0.00
- PHRM 39599 - Extensive Cooperative Experience V  Credits: 0.00
Polytechnic Institute

- TECH 29199 - Cooperative Experience I Credits: 0.00
- TECH 29299 - Cooperative Experience II Credits: 0.00
- TECH 39399 - Cooperative Experience III Credits: 0.00
- TECH 39499 - Extensive Cooperative Experience IV Credits: 0.00
- TECH 39599 - Extensive Cooperative Experience V Credits: 0.00

College of Science

- CHM 29199 - Cooperative Experience I Credits: 0.00
- CHM 29299 - Cooperative Experience II Credits: 0.00
- CHM 39399 - Cooperative Experience III Credits: 0.00
- CHM 39499 - Extensive Cooperative Experience IV Credits: 0.00
- CHM 39599 - Extensive Cooperative Experience V Credits: 0.00
- CS 29199 - Cooperative Experience I Credits: 0.00
- CS 29299 - Cooperative Experience II Credits: 0.00
- CS 39399 - Cooperative Experience III Credits: 0.00
- CS 39499 - Extensive Cooperative Experience IV Credits: 0.00
- CS 39599 - Extensive Cooperative Experience V Credits: 0.00
- MA 29199 - Cooperative Experience I Credits: 0.00
- MA 29299 - Cooperative Experience II Credits: 0.00
- MA 39399 - Cooperative Experience III Credits: 0.00
- MA 39499 - Extensive Cooperative Experience IV Credits: 0.00
- MA 39599 - Extensive Cooperative Experience V Credits: 0.00
- PHYS 29199 - Cooperative Experience I Credits: 0.00
- PHYS 29299 - Cooperative Experience II Credits: 0.00
- PHYS 39399 - Cooperative Experience III Credits: 0.00
- PHYS 39499 - Extensive Cooperative Experience IV Credits: 0.00
- PHYS 39599 - Extensive Cooperative Experience V Credits: 0.00
- SCI 29199 - Cooperative Experience I Credits: 0.00
- SCI 29299 - Cooperative Experience II Credits: 0.00
- SCI 39399 - Cooperative Experience III Credits: 0.00
- SCI 39499 - Extensive Cooperative Experience IV Credits: 0.00
- SCI 39599 - Extensive Cooperative Experience V Credits: 0.00
- STAT 29199 - Cooperative Experience I Credits: 0.00
- STAT 29299 - Cooperative Experience II Credits: 0.00
- STAT 39399 - Cooperative Experience III Credits: 0.00
- STAT 39499 - Extensive Cooperative Experience IV Credits: 0.00
- STAT 39599 - Extensive Cooperative Experience V Credits: 0.00

Additional Courses:

Any course below can substitute for a co-op course in a sequence above.

- Course Number 39699 (may choose one)
- AAE 39699 - Professional Practice Internship Credits: 0.00
• ABE 39699 - Professional Practice Internship Credits: 0.00
• BIOL 39699 - Professional Practice Internship Credits: 0.00
• BME 39699 - Professional Practice Internship Credits: 0.00
• CE 39699 - Professional Practice Internship Credits: 0.00
• CHE 39699 - Professional Practice Internship Credits: 0.00
• CHM 39699 - Professional Practice Internship Credits: 0.00
• ECE 39699 - Professional Practice Internship Credits: 0.00
• EEE 39699 - Professional Practice Internship Credits: 0.00
• ENGR 39699 - Professional Practice Internship Credits: 0.00
• ENTR 39699 - Internship And Research Experiences Credits: 0.00
• IDE 39699 - Professional Practice Internship Credits: 0.00
• IE 39699 - Professional Practice Internship Credits: 0.00
• ME 39699 - Professional Practice Internship Credits: 0.00
• MSE 39699 - Professional Practice Internship Credits: 0.00
• NUCL 39699 - Professional Practice Internship Credits: 0.00
• NUR 39699 - Professional Practice Internship Credits: 0.00
• TECH 39699 - Professional Practice Internship Credits: 0.00 to 3.00
  Course Number 39799
• ENGR 39799 - GEARE Domestic Internship Credits: 0.00
  Course Number 39899
• ENGR 39899 - GEARE Global Internship Credits: 0.00

Disclaimer

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

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

Human Resource Management Certificate (Purdue in Indianapolis and Statewide Only)

Required Courses (18 Credits)

A minimum grade of C is required in all courses.

Phase 1: Foundation (9 Credits)

• TLI 11200 - Foundations Of Organizational Leadership Credits: 3.00
• TLI 15200 - Business Principles For Organizational Leadership Credits: 3.00
• OLS 37500 - Training Methods Credits: 3.00

Phase 2: Broadening (9 Credits)
- OLS 37600 - Human Resource Issues **Credits:** 3.00
- OLS 38600 - Leadership For Organizational Change **Credits:** 3.00
- OLS 37800 - Labor And Management Relations **Credits:** 3.00

### Industry Co-op Certificate

#### About the Certificate

The Industry Co-op Certificate is awarded to students who have gained about one year of full-time work (at least one fall/spring semester) experience related to their academic field of study. Students will register for a cooperative education course during each academic term for which they are engaged in full-time work with an employer. Students are required to complete a minimum of three work terms. Students should have a progressive experience, with a minimum of two work terms occurring with the same employer. Students must complete all necessary requirements specific to their academic discipline.

#### Course Requirements (3 course sequence)

Three sequential courses with the same prefix must be taken to complete the Industry Co-op Program Certificate.

**College of Agriculture**
- AGEC 29199 - Cooperative Experience I **Credits:** 0.00
- AGEC 29299 - Cooperative Experience II **Credits:** 0.00
- AGEC 39399 - Cooperative Experience III **Credits:** 0.00
- AGR 29199 - Cooperative Experience I **Credits:** 0.00
- AGR 29299 - Cooperative Experience II **Credits:** 0.00
- AGR 39399 - Cooperative Experience III **Credits:** 0.00
- AGRY 29199 - Cooperative Experience I **Credits:** 0.00
- AGRY 29299 - Cooperative Experience II **Credits:** 0.00
- AGRY 39399 - Cooperative Experience III **Credits:** 0.00
- ASM 29199 - Cooperative Experience I **Credits:** 0.00
- ASM 29299 - Cooperative Experience II **Credits:** 0.00
- ASM 39399 - Cooperative Experience III **Credits:** 0.00
- ENTM 29199 - Cooperative Experience I **Credits:** 0.00
- ENTM 29299 - Cooperative Experience II **Credits:** 0.00
- ENTM 39399 - Cooperative Experience III **Credits:** 0.00
- FNR 29199 - Cooperative Experience I **Credits:** 0.00
- FNR 29299 - Cooperative Experience II **Credits:** 0.00
- FNR 39399 - Cooperative Experience III **Credits:** 0.00
- FS 29199 - Cooperative Experience I **Credits:** 0.00
- FS 29299 - Cooperative Experience II **Credits:** 0.00
- FS 39399 - Cooperative Experience III **Credits:** 0.00
- HORT 29199 - Cooperative Experience I **Credits:** 0.00
- HORT 29299 - Cooperative Experience II **Credits:** 0.00
- HORT 39399 - Cooperative Experience III **Credits:** 0.00
- LA 29199 - Cooperative Experience I **Credits:** 0.00
- LA 29299 - Cooperative Experience II **Credits:** 0.00
- LA 39399 - Cooperative Experience III **Credits:** 0.00

**College of Engineering**
- AAE 29199 - Cooperative Experience I Credits: 0.00
- AAE 29299 - Cooperative Experience II Credits: 0.00
- AAE 39399 - Cooperative Experience III Credits: 0.00
- ABE 29199 - Cooperative Experience I Credits: 0.00
- ABE 29299 - Cooperative Experience II Credits: 0.00
- ABE 39399 - Cooperative Experience III Credits: 0.00
- BME 29199 - Cooperative Experience I Credits: 0.00
- BME 29299 - Cooperative Experience II Credits: 0.00
- BME 39399 - Cooperative Experience III Credits: 0.00
- CE 29199 - Cooperative Experience I Credits: 0.00
- CE 29299 - Cooperative Experience II Credits: 0.00
- CE 39399 - Cooperative Experience III Credits: 0.00
- CHE 29199 - Cooperative Experience I Credits: 0.00
- CHE 29299 - Cooperative Experience II Credits: 0.00
- CHE 39399 - Cooperative Experience III Credits: 0.00
- ECE 29199 - Cooperative Experience I Credits: 0.00
- ECE 29299 - Cooperative Experience II Credits: 0.00
- ECE 39399 - Cooperative Experience III Credits: 0.00
- EEE 29199 - Cooperative Experience I Credits: 0.00
- EEE 29299 - Cooperative Experience II Credits: 0.00
- EEE 39399 - Cooperative Experience III Credits: 0.00
- ENGR 29199 - Cooperative Experience I Credits: 0.00
- ENGR 29299 - Cooperative Experience II Credits: 0.00
- ENGR 39399 - Cooperative Experience III Credits: 0.00
- IDE 29199 - Cooperative Experience I Credits: 0.00
- IDE 29299 - Cooperative Experience II Credits: 0.00
- IDE 39399 - Cooperative Experience III Credits: 0.00
- IE 29199 - Cooperative Experience I Credits: 0.00
- IE 29299 - Cooperative Experience II Credits: 0.00
- IE 39399 - Cooperative Experience III Credits: 0.00
- ME 29199 - Cooperative Experience I Credits: 0.00
- ME 29299 - Cooperative Experience II Credits: 0.00
- ME 39399 - Cooperative Experience III Credits: 0.00
- MSE 29199 - Cooperative Experience I Credits: 0.00
- MSE 29299 - Cooperative Experience II Credits: 0.00
- MSE 39399 - Cooperative Experience III Credits: 0.00
- NUCL 29199 - Cooperative Experience I Credits: 0.00
- NUCL 29299 - Cooperative Experience II Credits: 0.00
- NUCL 39399 - Cooperative Experience III Credits: 0.00
- NUR 29199 - Cooperative Experience I Credits: 0.00
- NUR 29299 - Cooperative Experience II Credits: 0.00
- NUR 39399 - Cooperative Experience III Credits: 0.00
- PSY 29199 - Cooperative Experience I Credits: 0.00
- PSY 29299 - Cooperative Experience II Credits: 0.00
- PSY 39399 - Cooperative Experience III Credits: 0.00
- AD 29199 - Cooperative Experience I Credits: 0.00

College of Health and Human Sciences
- NUR 29199 - Cooperative Experience I Credits: 0.00
- NUR 29299 - Cooperative Experience II Credits: 0.00
- NUR 39399 - Cooperative Experience III Credits: 0.00
- PSY 29199 - Cooperative Experience I Credits: 0.00
- PSY 29299 - Cooperative Experience II Credits: 0.00
- PSY 39399 - Cooperative Experience III Credits: 0.00

College of Liberal Arts
- AD 29199 - Cooperative Experience I Credits: 0.00
- AD 29299 - Cooperative Experience II Credits: 0.00
- AD 39399 - Cooperative Experience III Credits: 0.00
- COM 29199 - Cooperative Experience I Credits: 0.00
- COM 29299 - Cooperative Experience II Credits: 0.00
- COM 39399 - Cooperative Experience III Credits: 0.00

School of Management
- ECON 29199 - Cooperative Experience I Credits: 0.00
- ECON 29299 - Cooperative Experience II Credits: 0.00
- ECON 39399 - Cooperative Experience III Credits: 0.00
- MGMT 29199 - Cooperative Experience I Credits: 0.00
- MGMT 29299 - Cooperative Experience II Credits: 0.00
- MGMT 39399 - Cooperative Experience III Credits: 0.00

College of Pharmacy
- PHRM 29199 - Cooperative Experience I Credits: 0.00
- PHRM 29299 - Cooperative Experience II Credits: 0.00
- PHRM 39399 - Cooperative Experience III Credits: 0.00

Polytechnic Institute
- TECH 29199 - Cooperative Experience I Credits: 0.00
- TECH 29299 - Cooperative Experience II Credits: 0.00
- TECH 39399 - Cooperative Experience III Credits: 0.00

College of Science
- CHM 29199 - Cooperative Experience I Credits: 0.00
- CHM 29299 - Cooperative Experience II Credits: 0.00
- CHM 39399 - Cooperative Experience III Credits: 0.00
- CS 29199 - Cooperative Experience I Credits: 0.00
- CS 29299 - Cooperative Experience II Credits: 0.00
- CS 39399 - Cooperative Experience III Credits: 0.00
- MA 29199 - Cooperative Experience I Credits: 0.00
- MA 29299 - Cooperative Experience II Credits: 0.00
- MA 39399 - Cooperative Experience III Credits: 0.00
- PHYS 29199 - Cooperative Experience I Credits: 0.00
- PHYS 29299 - Cooperative Experience II Credits: 0.00
- PHYS 39399 - Cooperative Experience III Credits: 0.00
- SCI 29199 - Cooperative Experience I Credits: 0.00
- SCI 29299 - Cooperative Experience II Credits: 0.00
- SCI 39399 - Cooperative Experience III Credits: 0.00
- STAT 29199 - Cooperative Experience I Credits: 0.00
- STAT 29299 - Cooperative Experience II Credits: 0.00
- STAT 39399 - Cooperative Experience III Credits: 0.00

Additional Courses:

Any course below can substitute for a co-op course in a sequence above.

Course Number 39699 (may choose one)
- AAE 39699 - Professional Practice Internship Credits: 0.00
- ABE 39699 - Professional Practice Internship Credits: 0.00
- BIOL 39699 - Professional Practice Internship Credits: 0.00
• BME 39699 - Professional Practice Internship Credits: 0.00
• CE 39699 - Professional Practice Internship Credits: 0.00
• CHE 39699 - Professional Practice Internship Credits: 0.00
• CHM 39699 - Professional Practice Internship Credits: 0.00
• ECE 39699 - Professional Practice Internship Credits: 0.00
• EEE 39699 - Professional Practice Internship Credits: 0.00
• ENGR 39699 - Professional Practice Internship Credits: 0.00
• ENTR 39699 - Internship And Research Experiences Credits: 0.00
• IDE 39699 - Professional Practice Internship Credits: 0.00
• IE 39699 - Professional Practice Internship Credits: 0.00
• ME 39699 - Professional Practice Internship Credits: 0.00
• MSE 39699 - Professional Practice Internship Credits: 0.00
• NUCL 39699 - Professional Practice Internship Credits: 0.00
• NUR 39699 - Professional Practice Internship Credits: 0.00
• TECH 39699 - Professional Practice Internship Credits: 0.00 to 3.00
  Course Number 39799
  • ENGR 39799 - GEARE Domestic Internship Credits: 0.00
  Course Number 39899
  • ENGR 39899 - GEARE Global Internship Credits: 0.00

Disclaimer

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

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

Leadership Series Certificate (Purdue in Indianapolis and Statewide Only)

Required Courses (18 Credits)

A minimum grade of C required in all courses.

Phase 1: Foundation (6 Credits)

• TLI 11200 - Foundations Of Organizational Leadership Credits: 3.00
• TLI 15200 - Business Principles For Organizational Leadership Credits: 3.00

Phase 2: Broadening (6 Credits)

• TLI 21300 - Project Management Credits: 3.00
• OLS 38600 - Leadership For Organizational Change Credits: 3.00
Phase 3: Specialization (6 Credits)

Choose two of the following:

- IET 21400 - Introduction To Supply Chain Management Technology Credits: 3.00
- IET 23500 - Introduction To Systems Thinking And Process Improvement Credits: 3.00
- TLI 31400 - Leading Innovation In Organizations Credits: 3.00

Pharmaceutical Manufacturing Certificate

About the Certificate

The Certificate in Pharmaceutical Manufacturing (16 credits) is open to undergraduate students interested in careers in the pharmaceutical industry, especially within the manufacturing and supply chain sectors. The certificate is designed to supplement the baccalaureate plans of studies in different majors, including (but not limited to) engineering, computer science, chemistry, biology, pharmaceutical sciences, health sciences, technology, and business, chemistry, biology, pharmaceutical sciences, and health sciences. The pharmaceutical and life sciences industry talent needs are shifting driven by the new therapeutic product modalities (e.g., cell and gene therapies), digitization, and advanced data analytics. The technological disruptors are creating a skill mismatch between the traditional degrees associated with the pharmaceutical sector and future demands. By 2030 a projected 90,000 current jobs in the pharma industry will disappear due to automation while up to 120,000 of different jobs in high-skilled occupations will be created. Purdue University has gained an understanding of the industry's needs through collaboration with Work Force of the Future initiative, sponsored by the ISPE Global Pharmaceutical Manufacturing Leadership Forum, and partnerships with major regional life sciences industry employers such as Eli Lilly. While the degrees most associated with this sector (chemistry, chemical engineering, and pharmaceutical sciences) will continue to be valuable, the disciplines of data science, artificial intelligence, mechanical engineering, biomedical engineering, industrial engineering, as well as robotics and automation technologies will play significant roles within these organizations. Graduates of such programs currently have limited exposure to drug development and regulatory process required to ensure public safety. The undergraduate certificate provides broad technical exposure to these topics through relevant courses and experiential learning opportunities. Combined with their Purdue major plans of study, students who attain this certificate will be well positioned to advance into successful careers working in the global pharmaceutical industry. Clinical exposure to these topics through relevant courses and experiential learning opportunities. Combined with their Purdue major plans of study, students who attain this certificate will be well positioned to advance into successful careers working in the global pharmaceutical industry.

Requirements for the Certificate (10 credits)

Required Courses (1 credits)

At least 1 credit hour of orientation seminar from the course list below.

- ENGR 10301 - Introduction To Engineering In Practice Credits: 1.00

Experiential Learning in Pharmaceutical Manufacturing

- Full-time internship or co-op in areas relevant to pharmaceutical manufacturing.
  - A 10-week or more of full-time internship/co-op is equivalent to 4 credit hours.
  - Summer Undergraduate Research Fellowship or similar full-time undergraduate research internship is considered equivalent to 2 credit hours.
  - Relevant Study Abroad courses.
Technical Areas (9 credits)

At least 9 credit hours of courses in at least two out of four technical areas below (with at least 6 credit hours should be at 400-level or above.

Pharmaceutical Product Development and Regulatory Affairs

- ABE 51100 - Drug Development Credits: 3.00
- ABE 51200 - Good Regulatory Practices Credits: 3.00
- ABE 51300 - Quality Management, Audits, Inspections Credits: 3.00
- BIOL 39500 - Special Assignments Credits: 0.00 to 18.00
- BIOL 41500 - Introduction To Molecular Biology Credits: 3.00
- BIOL 41600 - Viruses And Viral Disease Credits: 3.00
- BIOL 51600 - Molecular Biology Of Cancer Credits: 3.00
- BIOL 53601 - Biological And Structural Aspects Of Drug Design And Action Credits: 3.00
- BIOL 53700 - Immunobiology Credits: 3.00
- BIOL 59500 - Special Assignments Credits: 0.00 to 18.00
  - Immunology, Cancer and Infectious Disease
  - Neural Mechanisms Health Disease
  - Pathways in Human Health and Disease
- BME 55600 - Introduction To Clinical Medicine For Engineering Solutions Credits: 3.00
- BME 56100 - Preclinical And Clinical Study Design Credits: 3.00
- BME 56200 - Regulatory Issues Surrounding Approval Of Biomedical Devices Credits: 3.00
- BME 56300 - Quality Systems For Regulatory Compliance Credits: 3.00
- BME 56400 - Ethical Engineering Of Medical Technologies Credits: 3.00
- CHE 59700 - Special Topics In Chemical Engineering Credits: 0.00 to 18.00
- HSOP 50100 - Food And Drug Law I Credits: 3.00
- IE 53000 - Quality Control Credits: 3.00
- IE 55800 - Safety Engineering Credits: 3.00
- IE 59000 - Topics In Industrial Engineering Credits: 1.00 to 6.00
- MCMP 54400 - Drug Classes And Mechanisms Credits: 3.00
- PHRM 46000 - Drug Discovery And Development I Credits: 3.00
- PHRM 46100 - Drug Discovery And Development II Credits: 3.00
- PHRM 82400 - Principles Of Pathophysiology And Drug Action Credits: 3.00
- PHRM 82800 - Dosage Forms I Credits: 3.00
- PHRM 82900 - Dosage Forms II Credits: 2.00
  Additional Approved Non-PWL Courses:
  - BIOT 102 Survey of Good Manufacturing Practices (Ivy Tech)
  - BIOT 103 Safety and Regulatory Compliance for Biotechnology (Ivy Tech)
  - BIOT 104 Quality Practices (Ivy Tech)
  - BIOT 105 Survey of Regulatory Affairs (Ivy Tech)
  - BME 57100 Drug Delivery (IUPUI)

Pharmaceutical Manufacturing Science and Technology (Materials, Measurement and Manufacturing)

- ABE 30300 - Physical Chemistry In Biological Engineering Credits: 3.00
• ABE 30400 - Biological Engineering Laboratory Credits: 3.00
• ABE 30700 - Momentum Transfer In Biological Engineering Credits: 3.00
• ABE 30800 - Heat And Mass Transfer In Biological Engineering Credits: 3.00
• ABE 45700 - Unit Operations In Biological Engineering Credits: 3.00
• ABE 46000 - Sensors And Process Control Credits: 3.00
• ABE 50501 - Particle, Powder, and Compact Characterization Credits: 2.00
• ABE 50502 - Particles, Powders, And Compact Characterization Laboratory Credits: 1.00
• ABE 55700 - Biological Engineering Design I Credits: 3.00
• ABE 55800 - Biological Engineering Design II Credits: 3.00
• BIOL 59500 - Special Assignments Credits: 0.00 to 18.00 - Methods and Measurements in Physical Biochem
• BME 47000 - Biomolecular Engineering Credits: 3.00
• CHE 53600 - Particulate Systems Credits: 3.00
• CHE 55100 - Principles Of Pharmaceutical Engineering Credits: 3.00
• CHE 55300 - Pharmaceutical Process, Development And Design Credits: 3.00
• CHE 55400 - Smart Manufacturing In Process Industries Credits: 3.00
• CHE 55500 - Computer Integrated Process Operations Credits: 3.00
• CHE 59700 - Special Topics In Chemical Engineering Credits: 0.00 to 18.00
  - Industrial Chemical Technology
  - Process Safety
• CHM 32100 - Analytical Chemistry I Credits: 4.00
• CHM 33900 - Biochemistry: A Molecular Approach Credits: 3.00
• CHM 42400 - Instrumental Analysis Credits: 4.00
• CHM 43300 - Biochemistry Credits: 3.00
• CHM 43800 - Introduction To Molecular Biotechnology Credits: 3.00
• IE 37000 - Manufacturing Processes I Credits: 3.00
• IE 57400 - Industrial Robotics And Flexible Assembly Credits: 3.00
• IE 59000 - Topics In Industrial Engineering Credits: 1.00 to 6.00
• ME 53101 - Particle, Powder, And Compact Characterization Credits: 2.00
• ME 53102 - Particle, Powder, And Compact Characterization Laboratory Credits: 1.00
• ME 59500 - Special-Topic Minicourses Credits: 1.00 - Powder Storage and Flow
• MGMT 45200 - Manufacturing Strategy And Process Innovation Credits: 3.00
• MSE 51200 - Powder Processing Credits: 3.00
• MSE 59700 - Selected Topics In Materials Engineering Credits: 0.00 to 18.00 - Lean Manufacturing
• PHRM 83600 - Biochemistry For Pharmaceutical Sciences II Credits: 2.00

Additional Approved non-PWL Courses:
• BIOT 110 Pharmaceutical Product Manufacturing (Ivy Tech)
• BME 38100 Implantable Materials And Biological Response (IUPUI)
• BME 38800 Applied Biomaterials (IUPUI)
• BME 46100 Transport Processes In Biomedical Engineering (IUPUI)
• BME 58200 Advanced Biomedical Polymers (IUPUI)

Data Analytics and Computing

• ABE 30100 - Modeling And Computational Tools In Biological Engineering Credits: 3.00
• BME 40100 - Mathematical & Computational Analysis Of Complex System Dynamics In Biology, Medicine, & Healthcare Credits: 3.00
• BME 50100 - Multivariate Analyses In Biostatistics Credits: 3.00
• CHE 32000 - Statistical Modeling And Quality Enhancement Credits: 3.00
• CNIT 48800 - Data Warehousing Credits: 3.00
• CNIT 57000 - IT Data Analytics Credits: 3.00
• CS 24200 - Introduction To Data Science Credits: 3.00
• ECE 20875 - Python For Data Science Credits: 3.00
• ECE 47300 - Introduction To Artificial Intelligence Credits: 3.00
• IE 33200 - Computing In Industrial Engineering Credits: 3.00
• IE 33500 - Operations Research - Optimization Credits: 3.00
• IE 33600 - Operations Research - Stochastic Models Credits: 3.00
• IE 48100 - Introduction To System Simulation Credits: 3.00
• IE 49000 - Special Topics In Industrial Engineering Credits: 1.00 to 6.00 - Machine Learning and Its Applications
• IE 53300 - Industrial Applications Of Statistics Credits: 3.00
• IE 53500 - Linear Programming Credits: 3.00
• IE 53600 - Stochastic Models In Operations Research I Credits: 3.00
• IE 58000 - Systems Simulation Credits: 3.00
• IE 59000 - Topics In Industrial Engineering Credits: 1.00 to 6.00
• ILS 10300 - Introduction To Data Lifecycle Management Credits: 1.00
• ILS 23000 - Data Science And Society: Ethical Legal Social Issues Credits: 3.00
• ILS 29500 - Special Topics In Information And Data Science Credits: 1.00 to 4.00
• MGMT 47500 - Machine Learning For Business Credits: 3.00
• MGMT 47900 - Data Visualization Credits: 2.00 or 3.00
• MGMT 48800 - Data-Driven Decisions In Digital Markets Credits: 3.00
• MGMT 54400 - Database Management Systems Credits: 3.00
• PHIL 20800 - Ethics Of Data Science Credits: 3.00
• POL 22800 - Data Science And Public Policy Credits: 3.00
• STAT 35500 - Statistics For Data Science Credits: 3.00

Supply Chain and Business Operations

• IE 49000 - Special Topics In Industrial Engineering Credits: 1.00 to 6.00 - Supply Chain Engineering
• IE 56800 - Production Management Control Credits: 3.00
• IE 57900 - Design And Control Of Production And Manufacturing Systems Credits: 3.00
• IE 58200 - Advanced Facilities Design Credits: 3.00
• MGMT 26100 - Introduction To Supply Chain Management Credits: 3.00
• MGMT 40500 - Six Sigma And Quality Analytics Credits: 3.00
• MGMT 46200 - Advanced Manufacturing Planning And Control Systems Credits: 3.00
• MGMT 46300 - Supply Chain Analytics Credits: 3.00
• MGMT 46400 - Logistics: Concepts And Models Credits: 3.00
• MGMT 46501 - Strategic Sourcing And Procurement Credits: 3.00
• MGMT 46600 - Project Management Credits: 3.00

Disclaimer

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

About the Program

The Certificate in Quantum Information Science & Technology (16 credits) will be jointly offered by the College of Science and the College of Engineering, and will be open to students in all undergraduate majors interested in careers in the field of quantum information science and technology. This certificate will give undergraduate students broad technical exposure to fundamental and applied topics related to QIST and is designed to supplement the baccalaureate plans of studies in different majors, including (but not limited to) engineering, computer science, physics, chemistry, math, and technology.

Requirements for the Certificate (16 credits)

Engineering Requirement (1 credit)

- ENGR 10301 - Introduction To Engineering In Practice Credits: 1.00 Title: Introduction to Nano- and Quantum Technology

QIST Introduction Courses (3-4 credits)

- PHYS 34400 - Introduction To Quantum Science Credits: 4.00

QIST Fundamental Courses (1-3 credits)

Choose one:

- ECE 39595 - Selected Topics In Electrical And Computer Engineering Credits: 1.00 to 5.00 Title: Fundamentals of Quantum Technology
- ECE 59500 - Selected Topics In Electrical Engineering Credits: 1.00 to 3.00 Titles: Applied Quantum Computing I - Fundamentals; Introduction to Quantum Science and Technology
- PHYS 36000 - Quantum Mechanics Credits: 3.00
- PHYS 46000 - Quantum Mechanics I Honors Credits: 3.00
- PHYS 55000 - Introduction To Quantum Mechanics Credits: 3.00

QIST Experience for Undergraduates Selectives (1-6 credits)

Choose 1-6 credits from courses below:

- PHYS 34000 - Modern Physics Laboratory Credits: 1.00
- Vertically Integrated Projects (VIP) courses or Research courses including relevant independent studies - Credit Hours: 1.00-6.00
- CHM 49900 - Special Assignments Credits: 1.00 to 5.00
- MA 29000 - Topics In Mathematics For Undergraduates Credits: 1.00 to 5.00
- MA 39000 - Topics In Mathematics For Undergraduates Credits: 1.00 to 5.00
- MA 49000 - Topics In Mathematics For Undergraduates Credits: 1.00 to 6.00
- PHYS 39000 - Special Assignments Credits: 1.00 to 4.00
- PHYS 49000 - Special Assignments Credits: 1.00 to 3.00
- PHYS 59000 - Reading And Research Credits: 1.00 to 3.00
- VIP 17910 - First-Year Participation In Vertically Integrated Projects (VIP) Lim Credits: 1.00
- VIP 17911 - First Year Participation In Vertically Integrated Projects (VIP) I Credits: 1.00
- VIP 17912 - First Year Participation In Vertically Integrated Projects (VIP) II Credits: 1.00
- VIP 17920 - First Year Participation In Vertically Integrated Projects (VIP) Credits: 2.00
- VIP 27910 - Sophomore Participation In Vertically Integrated Projects (VIP) Lim Credits: 1.00
- VIP 27920 - Sophomore Participation In Vertically Integrated Projects (VIP) Credits: 2.00
- VIP 27930 - Sophomore Participation In Vertically Integrated Projects (VIP) Ext Credits: 3.00
- VIP 37910 - Junior Participation In Vertically Integrated Projects (VIP) Lim Credits: 1.00
- VIP 37920 - Junior Participation In Vertically Integrated Projects (VIP) Credits: 2.00
- VIP 37930 - Junior Participation In Vertically Integrated Projects (VIP) Ext Credits: 3.00
- VIP 47910 - Senior Participation In Vertically Integrated Projects (VIP) Lim Credits: 1.00
- VIP 47920 - Senior Participation In Vertically Integrated Projects (VIP) Credits: 2.00
- VIP 47921 - Senior Design Participation In Vertically Integrated Projects (VIP) I Credits: 2.00
- VIP 47922 - Senior Design Participation In Vertically Integrated Projects (VIP) II Credits: 2.00
- VIP 47930 - Senior Participation In Vertically Integrated Projects (VIP) Ext Credits: 3.00
- Full-time internship relevant to technical areas of QIST. Summer or semester-long of full-time internship, co-op, or summer undergraduate research fellowship (SURF), or similar experience is considered equivalent to 6 credit hours. (See advisor for courses that qualify) - Credit Hours: 1.00-6.00

Certificate Requirements

- Student must demonstrate a significant and meaningful experiential activity related to quantum information science.
  Examples include
- Internship with a company with responsibilities related to quantum information science. The internship should be full-time for a duration of 8-12 weeks, totaling 320+ hours of work experience. Students must register for a 0-credit internship course during their experience. The course requires student reflection and a performance evaluation completed by their supervisor.
- Full-time summer research experience related to quantum information science with a minimum duration of 8 weeks totaling 320 hours of work. Student must register for a 0-credit experiential learning course requiring reflection and a performance evaluation completed by their supervisor
- 6 credits of part-time research related to quantum information science
- 6 credits of study abroad with coursework related to quantum information science
- A combination of study abroad or part-time research related to quantum information science totaling 6 credits

*For 0-credit paid internships or research experiences, students will be asked to submit an offer letter to verify their experience dates, hours, and responsibilities.

Electives (2-10 credits)

Remaining credit hours must come from the courses below:

- CHM 37400 - Physical Chemistry II Credits: 3.00
- CS 48300 - Introduction To The Theory Of Computation Credits: 3.00
- CS 58400 - Theory Of Computation And Computational Complexity Credits: 3.00
• ECE 30653 - Introduction To Nanotechnology And Quantum Science & Technology Credits: 3.00
• ECE 39595 - Selected Topics In Electrical And Computer Engineering Credits: 1.00 to 5.00 Title: Fundamentals of Quantum Technology
• ECE 50631 - Fundamentals Of Current Flow Credits: 1.00
• ECE 50632 - Introduction To Quantum Transport Credits: 1.00
• ECE 50633 - Boltzmann Law: Physics To Computing Credits: 1.00
• ECE 55200 - Introduction To Lasers Credits: 3.00
• ECE 59500 - Selected Topics In Electrical Engineering Credits: 1.00 to 3.00 Titles: Applied Quantum Computing I – Fundamentals; Applied Quantum Computing I – Fundamentals; Applied Quantum Computing III - Algorithm and Software; Intro to Electronics Packaging and Heterogeneous Integration; Introduction to Quantum Science and Technology; Microfabrication Fundamentals; Semiconductor Fundamentals; Semiconductor Manufacturing
• ME 50100 - Statistical Thermodynamics Credits: 3.00
• ME 50300 - Micro-And-Nano-Scale Energy Transfer Processes Credits: 3.00
• MSE 50200 - Defects In Solids Credits: 3.00
• PHYS 36000 - Quantum Mechanics Credits: 3.00
• PHYS 46000 - Quantum Mechanics I Honors Credits: 3.00
• PHYS 46100 - Quantum Mechanics II Honors Credits: 3.00
• PHYS 52600 - Physics Of Quantum Computing And Quantum Information Credits: 3.00
• PHYS 54500 - Solid-State Physics Credits: 3.00
• PHYS 55000 - Introduction To Quantum Mechanics Credits: 3.00
• MA 51100 - Linear Algebra With Applications Credits: 3.00

Note

• Credit from only ONE of the following courses can be applied toward the total credit requirement of this certificate: PHYS 36000, PHYS 46000, ECE 39595: Fundamentals of Quantum Technology.
• QIST Experience for Undergraduates Selectives (1-6 credits) area will require advisor exceptions since courses are not listed by name.

Pre-Requisite Information

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

Disclaimer

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

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

Semiconductors and Microelectronics Certificate

Add to Purdue Indy per Joe Tort
The Certificate in Semiconductors and Microelectronics (16 credits) will be open to students in all undergraduate majors interested in careers in the field of semiconductors and microelectronics. This certificate will give undergraduate students broad technical exposure to topics in the areas of semiconductors and microelectronics and is designed to supplement the baccalaureate plans of studies in different majors, including (but not limited to) engineering, computer science, physics, chemistry, technology, and business. The U.S. semiconductor/microelectronics industry is facing an overwhelming and rapidly growing crunch for trained talent - with industry forecasts estimating the need at a minimum of 50,000 additional trained semiconductor engineers and scientists by 2030. The broad scope of the semiconductors and microelectronics industry - from materials and processing to device and integrated circuit/system design, to manufacturing, supply chains, and data analytics, to testing, qualification, packaging, and thermal management - provides exciting career opportunities for students from a wide range of disciplines.

Requirements for the Certificate (10 credits)

Required Course (1 credit)

For ENGR 10301, the section titled "Introduction to Semiconductors" or similar is required.

- ENGR 10301 - Introduction To Engineering In Practice Credits: 1.00

Semiconductor Experience for Undergraduates

Research courses including relevant independent studies and Vertically Integrated Projects (VIP) courses, or Full-time internship relevant to technical areas of semiconductors and microelectronics. Summer or semester-long of full-time internship/co-op/SURF or similar experience is considered equivalent to 6 credit hours.

Technical Courses (9 credits)

Take at least 9 credit hours of courses in at least two out of five technical areas:

- Semiconductor and Microelectronic Devices
- Semiconductor Materials, Characterization, and Processing
- Integrated Circuit and System Design, Electronic Design Automation
- Electronics Packaging, Heterogeneous Integration, and Thermal Management
- Semiconductor Manufacturing and Global Supply Chain Management

Semiconductor and Microelectronic Devices

- ECE 30500 - Semiconductor Devices Credits: 3.00
- ECE 45300 - Fundamentals Of Nanoelectronics Credits: 3.00
- ECE 50616 - Physics And Manufacturing Of Solar Cells Credits: 3.00
- ECE 50631 - Fundamentals Of Current Flow Credits: 1.00
- ECE 50632 - Introduction To Quantum Transport Credits: 1.00
- ECE 50633 - Boltzmann Law: Physics To Computing Credits: 1.00
- ECE 50635 - Fundamentals Of Nanoelectronics Credits: 3.00
- ECE 55700 - Integrated Circuit Fabrication Laboratory Credits: 3.00
- ECE 59500 - Selected Topics In Electrical Engineering Credits: 1.00 to 3.00
  - Advanced Lithography
  - Essentials of Transistors
  - MEMS I: Microfabrication and Materials for MEMS
  - MEMS II: Fundamentals of MEMS Design
  - MEMS III: Applications in MEMS
  - Microfabrication Fundamentals
  - Semiconductor Fundamentals
  - Semiconductor Manufacturing
  - Theory and Practice of Solar Cells: A Cell to System Perspective
- PHYS 52600 - Physics Of Quantum Computing And Quantum Information Credits: 3.00

Semiconductor Material, Characterization, and Processing

- CHE 42000 - Process Safety Management And Analysis Credits: 3.00
- CHE 45600 - Process Dynamics And Control Credits: 3.00
- CHE 56400 - Organic Electronic Materials And Devices Credits: 3.00
- CHE 59700 - Special Topics In Chemical Engineering Credits: 0.00 to 18.00 - Manufacturing Advanced Composites
- IE 37000 - Manufacturing Processes I Credits: 3.00
- IE 38300 - Integrated Production Systems I Credits: 3.00
- IE 47000 - Manufacturing Processes II Credits: 3.00
- IE 57000 - Manufacturing Process Engineering Credits: 3.00
- IE 57900 - Design And Control Of Production And Manufacturing Systems Credits: 3.00
- IE 58300 - Design And Evaluation Of Material Handling Systems Credits: 3.00
- ME 36300 - Principles And Practices Of Manufacturing Processes Credits: 3.00
- ME 55700 - Design For Manufacturability Credits: 3.00
- MSE 23000 - Structure And Properties Of Materials Credits: 3.00
- MSE 27000 - Atomistic Materials Science Credits: 3.00
- MSE 49700 - Selected Topics In Materials Engineering Credits: 0.00 to 18.00 - Electronics Packaging and Heterogeneous Integration
- MSE 50200 - Defects In Solids Credits: 3.00
- MSE 51000 - Microstructural Characterization Techniques Credits: 3.00
- MSE 52300 - Physical Ceramics Credits: 3.00
- MSE 54800 - Deposition Processing Of Thin Films And Coatings Credits: 3.00
- MSE 59700 - Selected Topics In Materials Engineering Credits: 0.00 to 18.00 - Magnetic Materials: Physical Properties and Applications - Modeling & Simulation for Materials - Solid State Materials
- NUCL 42001 - Radiation Interaction With Materials And Applications Credits: 3.00
- NUCL 52000 - Radiation Effects And Reactor Materials Credits: 3.00
- NUCL 55300 - Nano-Macro Scale Applications Of Nuclear Technology Credits: 3.00

Integrated Circuit & System Design, Electronic Design Automation

- ECE 33700 - ASIC Design Laboratory Credits: 2.00
- ECE 36200 - Microprocessor Systems And Interfacing Credits: 4.00
- ECE 45500 - Integrated Circuit Engineering Credits: 3.00
- ECE 45600 - Digital Integrated Circuit Analysis And Design Credits: 3.00
• ECE 51220 - Applied Algorithms Credits: 3.00
• ECE 55900 - MOS VLSI Design Credits: 3.00
• ECE 56800 - Embedded Systems Credits: 3.00
• ECE 59500 - Selected Topics In Electrical Engineering Credits: 1.00 to 3.00
  - CMOS Analog IC Design
  - Computer Vision for Embedded Systems
  - Digital Systems Design Automation

Electronics Packaging, Heterogeneous Integration, and Thermal Management

• CHE 32000 - Statistical Modeling And Quality Enhancement Credits: 3.00
• ECE 59500 - Selected Topics In Electrical Engineering Credits: 1.00 to 3.00 - Introduction to Electronics Packaging and Heterogeneous Integration

Semiconductor Manufacturing and Global Supply Chain Management

• CHE 32000 - Statistical Modeling And Quality Enhancement Credits: 3.00
• IE 38600 - Work Analysis And Design I Credits: 3.00
• IE 48400 - Integrated Production Systems II Credits: 3.00
• IE 48600 - Work Analysis And Design II Credits: 3.00
• IE 49000 - Special Topics In Industrial Engineering Credits: 1.00 to 6.00 - Supply Chain Engineering
• IE 53200 - Reliability Credits: 3.00
• IE 53300 - Industrial Applications Of Statistics Credits: 3.00
• IE 55800 - Safety Engineering Credits: 3.00
• IE 56600 - Production Management Control Credits: 3.00
• IE 58200 - Advanced Facilities Design Credits: 3.00
• MGMT 26100 - Introduction To Supply Chain Management Credits: 3.00
• MGMT 40500 - Six Sigma And Quality Analytics Credits: 3.00
• MGMT 46200 - Advanced Manufacturing Planning And Control Systems Credits: 3.00
• MGMT 46300 - Supply Chain Analytics Credits: 3.00
• MGMT 47300 - Data Mining Credits: 3.00
• MGMT 47400 - Predictive Analytics Credits: 3.00
• MGMT 47900 - Data Visualization Credits: 2.00 or 3.00

Disclaimer

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

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

Concentration

Software Engineering Concentration for Computer Engineering
About the Concentration

The Software Engineering Concentration prepares students to work in software-oriented jobs or research areas. It covers topics in software engineering (how do you build good software) and software tools (what modern frameworks do software developers need to know), as well as electives that give students an opportunity to hone their software development skills.

Software Engineering Concentration Courses (10 credits)

Required Course (1 credit)

- ECE 30864 - Software Engineering Tools Credits: 1.00

Software Selectives (6 credits)

- ECE 46100 - Software Engineering Credits: 3.00 or
- ECE 49595 - Selected Topics In Electrical And Computer Engineering Credits: 1.00 to 5.00 Title: Open Source Software Senior Design - Credit Hours: 4.00

Selectives (3 credits)

- ECE 30862 - Object-Oriented Programming In C++ And Java Credits: 3.00
- ECE 40400 - Introduction To Computer Security Credits: 3.00
- ECE 46900 - Operating Systems Engineering Credits: 4.00
- ECE 46800 - Introduction To Compilers And Translation Engineering Credits: 4.00 or
- ECE 57300 - Compilers And Translator Writing Systems Credits: 3.00
- ECE 51220 - Applied Algorithms Credits: 3.00

Can include up to 3 hours of:

(Must have approval of the Associate Head of Undergraduate Programs or Associate Head of Teaching and Learning) Can only be used for one of the selectives areas in the concentration.

- ECE 49600 - Electrical And Computer Engineering Projects Credits: 0.00 to 18.00
- VIP 37920 - Junior Participation In Vertically Integrated Projects (VIP) Credits: 2.00
- VIP 47920 - Senior Participation In Vertically Integrated Projects (VIP) Credits: 2.00

Master of Science

Biomedical Engineering Program, MS

Computer Science, MS

Concentrations:
Cybersecurity & Trusted System, MS

Interdisciplinary Engineering, MS

Concentrations:

- Aeronautics & Astronautics
- Aeronautics & Astronautics Management/Professional Practice
- Aeronautics & Astronautics with Management
- Biomedical Engineering
- Civil Engineering
- Computational Engineering
- Computer Science
- Electrical & Computer Engineering
- Engineering Management & Leadership
- Engineering, Management & Professional Practice
- Engineering Management
- Geomatics
- Industrial Engineering
- Integrated Vehicle Systems Engineering
- Materials Engineering
- Mechanical Engineering & Management
- Mechanical Engineering & Management with Professional Practice
- Mechanical Engineering
- Multidisciplinary Engineering
- Quality
- Quality Systems Engineering
- Systems Engineering

Technology Leadership & Innovation, MS

Concentrations:

- Biotech Innov & Regulatory Science

Master of Science in Chemical Engineering

Chemical Engineering, MSCHE
Concentrations:

- Biochemical Engineering Professional
- Gas and Petroleum Engineering
- Energy Sys Fund & Process Prof
- Kinetics, Cat & React Engr Prof
- Particulate Production & Process Professional
- Pharmacy Engineering Professional
- Polymer Science and Engineering - Prof

Master of Science in Electrical and Computer Engineering

Electrical & Computer Engineering, MSECE

Concentrations:

- Computational Engineering
- Computational Life Science
- ECE Technology Innovation
- Innovative Technologies
- Manufacturing Engineering
- Wireless Systems Engineering

Master of Science in Mechanical Engineering

Mechanical Engineering, MSME

Concentrations:

- Computational Engineering
- Interdisciplinary Science & Engineering
- Professional Program In Mechanical Engineering
- Manufacturing Engineering

Doctor of Philosophy

Computer Science, PHD

Concentrations:
- Computational Life Sciences (CLS)
- Computational Science and Engineering (CSE)

Electrical & Computer Engineering, PHD

Concentrations:

- Biomedical Engineering
- Computational Engineering
- Computational Life Science
- Manufacturing Engineering
- Wireless Systems Engineering

Mechanical Engineering, PHD

Concentrations:

- Biomedical Engineering
- Computational Engineering
- Interdisciplinary Ecological Science & Engineering

Non-Degree

2025-2026 Academic Calendar

This information is for Purdue West Lafayette, Purdue Indianapolis, and Purdue Polytechnic Statewide campuses

<table>
<thead>
<tr>
<th>Classes/Term Begin</th>
<th>Summer 2025</th>
<th>Fall 2025</th>
<th>Winter 2025</th>
<th>Spring 2026</th>
<th>Summer 2026</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 19, 2025</td>
<td>August 25, 2025</td>
<td></td>
<td></td>
<td>January 12, 2026</td>
<td>May 18, 2026</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Last Day to Apply to Graduate/Declare Candidacy</th>
<th>June 13</th>
<th>September 19</th>
<th>February 6</th>
<th>June 12</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Classes End</th>
<th>August 8</th>
<th>December 13</th>
<th>January</th>
<th>May 2</th>
<th>August 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Exams</td>
<td>Dec. 15-20</td>
<td>Dec. 20</td>
<td>May 4-9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Ends</th>
<th>August 8</th>
<th>Dec. 20</th>
<th>May 9</th>
<th>August 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commencements</td>
<td>August 9</td>
<td>December 21</td>
<td>May 15-17</td>
<td>August 8</td>
</tr>
</tbody>
</table>

| Fall Break | October 13-14 | |
|------------|---------------|
2026-2027 Academic Calendar

This information is for Purdue West Lafayette, Purdue Indianapolis, and Purdue Polytechnic Statewide campuses

<table>
<thead>
<tr>
<th>Event</th>
<th>Summer 2025</th>
<th>Fall 2025</th>
<th>Winter 2026</th>
<th>Spring 2026</th>
<th>Summer 2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring Break</td>
<td>March 16-21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juneteenth - Class in Session</td>
<td>June 19</td>
<td></td>
<td></td>
<td></td>
<td>June 19</td>
</tr>
<tr>
<td>Thanksgiving Break</td>
<td>Nov. 27-30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter Recess</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memorial Day - University Closed</td>
<td>May 26</td>
<td></td>
<td></td>
<td></td>
<td>May 25</td>
</tr>
<tr>
<td>Fourth of July - University Closed</td>
<td>July 4</td>
<td></td>
<td></td>
<td></td>
<td>July 3</td>
</tr>
<tr>
<td>Labor Day - University Closed</td>
<td>September 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MLK Day - University Closed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>January 19</td>
</tr>
<tr>
<td>President's Designated Holiday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christmas Holiday - University Closed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>December 25 &amp; 26</td>
</tr>
<tr>
<td>New Year's Day - University Closed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>January 1, 2026</td>
</tr>
</tbody>
</table>

Classes/Term Begin

<table>
<thead>
<tr>
<th>Event</th>
<th>Summer 2026</th>
<th>Fall 2026</th>
<th>Winter 2026</th>
<th>Spring 2027</th>
<th>Summer 2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes/Term Begin</td>
<td>May 18, 2026</td>
<td>August 24, 2026</td>
<td>January 11, 2027</td>
<td>May 17, 2027</td>
<td></td>
</tr>
<tr>
<td>Last Day to Apply to Graduate/Declare Candidacy</td>
<td>June 12</td>
<td>September 18</td>
<td>February 5</td>
<td>June 11</td>
<td></td>
</tr>
<tr>
<td>Classes End</td>
<td>August 7</td>
<td>December 12</td>
<td>January</td>
<td>May 1</td>
<td>August 7</td>
</tr>
<tr>
<td>Final Exams</td>
<td>Dec. 14-19</td>
<td></td>
<td>May 3-8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term Ends</td>
<td>August 7</td>
<td>December 19</td>
<td>May 8</td>
<td>August 6</td>
<td></td>
</tr>
<tr>
<td>Commencements</td>
<td>August 8</td>
<td>December 20</td>
<td>May 14-16</td>
<td>August 7</td>
<td></td>
</tr>
<tr>
<td>Fall Break</td>
<td>October 12-13</td>
<td></td>
<td></td>
<td></td>
<td>March 15-20</td>
</tr>
<tr>
<td>Spring Break</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thanksgiving Break</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nov. 25-28</td>
</tr>
<tr>
<td>Winter Recess</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**2027-2028 Academic Calendar**

This information is for Purdue West Lafayette, Purdue Indianapolis, and Purdue Polytechnic Statewide campuses.

<table>
<thead>
<tr>
<th>Event</th>
<th>Summer 2026</th>
<th>Fall 2026</th>
<th>Winter 2026</th>
<th>Spring 2027</th>
<th>Summer 2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memorial Day - University Closed</td>
<td>May 25</td>
<td>August 23, 2027</td>
<td>January 10, 2028</td>
<td>May 31</td>
<td>May 15, 2028</td>
</tr>
<tr>
<td>Fourth of July - University Closed</td>
<td>July 3</td>
<td>September 17</td>
<td>April 29</td>
<td>June 9</td>
<td></td>
</tr>
<tr>
<td>Labor Day - University Closed</td>
<td>September 7</td>
<td>November 11</td>
<td>May 1-6</td>
<td>August 4</td>
<td></td>
</tr>
<tr>
<td>MLK Day - University Closed</td>
<td>January 18</td>
<td>January 19</td>
<td>May 6</td>
<td>August 4</td>
<td></td>
</tr>
<tr>
<td>President's Designated Holiday</td>
<td>December 31</td>
<td>December 24 &amp; 25</td>
<td>May 12-14</td>
<td>August 5</td>
<td></td>
</tr>
<tr>
<td>Christmas Holiday - University Closed</td>
<td>December 24 &amp; 25</td>
<td>December 25</td>
<td>November 27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Year's Day - University Closed</td>
<td>January 1, 2027</td>
<td>January 1</td>
<td>January 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Classes/Term Begin:
- May 17, 2027
- August 23, 2027

Last Day to Apply to Graduate/Declare Candidacy:
- June 11, 2027
- September 17, 2027
- February 4, 2028
- June 9, 2028

Classes End:
- August 6, 2027
- December 11, 2027
- January 19, 2028
- May 6, 2028

Final Exams:
- Dec. 13-18, 2027
- May 1-6, 2028

Term Ends:
- August 6, 2027
- Dec. 18, 2027
- May 6, 2028
- August 4, 2028

Commencements:
- August 7, 2027
- December 19, 2027
- May 12-14, 2028
- August 5, 2028

Fall Break:
- October 11-12, 2027

Spring Break:
- March 13-18, 2028

Thanksgiving Break:
- November 24-27, 2027

Winter Recess:
- May 29, 2027
- May 31, 2027

Memorial Day - University Closed:
- July 5, 2027
- July 4, 2028

Fourth of July - University Closed:
- September 6, 2027

Labor Day - University Closed:
- January 17, 2027
This information is for Purdue West Lafayette, Purdue Indianapolis, and Purdue Polytechnic Statewide campuses

<table>
<thead>
<tr>
<th>Event</th>
<th>Summer 2028</th>
<th>Fall 2028</th>
<th>Winter 2028</th>
<th>Spring 2029</th>
<th>Summer 2029</th>
</tr>
</thead>
<tbody>
<tr>
<td>President's Designated Holiday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christmas Holiday - University Closed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Year's Day - University Closed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2028-2029 Academic Calendar</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classes/Term Begin</td>
<td>May 15, 2028</td>
<td>August 21, 2028</td>
<td>January 1, 2029</td>
<td></td>
<td>May 14, 2029</td>
</tr>
<tr>
<td>Last Day to Apply to Graduate/Declare Candidacy</td>
<td>June 9</td>
<td>September 15</td>
<td>February 1, 2029</td>
<td>June 6</td>
<td></td>
</tr>
<tr>
<td>Classes End</td>
<td>August 4</td>
<td>December 9</td>
<td>April 28, 2029</td>
<td>August 3</td>
<td></td>
</tr>
<tr>
<td>Final Exams</td>
<td>Dec. 11-16</td>
<td>January</td>
<td>Apr. 30 - May 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term Ends</td>
<td>August 4</td>
<td>December 16</td>
<td>May 5, 2029</td>
<td>August 3</td>
<td></td>
</tr>
<tr>
<td>Commencements</td>
<td>August 5</td>
<td>December 17</td>
<td>May 11-13, 2029</td>
<td>August 4</td>
<td></td>
</tr>
<tr>
<td>Fall Break</td>
<td>October 9-10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring Break</td>
<td></td>
<td></td>
<td></td>
<td>March 12-17</td>
<td></td>
</tr>
<tr>
<td>Thanksgiving Break</td>
<td></td>
<td>November 22-25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter Recess</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memorial Day - University Closed</td>
<td>May 29</td>
<td></td>
<td>May 28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fourth of July - University Closed</td>
<td>July 4</td>
<td></td>
<td>July 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor Day - University Closed</td>
<td></td>
<td>September 4</td>
<td></td>
<td>January 17</td>
<td></td>
</tr>
<tr>
<td>MLK Day - University Closed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>President's Designated Holiday</td>
<td></td>
<td></td>
<td>December 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christmas Holiday - University Closed</td>
<td></td>
<td></td>
<td>December 23-24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Year's Day - University Closed</td>
<td></td>
<td></td>
<td>December 31</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2029-2030 Academic Calendar</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This information is for Purdue West Lafayette, Purdue Indianapolis, and Purdue Polytechnic Statewide campuses

<table>
<thead>
<tr>
<th></th>
<th>Summer 2029</th>
<th>Fall 2029</th>
<th>Winter 2029</th>
<th>Spring 2030</th>
<th>Summer 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes/Term Begin</td>
<td>May 14, 2029</td>
<td>August 20, 2029</td>
<td>December 2029</td>
<td>January 7, 2030</td>
<td>May 14, 2030</td>
</tr>
<tr>
<td>Last Day to Apply to Graduate/Declare Candidacy</td>
<td>June 6</td>
<td>September 16</td>
<td>February 3</td>
<td>June 6</td>
<td></td>
</tr>
<tr>
<td>Classes End</td>
<td>August 3</td>
<td>December 8</td>
<td>January</td>
<td>April 27</td>
<td>August 2</td>
</tr>
<tr>
<td>Final Exams</td>
<td>Dec. 10-15</td>
<td></td>
<td></td>
<td>Apr. 29 - May 4</td>
<td></td>
</tr>
<tr>
<td>Term Ends</td>
<td>August 3</td>
<td>December 15</td>
<td>May 4</td>
<td>August 2</td>
<td></td>
</tr>
<tr>
<td>Commencements</td>
<td>August 4</td>
<td>December 16</td>
<td>May 10-12</td>
<td>August 3</td>
<td></td>
</tr>
<tr>
<td>Fall Break</td>
<td></td>
<td></td>
<td></td>
<td>October 8-9</td>
<td></td>
</tr>
<tr>
<td>Spring Break</td>
<td></td>
<td></td>
<td></td>
<td>March 11-16</td>
<td></td>
</tr>
<tr>
<td>Thanksgiving Break</td>
<td></td>
<td>Nov. 22-25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter Recess</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memorial Day - University Closed</td>
<td>May 28</td>
<td></td>
<td>May 27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fourth of July - University Closed</td>
<td>July 4</td>
<td></td>
<td>July 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor Day - University Closed</td>
<td></td>
<td>September 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MLK Day - University Closed</td>
<td></td>
<td></td>
<td>January 21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>President's Designated Holiday</td>
<td></td>
<td></td>
<td>December 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christmas Holiday - University Closed</td>
<td></td>
<td></td>
<td>December 23-24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Year's Day - University Closed</td>
<td></td>
<td></td>
<td>December 31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2030-2031 Academic Calendar

This information is for Purdue West Lafayette, Purdue Indianapolis, and Purdue Polytechnic Statewide campuses

<table>
<thead>
<tr>
<th></th>
<th>Summer 2030</th>
<th>Fall 2030</th>
<th>Winter 2030</th>
<th>Spring 2031</th>
<th>Summer 2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes/Term Begin</td>
<td>May 13, 2030</td>
<td>August 19, 2030</td>
<td>December 2030</td>
<td>January 13, 2031</td>
<td>May 19, 2031</td>
</tr>
<tr>
<td>Last Day to Apply to Graduate/Declare Candidacy</td>
<td>June 6</td>
<td>September 15</td>
<td>February 3</td>
<td>June 6</td>
<td></td>
</tr>
</tbody>
</table>
2031-2032 Academic Calendar

This information is for Purdue West Lafayette, Purdue Indianapolis, and Purdue Polytechnic Statewide campuses

<table>
<thead>
<tr>
<th>Event</th>
<th>Summer 2030</th>
<th>Fall 2030</th>
<th>Winter 2030</th>
<th>Spring 2031</th>
<th>Summer 2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes End</td>
<td>August 2</td>
<td>December 7</td>
<td>January</td>
<td>May 3</td>
<td>August 8</td>
</tr>
<tr>
<td>Final Exams</td>
<td></td>
<td>Dec. 9-14</td>
<td></td>
<td>May 5-10</td>
<td></td>
</tr>
<tr>
<td>Term Ends</td>
<td>August 2</td>
<td>December 14</td>
<td>May 10</td>
<td>August 8</td>
<td></td>
</tr>
<tr>
<td>Commencements</td>
<td>August 3</td>
<td>December 15</td>
<td>May 16-18</td>
<td>August 9</td>
<td></td>
</tr>
<tr>
<td>Fall Break</td>
<td></td>
<td>October 7-8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring Break</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thanksgiving Break</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nov. 27-30</td>
</tr>
<tr>
<td>Winter Recess</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memorial Day - University Closed</td>
<td>May 27</td>
<td></td>
<td>May 26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fourth of July - University Closed</td>
<td>July 4</td>
<td></td>
<td>July 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor Day - University Closed</td>
<td></td>
<td>September 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MLK Day - University Closed</td>
<td></td>
<td></td>
<td>January 20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>President's Designated Holiday</td>
<td></td>
<td></td>
<td>December 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christmas Holiday - University Closed</td>
<td>December 23-24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Year's Day - University Closed</td>
<td>December 31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2031-2032 Academic Calendar

Classes/Term Begin: May 19, 2031 August 25, 2031 December 2031
Last Day to Apply to Graduate/Declare Candidacy: June 6 September
Classes End: August 8 December 13 January May 1 August 6
Final Exams: Dec. 15-20 May 3-8
Term Ends: August 8 December 20 May 8 August 6
Commencements: August 9 December 21 May 14-16 August 7
### 2032-2033 Academic Calendar

This information is for Purdue West Lafayette, Purdue Indianapolis, and Purdue Polytechnic Statewide campuses

<table>
<thead>
<tr>
<th></th>
<th>Summer 2032</th>
<th>Fall 2032</th>
<th>Winter 2032</th>
<th>Spring 2033</th>
<th>Summer 2033</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes/Term Begin</td>
<td>May 17, 2032</td>
<td>August 23, 2032</td>
<td>December 2032</td>
<td>January 10, 2033</td>
<td>May 16, 2033</td>
</tr>
<tr>
<td>Last Day to Apply to Graduate/Declare Candidacy</td>
<td>June 6</td>
<td>September</td>
<td>February 3</td>
<td>June 9</td>
<td></td>
</tr>
<tr>
<td>Classes End</td>
<td>August 6</td>
<td>December 11</td>
<td>January</td>
<td>April 30</td>
<td>August 5</td>
</tr>
<tr>
<td>Final Exams</td>
<td>Dec. 14-19</td>
<td></td>
<td>May 2-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term Ends</td>
<td>August 6</td>
<td>December 19</td>
<td>May 7</td>
<td>August 5</td>
<td></td>
</tr>
<tr>
<td>Commencements</td>
<td>August 7</td>
<td>December 20</td>
<td>May 13-15</td>
<td>August 6</td>
<td></td>
</tr>
<tr>
<td>Fall Break</td>
<td>October 11-12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring Break</td>
<td></td>
<td></td>
<td></td>
<td>March 14-19</td>
<td></td>
</tr>
<tr>
<td>Thanksgiving Break</td>
<td></td>
<td>Nov. 24-27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter Recess</td>
<td></td>
<td></td>
<td></td>
<td>May 30</td>
<td></td>
</tr>
<tr>
<td>Memorial Day - University Closed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This information is for Purdue West Lafayette, Purdue Indianapolis, and Purdue Polytechnic Statewide campuses

### Summer 2032
- Fourth of July - University Closed: July 5

### Fall 2032
- Labor Day - University Closed: September 6

### Winter 2032
- MLK Day - University Closed: January 17

### Spring 2033
- President's Designated Holiday: December 30

### Summer 2033
- Christmas Holiday - University Closed: December 23-24

### 2033-2034 Academic Calendar

<table>
<thead>
<tr>
<th>Classes/Term Begin</th>
<th>Summer 2033</th>
<th>Fall 2033</th>
<th>Winter 2033</th>
<th>Spring 2034</th>
<th>Summer 2034</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 17, 2033</td>
<td>August 23, 2033</td>
<td>December 2033</td>
<td>January 10, 2034</td>
<td>May 16, 2034</td>
<td></td>
</tr>
</tbody>
</table>

| Last Day to Apply to Graduate/Declare Candidacy | June 6 | September | February 3 | June 6 |

| Classes End | August 8 | December 13 | January | May 1 | August 6 |

| Final Exams | Dec. 15-20 | May 3-8 |

| Term Ends | August 8 | December 20 | May 8 | August 6 |

| Commencements | August 9 | December 21 | May 14-16 | August 7 |

| Fall Break | October 13-14 |

| Spring Break | |

| Thanksgiving Break | Nov. 26-29 |

| Winter Recess | |

| Memorial Day - University Closed | May 26 | May 31 |

| Fourth of July - University Closed | July 4 | July 5 |

| Labor Day - University Closed | September 1 |

| MLK Day - University Closed | January 19 |

| President's Designated Holiday | December 30 |
2034-2035 Academic Calendar

This information is for Purdue West Lafayette, Purdue Indianapolis, and Purdue Polytechnic Statewide campuses

<table>
<thead>
<tr>
<th>Classes/Term Begin</th>
<th>Summer 2033</th>
<th>Fall 2033</th>
<th>Winter 2033</th>
<th>Spring 2034</th>
<th>Summer 2034</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Day to Apply to Graduate/Declare Candidacy</td>
<td>June 6</td>
<td>September</td>
<td>February 3</td>
<td>June 6</td>
<td></td>
</tr>
<tr>
<td>Classes End</td>
<td>August 8</td>
<td>December 13</td>
<td>January</td>
<td>May 1</td>
<td>August 6</td>
</tr>
<tr>
<td>Final Exams</td>
<td></td>
<td>Dec. 15-20</td>
<td></td>
<td>May 3-8</td>
<td></td>
</tr>
<tr>
<td>Term Ends</td>
<td>August 8</td>
<td>December 20</td>
<td>May 8</td>
<td>August 6</td>
<td></td>
</tr>
<tr>
<td>Commencements</td>
<td>August 9</td>
<td>December 21</td>
<td>May 14-16</td>
<td>August 7</td>
<td></td>
</tr>
<tr>
<td>Fall Break</td>
<td></td>
<td></td>
<td>October 13-14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring Break</td>
<td></td>
<td></td>
<td></td>
<td>March 15-20</td>
<td></td>
</tr>
<tr>
<td>Thanksgiving Break</td>
<td></td>
<td></td>
<td></td>
<td>Nov. 26-29</td>
<td></td>
</tr>
<tr>
<td>Winter Recess</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memorial Day - University Closed</td>
<td>May 26</td>
<td></td>
<td></td>
<td>May 31</td>
<td></td>
</tr>
<tr>
<td>Fourth of July - University Closed</td>
<td>July 4</td>
<td></td>
<td></td>
<td>July 5</td>
<td></td>
</tr>
<tr>
<td>Labor Day - University Closed</td>
<td></td>
<td>September 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MLK Day - University Closed</td>
<td></td>
<td></td>
<td></td>
<td>January 19</td>
<td></td>
</tr>
<tr>
<td>President's Designated Holiday</td>
<td></td>
<td></td>
<td>December 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christmas Holiday - University Closed</td>
<td></td>
<td></td>
<td>December 23-24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Year's Day - University Closed</td>
<td></td>
<td></td>
<td>December 31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Animation And Visual Effects & Themed Entertainment Design Supplemental Information
This supplemental Information can be used for both Animation and Visual Effects, BS and Themed and Entertainment Design, BS.

CGT Entertainment Selectives

- CGT 10501 - Introduction To Games Credits: 3.00
- CGT 21500 - Computer Graphics Programming I Credits: 3.00
- CGT 24500 - Game Development I: Core Skills And Technologies Credits: 3.00
- CGT 24600 - Compositing I Credits: 3.00
- CGT 24700 - Visual Effects - Particles And Procedural Effects Credits: 3.00
- CGT 25500 - Game Development II: Design And Psychology Credits: 3.00
- CGT 27001 - Topics In Data Visualization Credits: 1.00
- CGT 27500 - Data Visualization II Credits: 3.00
- CGT 29000 - Computer Graphics Credits: 1.00 to 3.00
- CGT 31000 - Drawing, Acting And Scripts For Animation Credits: 3.00
- CGT 31500 - Computer Graphics Programming II Credits: 3.00
- CGT 32101 - Digital Illustration Credits: 3.00
- CGT 32500 - Animation For Games Credits: 3.00
- CGT 33300 - Modeling For Entertainment Graphics Credits: 3.00
- CGT 33500 - Game Scripting Credits: 3.00
- CGT 34000 - Digital Lighting And Rendering For Computer Animation Credits: 3.00
- CGT 34100 - Motion For Computer Animation Credits: 3.00
- CGT 34500 - Game Development III: Environment Modeling For Games Credits: 3.00
- CGT 34600 - Digital Video And Audio Credits: 3.00
- CGT 34800 - Photorealistic Shaders Credits: 3.00
- CGT 35300 - Principles Of Interactive And Dynamic Media Credits: 3.00
- CGT 35600 - Web Programming, Development And Data Integration Credits: 3.00
- CGT 36500 - Game Development Practicum Credits: 3.00
- CGT 37000 - Interactive Data Visualization Credits: 3.00
- CGT 37500 - Game Audio Credits: 3.00
- CGT 37700 - Scientific Visualization Credits: 3.00
- CGT 38500 - Game Production Credits: 3.00
- CGT 39000 - Computer Graphics Credits: 1.00 to 3.00
- CGT 44500 - Game Development IV: Procedural Asset Creation For Games Credits: 3.00
- CGT 45600 - Advanced Web Programming, Development And Data Integration Credits: 3.00
- CGT 47000 - Data Visualization Studio Credits: 3.00
- CGT 49000 - Computer Graphics Credits: 1.00 to 3.00
- CGT 49100 - Special Topics In Computer Graphics Credits: 1.00 to 6.00

Advanced English Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- ENGL 20500 - Introduction To Creative Writing Credits: 3.00
- ENGL 30400 - Advanced Composition Credits: 3.00
- ENGL 41900 - Multimedia Writing Credits: 3.00
- ENGL 42000 - Business Writing Credits: 3.00
- ENGL 42100 - Technical Writing Credits: 3.00

Statistics Selective

- IET 31600 - Statistical Quality Control Credits: 3.00
- PSY 20100 - Introduction To Statistics In Psychology Credits: 3.00
- STAT 22500 - Introduction To Probability Models Credits: 3.00
- STAT 30100 - Elementary Statistical Methods Credits: 3.00
- STAT 35000 - Introduction To Statistics Credits: 3.00

Technical Elective

Any Course within the Purdue Polytechnic Institute, Engineering, Management, or Science. Subjects include: AAE, ABE, AFT, ASTR, AT, BCHM, BCM, BIOL, BME, BMS, CE, CGT, CHE, CHM, CLPH, CM, CNIT, CPB, CS, EAPS, ECE, ECET, ECON, EEE, ENB, ENGR, ENGT, ENTM, ENTR, EPS, EPC, EPE, EPPH, I, MA, MCMP, ME, MET, MFET, MGMT, MSE, MSL, NS, NUCL, NUPH, NUR, OBHR, OLS, PHPR, PHRM, PHYS, PTEC, SCI, STAT, TECH, & TLI.

Humanities Elective

Possible Cornerstone Selective. See Cornerstone Certificate.

Any Course within the Purdue College of Liberal Arts. Subjects include: AAS, AD, AMST, ANTH, ARAB, ASAM, ASL, CHNS, CLCS, CMPL, COM, DANC, ENGL, FR, FVS, GER, GREK, GS, GSA, HEBR, HIST, IDIS, ITAL, JPNS, JWST, KOR, LALS, LATN, LC, LING, MARS, MUS, PHIL, POL, PTGS, REL, RUSS, SCLA, SOC, SPAN, THTR, & WGSS.

Human Cultures: Humanities (HUM) Core

Possible Cornerstone Selective. See Cornerstone Certificate.
Any Human Cultures: Humanities (HUM) allowed. Crossing with Cornerstone Certificate strongly recommended.

- Approved Human Cultures: Humanities Core Courses

Human Cultures: Behavioral/Social Science (BSS) Core

Possible Cornerstone Selective. See Cornerstone Certificate.

Any Human Cultures: Behavioral/Social Science (BSS) allowed. Crossing with Cornerstone Certificate strongly recommended.

- Approved Human Cultures: Behavioral/Social Science Core Courses
CGT Globalization Selective

Possible Cornerstone Selective. See Cornerstone Certificate.

- AAS 27100 - Introduction To African American Studies Credits: 3.00
- AAS 37300 - Issues In African American Studies Credits: 3.00
- AGR 20100 - Communicating Across Culture Credits: 3.00
- ANSC 38100 - Leadership For A Diverse Workplace Credits: 3.00
- ANTH 20300 - Biological Bases Of Human Social Behavior Credits: 3.00
- ANTH 20500 - Human Cultural Diversity Credits: 3.00
- ANTH 21000 - Technology And Culture Credits: 3.00
- ANTH 21200 - Culture, Food And Health Credits: 3.00
- ANTH 23000 - Gender Across Cultures Credits: 3.00
- ANTH 34000 - Global Perspectives On Health Credits: 3.00
- ANTH 34100 - Culture And Personality Credits: 3.00
- ANTH 37900 - Native American Cultures Credits: 3.00
- ARAB 28000 - Arabic Culture Credits: 3.00
- ASAM 24000 - Introduction To Asian American Studies Credits: 3.00
- AT 23300 - Ethics And Aviation Credits: 3.00
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology Credits: 3.00
- COM 22400 - Communicating In The Global Workplace Credits: 3.00
- COM 30300 - Intercultural Communication Credits: 3.00
- COM 32000 - Small Group Communication Credits: 3.00
- COM 41200 - Theories Of Human Interaction Credits: 3.00
- COM 42300 - Leadership, Communication And Organizations Credits: 3.00
- ECET 29000 - International Experience Credits: 1.00 to 3.00
- ECET 38001 - Global Professional Issues In Engineering Technology Credits: 3.00
- EDPS 23500 - Learning And Motivation Credits: 2.00 or 3.00
- EDPS 30000 - Student Leadership Development Credits: 1.00 to 3.00
- EDPS 30100 - Peer Counseling Training Credits: 1.00 to 3.00
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills Credits: 3.00
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings Credits: 3.00
- EDPS 31700 - Collaborative Leadership: Mentoring Credits: 3.00
- ENGL 41400 - Studies In Literature And Culture Credits: 3.00
- HDFS 28000 - Diversity In Individual And Family Life Credits: 3.00
- HDFS 33200 - Stress And Coping In Contemporary Families Credits: 3.00
- HEBR 38500 - The Holocaust In Modern Hebrew Literature Credits: 3.00
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century Credits: 3.00
- HIST 33805 - History Of Human Rights Credits: 3.00
- HIST 35000 - Science And Society In The Twentieth Century World Credits: 3.00
- HIST 36600 - Hispanic Heritage Of The United States Credits: 3.00
- HIST 37700 - History And Culture Of Native America Credits: 3.00
- HIST 46900 - Black Civil Rights Movement Credits: 3.00
- HTM 37000 - Sustainable Tourism And Responsible Travel Credits: 3.00
- HTM 37200 - Global Tourism Geography Credits: 3.00
- MSL 20100 - Leadership And Ethics Credits: 2.00 to 3.00
- OLS 35000 - Creativity In Business And Industry Credits: 3.00
• PHIL 11400 - Global Moral Issues Credits: 3.00
• PHIL 43500 - Philosophy Of Mind Credits: 3.00
• POL 22200 - Women, Politics, And Public Policy Credits: 3.00
• POL 23500 - International Relations Among Rich And Poor Nations Credits: 3.00
• POL 32600 - Black Political Participation In America Credits: 3.00
• POL 32700 - Global Green Politics Credits: 3.00
• POL 36000 - Women And The Law Credits: 3.00
• POL 41300 - Analysis Of Political Attitudes And Behavior Credits: 3.00
• POL 42300 - International Environmental Policy Credits: 3.00
• POL 42900 - Contemporary Political Problems Credits: 3.00
• POL 43300 - International Organization Credits: 3.00
• PSY 12000 - Elementary Psychology Credits: 3.00
• PUBH 23500 - Stress And Human Health Credits: 3.00
• SOC 10000 - Introductory Sociology Credits: 3.00
• SOC 31000 - Race And Ethnicity Credits: 3.00
• SOC 33900 - Sociology Of Global Development Credits: 3.00
• SYS 30000 - It's A Complex World - Addressing Global Challenges Credits: 3.00
• TECH 33000 - Technology And The Global Society Credits: 3.00
• TLI 11200 - Foundations Of Organizational Leadership Credits: 3.00
• TLI 31400 - Leading Innovation In Organizations Credits: 3.00
• WGSS 28200 - Introduction To LGBTQ Studies Credits: 3.00
• WGSS 38000 - Comparative Studies In Gender And Culture Credits: 3.00
• WGSS 38300 - Women, Work, And Labor Credits: 3.00
• Any Foreign Language course 20100, 20200, 30100, 30200, 40100, 40200

Other Requirements:

Intercultural Requirement:

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

Humanities Requirement (1 required):

1. Participation in Computational Arts Circle
2. Complete courses within major that have Humanities Integrated into their assignments
3. Complete course within major that have partnered with Humanities Professor
4. Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

Professional Requirement (1 required):

1. Complete an Internship
2. Complete a Co-op
3. Employment during the academic year related to Major Field of Study
4. Complete an in-class internship-like experience created by Major

5. Student Proposed Alternative: must be commensurate with the expectations of Professional Requirements related to Major Field of Study

Change of Major Approved Course Substitutions

CGT 21500

- CS 15900 - C Programming Credits: 3.00
- CS 15800 - C Programming
- CS 18000 - Problem Solving And Object-Oriented Programming Credits: 4.00

ECON 21000

- AGE 21700 - Economics Credits: 3.00
- ECON 25100 - Microeconomics Credits: 3.00
- ECON 25200 - Macroeconomics Credits: 3.00

MA 16010

- MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00
- MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00
- MA 16500 - Analytic Geometry And Calculus I Credits: 4.00

MGMT 45500

- MGMT 25400 - Legal Foundations Of Business I Credits: 3.00

PHYS 22000

- PHYS 17200 - Modern Mechanics Credits: 4.00
- PHYS 21400 - The Nature Of Physics Credits: 3.00
- PHYS 24100 - Electricity And Optics Credits: 3.00

SCLA 10100

- ENGL 10100 - English Composition I
- ENGL 10400 - English Composition I
- ENGL 10600 - First Year Composition With Conferences Credits: 4.00
- ENGL 10800 - First Year Composition Credits: 3.00
- HONR 19903 - Interdisciplinary Approaches In Writing Credits: 3.00

SCLA 10200

- COM 11400 - Fundamentals Of Speech Communication Credits: 3.00
• COM 21700 - Science Writing And Presentation Credits: 3.00

TECH 12000

• ENGR 13100 - Transforming Ideas To Innovation I Credits: 2.00 and
• ENGR 13200 - Transforming Ideas To Innovation II Credits: 2.00

Technical Electives

• AD 10500 - Design I Credits: 3.00
• AD 11300 - Basic Drawing Credits: 3.00
• AD 12500 - Introduction To Interior Design Credits: 3.00
• AD 21300 - Life Drawing I Credits: 3.00
• AD 22700 - History Of Art Since 1400 Credits: 3.00
• AD 25500 - Art Appreciation Credits: 3.00
• AD 26200 - Jewelry And Metalwork I Credits: 3.00
• AD 38300 - Modern Art Credits: 3.00

UX 37207

• CGT 49800 - Undergraduate Research In Computer Graphics Technology Credits: 1.00 to 3.00
• CGT 51200 - Foundational Readings Of User Experience Design Credits: 3.00
• CGT 56200 - Cognition And Human-Computer Interaction Credits: 3.00
• CGT 58100 - Workshop In Computer Graphics Technology Credits: 0.00 to 8.00
• TECH 39699 - Professional Practice Internship Credits: 0.00 to 3.00

Animation and Visual Effects Major Change (CODO) Requirements

Major Change (CODO) Requirements

Purdue students interested in changing their major should meet with their current academic advisor to discuss their options and begin the online process. Once the student's Major Change (CODO) has been processed, students will receive an email with instructions to authorize the change.

Students will need to meet the criteria below to be eligible for this major. A student's catalog term, typically the semester you started at Purdue, will be used to determine the Major Change criteria that applies to you. Students can find their catalog term at the top of their MyPurduePlan below the degree progress bar.

This major change information below is for the catalog term you are currently viewing; see the University Undergraduate Academic Advising Major Change (CODO) website for prior catalog term criteria, more about the major change process and FAQs.

Students changing their major to a space restricted program, as designated by SPACE AVAILABLE BASIS ONLY, need to have their Curricular Change Request (CCR) submitted by their home college/school by 5pm the Thursday of Finals week for requests effective the following term to be considered.

Majors
• Animation And Visual Effects, BS (ANFX)
• Themed Entertainment Design, BS (TEDN)

General Requirements

• Minimum Semesters: 0
• Minimum Purdue Main Campus Credit Hours (West Lafayette/Indianapolis): 0
• Minimum Cumulative GPA: 2.0

Course Requirements

• n/a

Other Requirements

• Students are accepted for effective terms FALL, SPRING, and SUMMER
• Major is open with no anticipated space restrictions.
• Students must be in good academic standing (not on academic notice)

Advising Website

Purdue Polytechnic Institute Undergraduate Studies College Advisors

Student Next Steps

For additional information on the CGT Department's CODO process, to find out how your courses would count in the CGT program, or for any other relevant information that will assist you in making a wise decision about CODOing, contact a CGT academic advisor.

Biomedical Engineering Supplemental Information

Biomedical Engineering Selectives

Below are the lists of courses approved to fulfill the following requirements in the Biomedical Engineering BS program:

• Life Science Requirements (6 credits)
• Technical Engineering Requirements (15 credits)
• General Education Requirements (21 credits)
• Ethics/Policy Healthcare Requirement (3 credits)

BME Depth Area Selectives (9 credits)
Students are required to select a primary depth area and complete the two required courses as part of their BME undergraduate degree requirements. Students are also required to select a secondary depth area and complete one of the two required courses for that depth area.

- **Primary Depth Area I** - Credit Hours: 3.00
- **Primary Depth Area II** - Credit Hours: 3.00
- **Secondary Depth Area** - Credit Hours: 3.00

Complete one of the following course sequences:

- **BME 31300 - Biofluid Mechanics** Credits: 3.00 and (BME 31400 or BME 38800)
- **BME 33000 - Bioelectricity** Credits: 3.00 and (ECE 30100 or BME 33100)
- **BME 36000 - Introduction To Biomedical Imaging** Credits: 3.00 and (ECE 30100 or BME 33100)
- **BME 35600 - Mathematical Models And Methods In Physiology** Credits: 3.00 and BME 35700

**Additional Course from the following List** (must not already be taken)

- BME 313, BME 314, BME 330, BME 331 (cannot be used if ECE 301 taken), BME 356, BME 357, BME 360, BME 388 and ECE 301 (cannot be used if BME 331 taken).

- **BME 31400 - Experimental Methods In Biomechanics** Credits: 3.00
- **BME 33100 - Biosignals And Systems** Credits: 3.00 (cannot be used if ECE 30100 has been taken)
- **BME 35700 - Foundations Of Biomedical Data Science** Credits: 3.00
- **BME 38800 - Applied Biomaterials** Credits: 3.00
- **ECE 30100 - Signals And Systems** Credits: 3.00

**Life Science Selectives (6 credits)**

Below are the courses approved by the BME Curriculum Committee.

- Please access myPurdue to confirm the semester courses are offered. They can change due to instructor availability, pre-requisites, and course offering rotation. In some cases an override may have to be requested.
- Only one PUBH course may be used to complete the Life Science Selective requirements.
- **AGRY 32000 - Genetics** Credits: 3.00
- **BCHM 30700 - Biochemistry** Credits: 3.00
- **BCHM 42100 - R For Molecular Biosciences** Credits: 3.00
- **BCHM 42200 - Computational Genomics** Credits: 3.00
- **BCHM 43400 - Medical Topics In Biochemistry** Credits: 3.00
- **BCHM 46200 - Metabolism** Credits: 3.00
- **BCHM 53600 - Biological And Structural Aspects Of Drug Design And Action** Credits: 3.00
- **BCHM 56100 - General Biochemistry I** Credits: 3.00
- **BCHM 56200 - General Biochemistry II** Credits: 3.00
- **BIOL 20300 - Human Anatomy And Physiology** Credits: 4.00
- **BIOL 24100 - Biology IV: Genetics And Molecular Biology** Credits: 3.00
- **BIOL 41500 - Introduction To Molecular Biology** Credits: 3.00
- **BIOL 41600 - Viruses And Viral Disease** Credits: 3.00
- **BIOL 42000 - Eukaryotic Cell Biology** Credits: 3.00
- **BIOL 43200 - Reproductive Physiology** Credits: 3.00
- **BIOL 43600 - Neurobiology** Credits: 3.00
- **BIOL 43800 - General Microbiology** Credits: 3.00
- **BIOL 44400 - Human Medical Genetics** Credits: 3.00
- **BIOL 47800 - Introduction To Bioinformatics** Credits: 3.00
Technical Engineering Selectives (15 credits)

Below are the courses approved by the BME Curriculum Committee.

Please access myPurdue to confirm the semester courses are offered. They can change due to instructor availability and course offering rotation. In some cases an override may have to be requested.

**BME Technical Engineering Selective Policy:**

A total of 15 credit hours must be completed with the following requirements and restrictions:
• One 3-credit hour Quantitative Breadth (QB) course and one 3-credit hour Data Science-focused QB course (cannot be the same course).
• A maximum of six credit hours may be taken at the 300-level.
• At least one 3 credit hour BME course must be taken at the 400-level from the Biomedical Engineering list. This cannot be BME 49800.
• The 400-level BME Technical Engineering Selective course must be successfully completed with a B or above before any 500-level BME course can be taken. This 400-level tech elective must be a 400-level from the Biomedical Engineering curriculum and cannot be BME 49800.
• Only one Regulatory Selective can count toward the Technical Engineering Selective requirement.
• One 3-credit course of the Technical Engineering Selective requirements may be satisfied with any of the following approved mentored experiential learning options (must complete all in the same category):
  3 credits of EPICS (200-level or higher)
  3 credits of VIP (200-level or higher)
  3 credits of BME 49800 research for credit (with restrictions)
• Students enrolling in a BME course cross-listed with another department should register for the BME section on myPurdue
• Any Depth Area course can be taken for Tech Selective credit if not used towards the Depth Area requirement.

Quantitative Breadth Selectives List (6 credits)

Choose one course from the Data Science-Focused Quantitative Breadth (QB) course list, and a second one from either QB list.

Data Science-Focused Quantitative Breadth Courses: (Must choose at least one)

• BME 35700 - Foundations Of Biomedical Data Science Credits: 3.00
• BME 40100 - Mathematical & Computational Analysis Of Complex System Dynamics In Biology, Medicine, & Healthcare Credits: 3.00
• BME 45000 - Deep Learning For Medical Imaging Credits: 3.00
• BME 50100 - Multivariate Analyses In Biostatistics Credits: 3.00
• BME 51100 - Biomedical Signal Processing Credits: 3.00
• BME 59500 - Selected Topics In Biomedical Engineering Credits: 1.00 to 3.00
  • Complex Systs Theory & Appls
• CS 31400 - Numerical Methods Credits: 3.00
• CS 35500 - Introduction To Cryptography Credits: 3.00
• CS 38100 - Introduction To The Analysis Of Algorithms Credits: 3.00
• IE 33500 - Operations Research - Optimization Credits: 3.00
• IE 33600 - Operations Research - Stochastic Models Credits: 3.00
• STAT 51200 - Applied Regression Analysis Credits: 3.00
• STAT 51400 - Design Of Experiments Credits: 3.00

Additional Quantitative Breadth Courses:

• ABE 30100 - Modeling And Computational Tools In Biological Engineering Credits: 3.00
• ABE 45000 - Computational Modeling And Data Analysis In Agricultural Engineering Credits: 3.00
• BME 31300 - Biofluid Mechanics Credits: 3.00
• BME 31400 - Experimental Methods In Biomechanics Credits: 3.00
• BME 33000 - Bioelectricity Credits: 3.00
• BME 33100 - Biosignals And Systems Credits: 3.00
• BME 35600 - Mathematical Models And Methods In Physiology Credits: 3.00
• BME 36000 - Introduction To Biomedical Imaging Credits: 3.00
• BME 38800 - Applied Biomaterials Credits: 3.00
• BME 59500 - Selected Topics In Biomedical Engineering Credits: 1.00 to 3.00
  Title: Continuum Models
  Biomed Engr
• CHE 45600 - Process Dynamics And Control Credits: 3.00
• ECE 30100 - Signals And Systems Credits: 3.00
• ECE 30200 - Probabilistic Methods In Electrical And Computer Engineering Credits: 3.00
• ECE 30411 - Electromagnetics I Credits: 3.00
• IE 53300 - Industrial Applications Of Statistics Credits: 3.00
• MA 41600 - Probability Credits: 3.00
• ME 30000 - Thermodynamics II Credits: 3.00
• ME 30800 - Fluid Mechanics Credits: 3.00
• ME 50900 - Intermediate Fluid Mechanics Credits: 3.00
• ME 57700 - Human Motion Kinetics Credits: 3.00
• NUCL 57000 - Fuzzy Approaches In Engineering Credits: 3.00
• STAT 41600 - Probability Credits: 3.00

Other Technical Engineering Selectives

• AAE 50700 - Principles Of Dynamics Credits: 3.00
• ABE 37000 - Reaction Kinetics In Biological Engineering Credits: 3.00
• ABE 44000 - Cell And Molecular Modeling In Biological Engineering Credits: 3.00
• BME 46000 - Cardiovascular Mechanical Support And Devices Credits: 3.00
• BME 47000 - Biomolecular Engineering Credits: 3.00
• BME 49500 - Selected Topics In Biomedical Engineering Credits: 1.00 to 4.00
  Titles: Gnd Challenges & Accessibility; Smart Healthcare Eng
• BME 52100 - Biosensors: Fundamentals And Applications Credits: 3.00
• BME 52800 - Measurement And Stimulation Of The Nervous System Credits: 3.00
• BME 43100 - Neural Engineering Credits: 3.00
• BME 51500 - Practical MRI And Applications Credits: 1.00
• BME 53000 - Imaging Diagnostic Technologies For Medical And Biological Applications Credits: 3.00
• BME 54000 - Biomechanics Credits: 3.00
• BME 54200 - Cell & Tissue Mechanics Credits: 3.00
• BME 55100 - Tissue Engineering Credits: 3.00
• BME 55300 - Biomedical Optics Credits: 3.00
• BME 55500 - Magnetic Resonance Imaging Theory Credits: 3.00
• BME 55600 - Introduction To Clinical Medicine For Engineering Solutions Credits: 3.00
• BME 58100 - Bio-Micro-Electro-Mechanical Systems (BioMEMS) & Biomedical Microsystems Credits: 3.00
• BME 58300 - Biomaterials Credits: 3.00
• BME 59500 - Selected Topics In Biomedical Engineering Credits: 1.00 to 3.00

• Bioelectronics
• Biophotonics: Fundamentals
• Deep Learning
• Design Of Mobile Robots
• Electromechanical Robotic Sys
• Functional Neuroimaging
• Healthcare Systems Engineering
• Implantable Medical Devices
• Light Tissue Interactions
• Molecular & Cell Biomechanics
• Neural Mech Health & Disease
• Point Of Care Diagnostics
• Polymeric Biomaterials
• Principles Of Tissue Engr
• Regenerative Biol/Tiss Repair

• CHE 34800 - Chemical Reaction Engineering Credits: 4.00
• CHE 52500 - Biochemical Engineering Credits: 3.00
• CHE 54400 - Structure And Physical Behavior Of Polymer Systems Credits: 3.00
• CS 30700 - Software Engineering I Credits: 3.00
• CS 33400 - Fundamentals Of Computer Graphics Credits: 3.00
• CS 34800 - Information Systems Credits: 3.00
• CS 40800 - Software Testing Credits: 3.00
• CS 44800 - Information Systems Credits: 3.00
• ECE 30010 - Introduction To Machine Learning And Pattern Recognition Credits: 3.00
• ECE 30412 - Electromagnetics II Credits: 3.00
• ECE 36800 - Data Structures Credits: 3.00
• ECE 43800 - Digital Signal Processing With Applications Credits: 4.00
• ECE 44100 - Distributed Parameter Systems Credits: 3.00
• ECE 45500 - Integrated Circuit Engineering Credits: 3.00
• ECE 45600 - Digital Integrated Circuit Analysis And Design Credits: 3.00
• ECE 47300 - Introduction To Artificial Intelligence Credits: 3.00
• ECE 50653 - Fundamentals Of Nanoelectronics Credits: 3.00
• ECE 51100 - Psychophysics Credits: 3.00
• HSCI 31200 - Radiation Science Fundamentals Credits: 3.00
• HSCI 59000 - Special Topics Credits: 1.00 to 8.00 Titles: Advanced MR Imaging; Basics Of ME Spectroscopy
• IE 34300 - Engineering Economics Credits: 3.00
IE 38600 - Work Analysis And Design I Credits: 3.00
IE 47200 - Imagine, Model, Make Credits: 3.00
IE 53000 - Quality Control Credits: 3.00
IE 54600 - Economic Decisions In Engineering Credits: 3.00
IE 55800 - Safety Engineering Credits: 3.00
IE 57700 - Human Factors In Engineering Credits: 3.00
IE 59000 - Topics In Industrial Engineering Credits: 1.00 to 6.00 Titles: Assistive Technology Practice; Human Factor & Medical Devices
MA 34100 - Foundations Of Analysis Credits: 3.00
ME 35200 - Machine Design I Credits: 4.00
ME 36300 - Principles And Practices Of Manufacturing Processes Credits: 3.00
ME 41300 - Noise Control Credits: 3.00
ME 44400 - Computer-Aided Design And Prototyping Credits: 3.00
ME 48900 - Introduction To Finite Element Analysis Credits: 3.00
ME 50500 - Intermediate Heat Transfer Credits: 3.00
ME 50700 - Laser Processing Credits: 3.00
ME 51300 - Engineering Acoustics Credits: 3.00
ME 55600 - Lubrication, Friction & Wear Credits: 3.00
ME 55900 - Micromechanics Of Materials Credits: 3.00
ME 56200 - Advanced Dynamics Credits: 3.00
ME 58600 - Microprocessors In Electromechanical Systems Credits: 3.00
ME 58800 - Mechatronics - Integrated Design Of Electro-Mechanical Systems Credits: 3.00
MSE 33000 - Processing And Properties Of Materials Credits: 3.00
MSE 38200 - Mechanical Response Of Materials Credits: 3.00
MSE 52700 - Introduction To Biomaterials Credits: 3.00
MSE 56200 - Soft Materials Credits: 3.00
MSE 57600 - Corrosion Credits: 3.00
NUCL 30000 - Nuclear Structure And Radiation Interactions Credits: 3.00
NUCL 47000 - Fuel Cell Engineering Credits: 3.00
NUCL 59700 - Selected Topics In Nuclear Engineering I Credits: 1.00 to 3.00 Title: Introduction To Bioelectrics
STAT 51300 - Statistical Quality Control Credits: 3.00

One 3-credit course of the Technical Engineering Selective requirements may be satisfied with any of the following approved mentored experiential learning options (must complete all in the same category):

- 3 credits of EPICS (200-level or higher)
- 3 credits of BME 49800 research for credit (with restrictions). This cannot be used to satisfy the 400-level BME Technical Elective requirement.

Regulatory Selectives List

Optional. Only one Regulatory Selective can count toward the Technical Engineering Selectives requirements.

- BME 49500 - Selected Topics In Biomedical Engineering Credits: 1.00 to 4.00
  - Glbl Perspect On Med Tech Dsgn
- BME 56100 - Preclinical And Clinical Study Design Credits: 3.00
- BME 56200 - Regulatory Issues Surrounding Approval Of Biomedical Devices Credits: 3.00
- BME 56300 - Quality Systems For Regulatory Compliance Credits: 3.00
General Education Selectives (21 credits)

- General Education I - Credit Hours: 3.00
- General Education II - Credit Hours: 3.00
- General Education III - Credit Hours: 3.00
- General Education IV - Credit Hours: 3.00 (C- or better)
- General Education V - Credit Hours: 3.00 (30000+ level/Upper level)
- General Education VI - Credit Hours: 3.00 (30000+ level/Upper level)
- General Education VII - Credit Hours: 3.00

General Education for Written & Oral Communication may be met in First-Year Engineering - Credit Hours: 6.00-7.00

General Education Courses can be used to meet University Core Requirements.

- BME Undergraduate students must complete 21 credits of general education. General education courses are non-technical courses that provide a broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context.
- Many courses count for both General Education and University Core Curriculum (UCC) Foundational Learning Outcomes (FLO) but many do not. When choosing courses to fulfill these requirements, students will need to check both the UCC FLO course list and the BME Approved General Education Course List found below.

The following requirements must be met:

- At least 12 credits must be taken inside the College of Liberal Arts, the Krannert School of Management and/or the Honors College.
- At least 6 credits of the general education courses must be at the non-introductory level, meaning they are at the 30000-level or higher, or have a required prerequisite in the same department.
- The remaining courses may be taken from any of the following departments. If a student is unsure about a course counting for their general education requirement, see academic advisor BEFORE taking the course.

Liberal Arts/Management/Honors (12 credits)

At least 12 credits must be taken inside the College of Liberal Arts, the School of Business and/or the Honors College. This includes courses with the following departmental prefixes.

AAS, AD, AMST, ANTH, ARAB, ASAM, ASL, CHNS, CLCS, CMPL, COM, DANC, ECON, ENGL, FR, GER, HEBR, HIST, HONR, ITAL, JPNS, JWST, LALS, LATIN, LC, LING, MARS, MGMT, MUS, PHIL, POL, PTGS, REL, RUSS, SCLA, SOC, SPAN, THTR, WGSS

Additional General Education Selectives (9 credits)

An additional 9 credits must be taken from either the departments in the Liberal Arts/Business/Honors list, or from the following additional departments:

AGEC, CSR, EDCI, EDPS, EDST, ENTR, HDFS, PSY, SLHS

General Education No Count List

The following courses may not be used to satisfy any General Education Selectives for the Bachelor of Science in Biomedical Engineering:

- AGEC 29800 - Careers In Agribusiness Credits: 1.00
- AGEC 35200 - Quantitative Techniques For Firm Decision Making Credits: 3.00
- AGEC 45100 - Applied Econometrics Credits: 3.00
- ANTH 30600 - Quantitative Methods For Anthropological Research Credits: 3.00
- ANTH 42800 - Field Methods In Archaeology Credits: 1.00 to 9.00
- ANTH 43800 - Field Methods In Biological Anthropology Credits: 1.00 to 9.00
- ANTH 49700 - Senior Honors Seminar Credits: 3.00
- DANC 24500 - Practicum In Dance Performance And Production Credits: 1.00 to 2.00
- ECON 37300 - Computational Economics Credits: 3.00
- ECON 46300 - Advanced Data Analysis And Machine Learning Credits: 3.00
- EDCI 22200 - Knowing The World Through Mathematics Credits: 3.00
- EDCI 22550 - Mathematics Education Seminar Credits: 1.00
- EDCI 36400 - Mathematics In The Elementary School Credits: 3.00
- EDCI 36401 - Teaching Mathematics In K-2 Credits: 2.00
- EDCI 36402 - Teaching Mathematics In Grades 3-6 Credits: 2.00
- EDCI 36500 - Science In The Elementary School Credits: 3.00
- EDCI 36501 - Teaching Science Through Design In Grades K-2 Credits: 2.00
- EDCI 36502 - Teaching Science Through Design In Grades 3-6 Credits: 2.00
- EDCI 42100 - The Teaching Of Biology In Secondary Schools Credits: 3.00
- EDCI 42400 - The Teaching Of Earth And Physical Science In The Secondary Schools Credits: 3.00
- EDCI 42500 - Teaching Of Secondary Mathematics - Methods I Credits: 3.00
- EDCI 42600 - Teaching Of Secondary Mathematics - Methods II Credits: 3.00
- EDCI 42800 - Teaching Science In The Middle And Junior High School Credits: 2.00
- ENGL 11000 - SHOULD BE SCLA Credits: 3.00
- ENGL 11100 - SHOULD BE SCLA Credits: 3.00
- HDFS 40600 - Mathematics In Preschool And Primary Grades Credits: 4.00
- HDFS 40900 - Science In Preschool And Primary Grades Credits: 3.00
- MGMT 38800 - Python For Business Credits: 3.00
- MGMT 47400 - Predictive Analytics Credits: 3.00
- MGMT 47500 - Machine Learning For Business Credits: 3.00
- PSY 20100 - Introduction To Statistics In Psychology Credits: 3.00
- PSY 20300 - Introduction To Research Methods In Psychology Credits: 3.00
- PSY 30500 - Understanding And Analyzing Psychological Data Credits: 3.00
- PSY 30600 - Understanding And Analyzing Experiments Credits: 3.00
- PSY 39000 - Research Experience In Psychology Credits: 1.00 to 3.00
- SOC 38200 - Introduction To Statistics In Sociology Credits: 3.00
- SOC 38300 - Introduction To Research Methods In Sociology Credits: 3.00
- SLHS 30200 - Hearing Science Credits: 3.00
- SLHS 30300 - Anatomy And Physiology Of The Speech Mechanism Credits: 3.00
- SLHS 41900 - Topics In Audiology And Speech Pathology Credits: 1.00 to 3.00
- SLHS 50100 - Neural Bases Of Speech And Hearing Credits: 3.00
- SLHS 56100 - Medical Audiology Credits: 3.00
- SLHS 30100 - Introduction To Cognitive Neuroscience Credits: 3.00

Ethics and Policy Healthcare Requirement (3 credits)

BME students must complete at least 3 credits (earning a C- or better) addressing ethical and policy issues in healthcare and medicine. It is important that our students have an awareness of societal, regulatory, policy, and ethical
considerations that influence healthcare and medicine. Thus, we require our students to take at least one course that advances their knowledge in this area.

Course(s) taken to fulfill this requirement cannot also count towards the General Education Requirement.

- ANTH 34000 - Global Perspectives On Health Credits: 3.00
- BME 56400 - Ethical Engineering Of Medical Technologies Credits: 3.00
- PHIL 20700 - Ethics For Technology, Engineering, And Design Credits: 3.00
- PHIL 27000 - Biomedical Ethics Credits: 3.00
- PHIL 28000 - Ethics And Animals Credits: 3.00
- PSY 58100 - Neuroethics Credits: 3.00
- SOC 57200 - Comparative Healthcare Systems Credits: 3.00
- SOC 57300 - The Human Side Of Medicine Credits: 3.00
- SOC 57400 - The Social Organization Of Healthcare Credits: 3.00

Electrical Engineering Technology Supplemental Information

ECET Electives (12 credits)

Please note that not all ECET Electives are offered every year.

- ECET 30201 - Introduction To Industrial Controls Credits: 3.00
- ECET 31800 - Foundations Of Audio Electronics Credits: 3.00
- ECET 32100 - Introduction To Nanotechnology Credits: 3.00
- ECET 32300 - Introduction To Electric Vehicle Systems Credits: 3.00
- ECET 32700 - Instrumentation And Data Acquisition Design Credits: 3.00
- ECET 32900 - Advanced Embedded Digital Systems Credits: 3.00
- ECET 33300 - Power Electronics In Energy Systems Credits: 3.00
- ECET 33500 - Computer Architecture And Performance Evaluation Credits: 3.00
- ECET 33700 - Continuous Systems Analysis And Design Credits: 3.00
- ECET 33900 - Digital Signal Processing Credits: 3.00
- ECET 34900 - Advanced Digital Systems Credits: 3.00
- ECET 35901 - Computer Based Data Acquisition Applications Credits: 3.00
- ECET 36400 - Fundamentals Of Electromagnetics Credits: 3.00
- ECET 36900 - Applied Computer Vision For Sensing And Automation Credits: 3.00
- ECET 37201 - Continuous Control Electronics Credits: 3.00
- ECET 37300 - Applied Electronic Drives Credits: 3.00
- ECET 38600 - Building Electrical Codes And Standard Practices Credits: 3.00
- ECET 38800 - Analog IC Applications Credits: 3.00
- ECET 42301 - Electrical Vehicle Integration And Fabrication Credits: 3.00
- ECET 42800 - Audio Electronics-Selected Topics Credits: 3.00
- ECET 43600 - Electrical Power Transmissions, Distribution, And Smart Control Credits: 3.00
- ECET 43900 - Advanced Digital Signal Processing Credits: 3.00
- ECET 44200 - Programming Robots With ROS Credits: 3.00
- ECET 44400 - Wireless Systems: Design And Measurement Credits: 3.00
- ECET 47600 - Smart Grid Technology And Applications Credits: 3.00
Advanced Analysis Selectives (3 credits)

- ECET 33700 - Continuous Systems Analysis And Design Credits: 3.00
- ECET 33900 - Digital Signal Processing Credits: 3.00

Senior Capstone I & II Selectives (6 credits)

Select one pair of Senior Capstone I and II Selectives. Senior Capstone Selectives I and II must be taken in consecutive semesters to count toward degree requirements.

- ENGT 48000 - Engineering Technology Capstone I Credits: 3.00 and
- ENGT 48100 - Engineering Technology Capstone II Credits: 3.00

or

- ECET 43000 - Electrical And Electronic Product And Program Management Credits: 3.00 and
- ECET 46000 - Project Design And Development Credits: 3.00

or

- ECET 43100 - International Capstone Project Planning And Design Credits: 3.00 and
- ECET 46100 - International Capstone Project Execution Credits: 3.00

Applied Calculus I Selective (3 credits)

- MA 16010 - Applied Calculus I Credits: 3.00 (preferred)
- MA 16100 - Plane Analytic Geometry And Calculus I Credits: 5.00
- MA 16500 - Analytic Geometry And Calculus I Credits: 4.00

Applied Calculus II Selective (3 credits)

- MA 16020 - Applied Calculus II Credits: 3.00 (preferred)
- MA 16200 - Plane Analytic Geometry And Calculus II Credits: 5.00
- MA 16600 - Analytic Geometry And Calculus II Credits: 4.00

Introduction to C Programming Selective (3 credits)

- CNIT 10500 - Introduction To C Programming Credits: 3.00 (preferred)
- CS 15900 - C Programming Credits: 3.00

General Physics I Selective (4 credits)

- PHYS 22000 - General Physics Credits: 4.00 (preferred)
- PHYS 17200 - Modern Mechanics Credits: 4.00

General Physics II Selective (4 credits)
- PHYS 22100 - General Physics Credits: 4.00 (preferred)
- PHYS 24100 - Electricity And Optics Credits: 3.00
- PHYS 27200 - Electric And Magnetic Interactions Credits: 4.00

Statistics Selective (3 credits)

- STAT 22500 - Introduction To Probability Models Credits: 3.00 (preferred)
- STAT 30100 - Elementary Statistical Methods Credits: 3.00

English Composition Selective (3 credits)

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

Written Communication Selective (3 credits)

- ENGL 20500 - Introduction To Creative Writing Credits: 3.00
- ENGL 30400 - Advanced Composition Credits: 3.00
- ENGL 42000 - Business Writing Credits: 3.00
- ENGL 42100 - Technical Writing Credits: 3.00
- ENGL 42400 - Writing For High Technology Industries Credits: 3.00

Freshman Speech Selective (3 credits)

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

Oral Communication Selective (3 credits)

- Any communication (COM) course at the 20000 level or higher.

Business Selective (3 credits)

Select 3 hours in one of the disciplines listed below, or any of the designated courses, subject to the following conditions:

- The course must be from the UCC approved list of Human Culture: Behavioral/Social Sciences, unless the student selects a General Education Selective, which meets the Human Culture: Behavioral/Social Sciences requirement for core.
- Any Agricultural Economics course (AGEC) at the 200-level or higher
- Any Economics (ECON) course at the 200-level or higher
- Any Entrepreneurship (ENTR) course at the 200-level or higher
- Any Management (MGMT) course at the 200-level or higher
- Or select one of the following courses:
• AGEC 20300 - Introductory Microeconomics For Food And Agribusiness Credits: 3.00
• AGEC 20400 - Introduction To Resource Economics And Environmental Policy Credits: 3.00
• AGEC 21700 - Economics Credits: 3.00
• AGEC 25000 - Economic Geography Of World Food And Resources Credits: 3.00
• CSR 34200 - Personal Finance Credits: 3.00
• ECON 21000 - Principles Of Economics Credits: 3.00
• ECON 25100 - Microeconomics Credits: 3.00
• ECON 25200 - Macroeconomics Credits: 3.00
• TLI 11200 - Foundations Of Organizational Leadership Credits: 3.00
• TLI 15200 - Business Principles For Organizational Leadership Credits: 3.00
• TLI 21300 - Project Management Credits: 3.00
• IET 21400 - Introduction To Supply Chain Management Technology Credits: 3.00
• IET 34200 - Warehouse And Inventory Management Credits: 3.00
• IET 34300 - Technical And Service Selling Credits: 3.00

General Education Selectives (12 credits)

Select 12 hours in one or more of the subject areas (disciplines) listed below, subject to the following conditions:

Foreign languages (except for courses in a student's native language); African American Studies (AAS); Art and Design (AD); American Studies (AMST); Anthropology (ANTH); Asian American Studies (ASAM); American Sign language (ASL); Bands (BAND); Classics (CLCS); Comparative Literature (CMPL); Communication (COM); Economics (ECON); English (ENGL); History (HIST); Interdisciplinary Studies (IDIS); Linguistics (LING); Music History and Theory (MUS); Philosophy (PHIL); Political Science (POL); Psychology (PSY); Religious Studies (REL); Sociology (SOC); Theater (THTR); Women's Studies (WGSS); ROTC (AFT, MSL, NS)

- One course must be from the UCC approved list of Human Culture: Humanities.
- One course must be from the UCC approved list of Human Culture: Behavioral/Social Sciences, unless the student selects a Business Selective, which meets the Human Culture: Behavioral/Social Sciences requirement for core.
- Only one of AGEC 21700 Economics and ECON 21000 Principles of Economics can be applied to the Plan of Study.
- BAND courses are limited to 6 hours.

Industrial Economics Selective (3 credits)

- IET 33400 - Economic Analysis For Technology Systems Credits: 3.00
- MGMT 20000 - Introductory Accounting Credits: 3.00
- MGMT 21200 - Business Accounting Credits: 3.00
- AGEC 33000 - Management Methods For Agricultural Business Credits: 3.00
- AGEC 35200 - Quantitative Techniques For Firm Decision Making Credits: 3.00

Technical Selectives (9 credits)

- ECET: ECET 29900 and other lab assistant courses are limited to 3 credit hours.
- College of Engineering: ME 29700 and Engineering Projects in Community Service (EPICS) are each limited to 3 credit hours. First Year Engineering (ENGR) courses cannot be used.
- Purdue Polytechnic Institute: CNIT 13600 and CNIT 15501 cannot be used.
• College of Science: Additional lab-based physics (PHYS), chemistry (CHM) and biology (BIOL) courses; computer Science (CS) courses; and higher-level mathematics (MA) courses: MA 26100, MA 26500, and MA 26600. CS 11000, CS 23500, CS 15900 cannot be used.

• College of Liberal Arts: Up to 9 hours of THTR 25300, THTR 35300, THTR 55300, FVS 26100, FVS 33200, FVS 33700, or FVS 33800.

• ECET Co-op sessions 1, 2 and 3 with seminar

• ECET 49900 - Electrical Engineering Technology Credits: 1.00 to 9.00
  Sust Engy Tech: Intl Perspectv Purdue In Germany

Global / Professional Selective (3 credits)

• COM 30300 - Intercultural Communication Credits: 3.00
• ECET 38001 - Global Professional Issues In Engineering Technology Credits: 3.00
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills Credits: 3.00
• EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings Credits: 3.00
• OLS 34600 - Critical Thinking And Ethics Credits: 3.00
• OLS 38600 - Leadership For Organizational Change Credits: 3.00
• PSY 33500 - Stereotyping And Prejudice Credits: 3.00
• TECH 32000 - Technology And The Organization Credits: 3.00
• TECH 33000 - Technology And The Global Society Credits: 3.00
• TLI 21300 - Project Management Credits: 3.00

Elective (3 credits)

Any non-remedial course.

Minors

Minors are offered through a variety of disciplines. The discipline offering the minor establishes the requirement. A minor is not required.

The Electrical Engineering Technology minor cannot be added to this major.

Double Majors within the Electrical Engineering Technology Program

Within the PIECET-BS Program, double majors of AUET or CEGT or ENET are allowed without restriction. A double major with EETC requires an additional 12 hours of ECET courses. The additional courses will fulfill the EETC major for the purposes of double majors. The additional courses have the following restrictions:

• No 100-level course may be used.
• Only three (3) credits of a 200-level course may be used, excluding: ECET 22400 Electronic Systems, ECET 29000 International Experience and ECET 29900 Selected EET Subjects, which may not be used.
• All courses must be taken on the PWL and/or PSW campuses.

Professional Requirement
The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response.

Table 1: Approved Professional Experiences

<table>
<thead>
<tr>
<th>Approval by</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic</td>
<td>Any TECH Professional Practice course (co-op, intern, etc.)</td>
</tr>
<tr>
<td>Automatic</td>
<td>MET 29900 Internship for Credit</td>
</tr>
<tr>
<td>Automatic</td>
<td>EPICS courses, minimum of two</td>
</tr>
<tr>
<td>Advisor</td>
<td>Any approved internship (assuming student and/or employer provide documentation)</td>
</tr>
<tr>
<td>Advisor</td>
<td>Military service (ROTC completion, reservist, active duty, veteran)</td>
</tr>
<tr>
<td>Faculty</td>
<td>Supervised undergraduate research experiences or laboratory assistantships (e.g., employed in the AEL as lab technician)</td>
</tr>
<tr>
<td>Faculty</td>
<td>Independent study - by petition to ensure the project meets the spirit of the requirement</td>
</tr>
<tr>
<td>Faculty</td>
<td>Professional society/club activities (e.g., led the Solar Racing team) - by petition</td>
</tr>
<tr>
<td>Faculty</td>
<td>Any approved employment or industry project.</td>
</tr>
</tbody>
</table>

*Approval Key:
- Automatic - student participation in this professional experience is already documented through existing means.
- Advisor - advisor reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.
- Faculty - designated committee reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.

Intercultural Requirement

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

Step 2: Complete one (1) of the following global experiences:
- Participate in a Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in a full semester abroad program program, or
- Complete 3 credit hours from the Polytechnic list of recommended Global/Cultural courses.

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

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pre-test).
*Global experiences must take place during the time of enrollment in Polytechnic to complete Step 2. Experiences taken place prior to a student's initial enrollment will not serve to complete Step 2. Intercultural competencies gained on experiences prior to Polytechnic enrollment will be captured as baseline data on a student's IDI.

Approved Global/Cultural Course List for Intercultural Requirement

**Interior Architecture Major Change (CODO) Requirements**

**Major Change (CODO) Requirements**

Purdue students interested in changing their major should meet with their current academic advisor to discuss their options and begin the online process. Once the student's Major Change (CODO) has been processed, students will receive an email with instructions to authorize the change.

Students will need to meet the criteria below to be eligible for this major. A student's catalog term, typically the semester you started at Purdue, will be used to determine the Major Change criteria that applies to you. Students can find their catalog term at the top of their MyPurduePlan below the degree progress bar.

This major change information below is for the catalog term you are currently viewing; see the University Undergraduate Academic Advising Major Change (CODO) website for prior catalog term criteria, more about the major change process and FAQs.

Students changing their major to a space restricted program, as designated by SPACE AVAILABLE BASIS ONLY, need to have their Curricular Change Request (CCR) submitted by their home college/school by 5pm the Thursday of Finals week for requests effective the following term to be considered.

**Majors**

- **Interior Architecture, BS (Indianapolis Only) (IARC)**

**General Requirements**

- **Minimum Semesters at Purdue West Lafayette:** 0
- **Minimum Purdue Main Campus Credit Hours (West Lafayette/Indianapolis):** 0
- **Minimum Cumulative GPA:** 2.0

**Course Requirements**

- n/a

**Other Requirements**

- Students are accepted for effective terms FALL, SPRING, and SUMMER
- Students are admitted on a SPACE AVAILABLE BASIS ONLY. Space is limited.
- Students must be in good academic standing (not on academic notice)

**Advising Website**
Student Next Steps

Students can email an advisor and will be sent an invite through BoilerConnect to make an appointment.

Mechanical Engineering Technology Supplemental Information

Computer Graphics Technology Selective

- CGT 11000 - Technical Graphics Communications Credits: 3.00
- ENGT 10500 - Industrial Technology Introduction To Design Credits: 3.00
- MFET 10301 - Geometric Modeling Applications Credits: 3.00
- MFET 16300 - Graphical Communication And Spatial Analysis Credits: 2.00

Freshman Composition Selective +

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

Freshman Speech Selective +

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

Economics/Finance Selective

- AGEC 21700 - Economics Credits: 3.00
- CSR 34200 - Personal Finance Credits: 3.00
- ECON 21000 - Principles Of Economics Credits: 3.00
- ECON 25100 - Microeconomics Credits: 3.00
- ECON 25200 - Macroeconomics Credits: 3.00
- ENTR 20000 - Introduction To Entrepreneurship And Innovation Credits: 3.00

Communications Selective +

- COM 31500 - Speech Communication Of Technical Information Credits: 3.00
- COM 32000 - Small Group Communication Credits: 3.00
- COM 41500 - Discussion Of Technical Problems Credits: 3.00
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills Credits: 3.00
Technical Writing Selective +

- ENGL 42000 - Business Writing Credits: 3.00
- ENGL 42100 - Technical Writing Credits: 3.00
- ENGL 42400 - Writing For High Technology Industries Credits: 3.00

Programming Selective

- CNIT 10500 - Introduction To C Programming Credits: 3.00
- CNIT 15500 - Introduction To Object-Oriented Programming Credits: 3.00
- CNIT 15501 - Introduction To Software Development Concepts Credits: 3.00
- CNIT 17500 - Visual Programming Credits: 3.00
- CS 15900 - C Programming Credits: 3.00
- CS 17700 - Programming With Multimedia Objects Credits: 4.00
- CS 18000 - Problem Solving And Object-Oriented Programming Credits: 4.00
- MET 16400 - Computing In Engineering Technology Credits: 3.00

Technical Selective

- 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.
- Any MFET 200 level lab-based course.
- Purdue 3- session co-op with completed seminar courses.
- ANSC 23000 - Physiology Of Domestic Animals Credits: 4.00
- AT 27200 - Introduction To Composite Technology Credits: 3.00
- AT 27800 - Nondestructive Testing For Aircraft Credits: 3.00
- BCHM 22100 - Analytical Biochemistry Credits: 3.00
- BIOL 20300 - Human Anatomy And Physiology Credits: 4.00
- BIOL 22100 - Introduction To Microbiology Credits: 4.00
- CE 35000 - Introduction To Environmental And Ecological Engineering Credits: 3.00
- CE 35500 - Engineering Environmental Sustainability Credits: 3.00
- CM 23301 - Mechanical, Electrical And Piping Systems In The Built Environment Credits: 3.00
- ECET 22700 - DC And Pulse Electronics Credits: 3.00
- ECET 27700 - AC And Power Electronics Credits: 3.00
- ECET 27900 - Embedded Digital Systems Credits: 3.00
- FNR 31110 - Identification And Basic Properties Of Wood Credits: 3.00
- FNR 41800 - Properties Of Wood Related To Manufacturing Credits: 3.00
- FNR 41910 - Furniture Product Development And Strength Design Credits: 3.00
- FNR 42500 - Secondary Wood Products Manufacturing Credits: 3.00
- HSCI 31200 - Radiation Science Fundamentals Credits: 3.00
- IE 57700 - Human Factors In Engineering Credits: 3.00
- MA 15800 - Precalculus - Functions And Trigonometry Credits: 3.00
- MFET 11301 - Product Data Management Credits: 3.00
- MFET 28800 - Smart Manufacturing Operational And Information Networks Credits: 3.00
- MFET 30301 - Digital Manufacturing Credits: 3.00
- NS 35000 - Naval Ship Systems-Engineering Credits: 3.00
- TECH 22000 - Designing Technology For People Credits: 3.00
- TECH 34000 - Prototyping Technology For People Credits: 3.00
- TLI 36700 - Teaching Design And Innovation I Credits: 3.00
- TLI 46000 - Teaching Design And Innovation II Credits: 3.00

Management Selective

A management selective course is required. If ECET 38001, EDPS 31600, MFET 35800, MGMT 45500 or OLS 46500 is the Global/Professional selective than a Technical Selective is allowed.

- AFT 35100 - Leading People And Effective Communication I Credits: 3.00
- AFT 36100 - Leading People And Effective Communication II Credits: 3.00
- ECET 38001 - Global Professional Issues In Engineering Technology Credits: 3.00
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills Credits: 3.00
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings Credits: 3.00
- EDPS 31700 - Collaborative Leadership: Mentoring Credits: 3.00
- ENTR 31000 - Marketing And Management For New Ventures Credits: 3.00
- ENTR 31500 - Business Planning For Social Entrepreneurship Credits: 3.00
- IET 41400 - Financial Analysis For Technology Systems Credits: 3.00
- MFET 35800 - Smart Manufacturing And The Global Economy Credits: 3.00
- MGMT 20000 - Introductory Accounting Credits: 3.00
- MGMT 20100 - Management Accounting I Credits: 3.00
- MGMT 21200 - Business Accounting Credits: 3.00
- MGMT 45500 - Legal Background For Business I Credits: 3.00
- MSL 20200 - Army Doctrine And Decision Making Credits: 2.00 to 3.00
- MSL 30100 - Training Management And The Warfighting Function Credits: 3.00 to 4.00
- MSL 40100 - The Army Officer Credits: 3.00 to 4.00
- NS 21400 - Naval Leadership And Management Credits: 3.00
- NS 41300 - Naval Leadership And Ethics Credits: 3.00
- OLS 27400 - Applied Leadership Credits: 3.00
- OLS 36400 - Professional Development Program Credits: 3.00
- OLS 38600 - Leadership For Organizational Change Credits: 3.00
- OLS 45600 - Leadership In A Global Environment Credits: 3.00
- PSY 27200 - Introduction To Industrial-Organizational Psychology Credits: 3.00
- TLI 11200 - Foundations Of Organizational Leadership Credits: 3.00
- TLI 15200 - Business Principles For Organizational Leadership Credits: 3.00
- TLI 21300 - Project Management Credits: 3.00

MET Elective (9 credit hours)

* 5 session co-op with completed seminar courses.
- MET 30200 - CAD In The Enterprise Credits: 3.00
- MET 31100 - Experimental Strength Of Materials Credits: 3.00
- MET 31300 - Applied Fluid Mechanics Credits: 3.00
- MET 31500 - Applied Mechanism Kinematics And Dynamics Credits: 3.00
- MET 31601 - Mechanics Of Machine Design Credits: 3.00
• MET 31700 - Machine Diagnostics Credits: 3.00
• MET 31800 - Applied Room Acoustics Credits: 3.00
• MET 33400 - Advanced Fluid Power Credits: 3.00
• MET 34600 - Advanced Materials In Manufacturing Credits: 3.00
• MET 34900 - Stringed Instrument Design And Manufacture Credits: 3.00
• MET 37900 - Introduction To Aerospace Technology Credits: 3.00
• MET 38200 - Controls And Instrumentation For Automation Credits: 3.00
• MET 40000 - Mechanical Design Credits: 3.00
• MET 41100 - Introduction To The Finite Element Method Credits: 3.00
• MET 42100 - Air Conditioning And Refrigeration Credits: 3.00
• MET 42200 - Power Plants And Energy Conversion Credits: 3.00
• MET 42600 - Internal Combustion Engines Credits: 3.00
• MET 43200 - Hydraulic Motion Control Systems Credits: 3.00
• MET 43600 - Pneumatic Motion Control Systems Credits: 3.00
• MET 44301 - Joining Processes Credits: 3.00
• MET 44500 - Applied Metalcasting Credits: 3.00
• MET 45100 - Manufacturing Quality Control Credits: 3.00
• MET 45200 - Advanced GD&T Concepts Applied To Product Quality Credits: 3.00
• MET 48200 - Mechatronics Credits: 3.00
• MET 49000 - Special Topics In MET Credits: 1.00 to 3.00
  - Independent Study

Global/Professional Selective

• AFT 47100 - National Security/Commissioning Preparation I Credits: 3.00
• AFT 48100 - National Security/Commissioning Preparation II Credits: 3.00
• ANTH 20500 - Human Cultural Diversity Credits: 3.00
• ANTH 34100 - Culture And Personality Credits: 3.00
• ARAB 28000 - Arabic Culture Credits: 3.00
• CHNS 28000 - Topics In Chinese Civilization And Culture Credits: 3.00
• COM 22400 - Communicating In The Global Workplace Credits: 3.00
• COM 30300 - Intercultural Communication Credits: 3.00
• ECET 38001 - Global Professional Issues In Engineering Technology Credits: 3.00
• EDPS 10500 - Academic And Career Planning Credits: 3.00
• EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings Credits: 3.00
• FR 33000 - French Cinema Credits: 3.00
• GER 23000 - German Literature In Translation Credits: 3.00
• GER 28000 - German Special Topics Credits: 3.00 - Beer Brewing in the German Culture
• GER 33000 - German Cinema Credits: 3.00
• HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century Credits: 3.00
• HIST 33300 - Science And Society In Western Civilization I Credits: 3.00
• HIST 33400 - Science And Society In Western Civilization II Credits: 3.00
• HIST 35000 - Science And Society In The Twentieth Century World Credits: 3.00
• JPNS 28000 - Introduction To Modern Japanese Civilization Credits: 3.00
• LC 23500 - East Asian Literature In Translation Credits: 3.00
• LC 23900 - Women Writers In Translation Credits: 3.00
• MFET 35800 - Smart Manufacturing And The Global Economy Credits: 3.00
• MGMT 45500 - Legal Background For Business I Credits: 3.00
• MSL 30200 - Applied Leadership In Small Unit Operations Credits: 3.00 to 4.00
• MUS 37600 - World Music Credits: 3.00
• NS 41300 - Naval Leadership And Ethics Credits: 3.00
• OLS 45600 - Leadership In A Global Environment Credits: 3.00
• PHIL 11400 - Global Moral Issues Credits: 3.00
• PHIL 20600 - Introduction To Philosophy Of Religion Credits: 3.00
• PHIL 29000 - Environmental Ethics Credits: 3.00
• POL 23100 - Introduction To United States Foreign Policy Credits: 3.00
• POL 23500 - International Relations Among Rich And Poor Nations Credits: 3.00
• PSY 33500 - Stereotyping And Prejudice Credits: 3.00
• PTGS 33000 - Brazilian, Portuguese, And African Cinema Credits: 3.00
• SCLA 11100 - Language And Cultural Exchange II: Texts And Contexts Credits: 3.00
• SOC 31000 - Race And Ethnicity Credits: 3.00
• SPAN 23500 - Spanish American Literature In Translation Credits: 3.00
• SPAN 33000 - Spanish And Latin American Cinema Credits: 3.00
• SYS 30000 - It's A Complex World - Addressing Global Challenges Credits: 3.00
  Any foreign language 200 or higher (20100, 20200, 30100, 30200, 40100, 40200).
• TECH 33000 - Technology And The Global Society Credits: 3.00
• Approved Study Abroad 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.

Approved Global/Cultural Course List for Intercultural Requirement

Professional Requirement

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response.
Table 1: Approved Professional Experiences

<table>
<thead>
<tr>
<th>Approval by</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic</td>
<td>Any TECH Professional Practice course (co-op, intern, etc.)</td>
</tr>
<tr>
<td>Automatic</td>
<td>MET 29900 Internship for Credit</td>
</tr>
<tr>
<td>Automatic</td>
<td>EPICS courses, minimum of two</td>
</tr>
<tr>
<td>Advisor</td>
<td>Any approved internship (assuming student and/or employer provide documentation)</td>
</tr>
<tr>
<td>Advisor</td>
<td>Military service (ROTC completion, reservist, active duty, veteran)</td>
</tr>
<tr>
<td>Faculty</td>
<td>Supervised undergraduate research experiences or laboratory assistantships (e.g., employed in the AEL as lab technician)</td>
</tr>
<tr>
<td>Faculty</td>
<td>Independent study - by petition to ensure the project meets the spirit of the requirement</td>
</tr>
<tr>
<td>Faculty</td>
<td>Professional society/club activities (e.g., led the Solar Racing team) - by petition</td>
</tr>
<tr>
<td>Faculty</td>
<td>Any approved employment or industry project</td>
</tr>
</tbody>
</table>

* 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

Organizational Leadership Major Change (CODO) Requirements

Major Change (CODO) Requirements

Purdue students interested in changing their major should meet with their current academic advisor to discuss their options and begin the online process. Once the student's Major Change (CODO) has been processed, students will receive an email with instructions to authorize the change.

Students will need to meet the criteria below to be eligible for this major. A student's catalog term, typically the semester you started at Purdue, will be used to determine the Major Change criteria that applies to you. Students can find their catalog term at the top of their MyPurduePlan below the degree progress bar.

This major change information below is for the catalog term you are currently viewing; see the University Undergraduate Academic Advising Major Change (CODO) website for prior catalog term criteria, more about the major change process and FAQs.

Students changing their major to a space restricted program, as designated by SPACE AVAILABLE BASIS ONLY, need to have their Curricular Change Request (CCR) submitted by their home college/school by 5pm the Thursday of Finals week for requests effective the following term to be considered.
Majors

- Organizational Leadership, BS (OLSV)

General Requirements

- Minimum Semesters: 1
- Minimum Purdue Main Campus Credit Hours (West Lafayette/Indianapolis): 12
- Minimum Cumulative GPA: 2.0

Course Requirements

- n/a

Other Requirements

- Students are accepted for effective terms FALL, SPRING, and SUMMER.
- Major is open with no anticipated space restrictions.
- Students must be in good academic standing (not on academic notice).

Advising Website

Technology, Leadership & Innovation Academic Advisors

Student Next Steps

Highly encouraged to set-up a meeting with a Technology, Leadership & Innovation academic advisor.

Organizational Leadership Supplemental Information

Written Communication Selective (3 credits)

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

Humanities Foundation Selective (3 credits)

Courses must be from the approved UCC Human Cultures: Humanities list: http://www.purdue.edu/provost/initiatives/curriculum/course.html

Science Selective (6 Credits)
Courses must be from the approved UCC Science list: http://www.purdue.edu/provost/initiatives/curriculum/course.html

Specialization Selective (6 credits)

Any 200+ level Communication (COM) course or 200+ level declared minor course.

Globalization Experience (0 credits)

Minimum requirements:

1. Complete the Pre-test Intercultural Development Inventory Assessments (1st year)
2. Complete one (1) of the following global experiences:
   o Participate in a Purdue University international capstone, collaborative project, or
   o Participate in an international internship (international location), or
   o Participate in Faculty-led Study Abroad program, or
   o Participate in a full semester abroad program, or
   o Complete 3 credit hours from the Polytechnic list of recommended Global/ Cultural courses.
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.

Post-Baccalaureate Certificate

Hybrid Vehicle Systems ABE, Post Baccalaureate Certificate

Hybrid Vehicle Systems ECE, Post Baccalaureate Certificate

Hybrid Vehicle Systems ME, Post Baccalaureate Certificate

Hybrid Vehicle Systems MSE, Post Baccalaureate Certificate

Project Management, Post Baccalaureate Certificate

Other Degrees

2024-2025 Academic Calendar

This information is for Purdue West Lafayette, Purdue Indianapolis, and Purdue Polytechnic Statewide campuses
<table>
<thead>
<tr>
<th>Event</th>
<th>Summer 2024</th>
<th>Fall 2024</th>
<th>Winter 2024</th>
<th>Spring 2025</th>
<th>Summer 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes/Term Begin</td>
<td>May 13, 2024</td>
<td>August 19, 2024</td>
<td>December 16, 2024</td>
<td>January 13, 2025</td>
<td>May 19, 2025</td>
</tr>
<tr>
<td>Last Day to Apply to Graduate/</td>
<td>June 7</td>
<td>September 13</td>
<td>February 7</td>
<td>June 13</td>
<td></td>
</tr>
<tr>
<td>Declare Candidacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classes End</td>
<td>August 2</td>
<td>December 7</td>
<td>January 3</td>
<td>May 3</td>
<td>August 8</td>
</tr>
<tr>
<td>Final Exams</td>
<td></td>
<td>December 9-14</td>
<td>May 5-10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term Ends</td>
<td>August 2</td>
<td>December 14</td>
<td>May 10</td>
<td>August 8</td>
<td></td>
</tr>
<tr>
<td>Commencements</td>
<td>August 3</td>
<td>December 15</td>
<td>May 16-18</td>
<td>August 9</td>
<td></td>
</tr>
<tr>
<td>Fall Break</td>
<td></td>
<td>October 7-8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring Break</td>
<td></td>
<td></td>
<td>March 17-22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juneteenth - Class in Session</td>
<td>June 19</td>
<td></td>
<td>June 19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thanksgiving Break</td>
<td></td>
<td>November 27-30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter Recess</td>
<td></td>
<td>December 26-27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memorial Day - University Closed</td>
<td>May 27</td>
<td></td>
<td>May 26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fourth of July - University Closed</td>
<td>July 4</td>
<td></td>
<td>July 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor Day - University Closed</td>
<td></td>
<td>September 2</td>
<td></td>
<td>January 20</td>
<td></td>
</tr>
<tr>
<td>MLK Day - University Closed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>President's Designated Holiday</td>
<td></td>
<td></td>
<td>December 23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christmas Holiday - University Closed</td>
<td>December 24 &amp; 25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Year's Day - University Closed</td>
<td></td>
<td></td>
<td>January 1, 2025</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 2024-2025 Add/Drop Calendars

- Summer 2024 Add/Drop
- Fall 2024 Add/Drop
- Winter 2024 Add/Drop
- Spring 2025 Add/Drop

- Please note the submission date is not the effective date. Your request cannot be processed until all required actions from campus partners are complete. This may affect your refund and/or if your request is canceled for not meeting the university established deadlines.
• All required actions must be completed by 11:59 PM EST on said deadline day
• Information on refunds from the University may be found at the following web site: https://www.purdue.edu/bursar/tuition/refund-withdrawals/policies.php
• Students withdrawing from ALL course assignments after classes have begun should go to myPurdue, Academic tab, and look for Withdraw Information.
• The revision/refund dates on this calendar apply to courses that exactly fit the time frames listed. Courses offered outside of these time frames have their own deadlines (2-week courses, etc.). For assistance, please contact Customer Service at 494 - 6165.

2025-2026 Add/Drop Calendars

Summer 2024 Add/Drop
Fall 2024 Add/Drop
Winter 2024 Add/Drop
Spring 2025 Add/Drop
Summer 2025 Add/Drop

• Please note the submission date is not the effective date. Your request cannot be processed until all required actions from campus partners are complete. This may affect your refund and/or if your request is canceled for not meeting the university established deadlines.
• All required actions must be completed by 11:59 PM EST on said deadline day
• Information on refunds from the University may be found at the following web site: https://www.purdue.edu/bursar/tuition/refund-withdrawals/policies.php
• Students withdrawing from ALL course assignments after classes have begun should go to myPurdue, Academic tab, and look for Withdraw Information.
• The revision/refund dates on this calendar apply to courses that exactly fit the time frames listed. Courses offered outside of these time frames have their own deadlines (2-week courses, etc.). For assistance, please contact Customer Service at 494 - 6165.

Fall 2023 Add/Drop

Please note the submission date is not the effective date. Your request cannot be processed until all required actions from campus partners are complete. This may affect your refund and/or if your request is canceled for not meeting the university established deadlines.

All required actions must be completed by 11:59 PM EST on said deadline day

Information on refunds from the University may be found at the following website: https://www.purdue.edu/treasurer/finance/bursar-office/tuition/refund-and-withdrawals/

Students withdrawing from ALL course assignments after classes have begun should go to myPurdue, Registration tab, and look for Withdraw Information.

The revision/refund dates on this calendar apply to courses that exactly fit the time frames listed. Courses offered outside of these time frames have their own deadlines (2-week courses, etc.). Additional information for these courses can be found by viewing the Short Course Drop/Add Refund Dates here: https://www.purdue.edu/registrar/calendars/index.html

• 16 Weeks / Full term: August 21 - December 16 (79 days)
• 1st 8 Weeks: August 21 - October 17 (39 days)
• 2nd 8 Weeks: October 18 - December 16 (40 days)
• No Classes: September 4 (Labor Day)
• No Classes: October 9-10 (Fall Break)
• No Classes: November 22-25 (Thanksgiving Break)

To ADD or MODIFY a Course

<table>
<thead>
<tr>
<th>16 Weeks</th>
<th>1st 8 Weeks</th>
<th>2nd 8 Weeks</th>
<th>Authorizations Required</th>
</tr>
</thead>
</table>
| August 21 - August 25  
(Week 1)     | August 21 - August 22  
(Week 1) | October 18 - October 19  
(Week 2) | (COURSE SPACE AVAILABILITY REQUIRED)  
Students may add courses via the Scheduling Assistant. |
| August 26 - October 24  
(Weeks 2 - 9) | August 23 - September 1  
(Weeks 2 - 9) | October 20 - October 31  
(Weeks 2 - 9) | Advisor and Instructor  
Submit request via the Scheduling Assistant. |
| September 1     | August 25  
(Week 3 - 13) | October 24  
(Week 3 - 13) | Last day to audit and/or request H grade mode.  
Submit change of grade mode to Audit / Honors after officially enrolled. |
| August 29       | August 29  
(Week 3 - 13) | August 29  
(Week 3 - 13) | Prepayment & $200 Late Registration Fee begins. |

To DROP a Course

<table>
<thead>
<tr>
<th>16 Weeks</th>
<th>1st 8 Weeks</th>
<th>2nd 8 Weeks</th>
<th>Authorizations Required</th>
</tr>
</thead>
</table>
| August 21 - September 1  
(Week 1 & 2) | August 21 - August 25  
(Week 1 & 2) | October 18 - October 24  
(Week 2 & 3) | No Authorizations required (Course not recorded)  
Students may drop courses via the Scheduling Assistant. |
| September 2 - November 27  
(Weeks 3 - 13)    | August 26 - October 4  
(Weeks 3 - 13) | October 25 - December 6  
(Weeks 3 - 13) | Advisor approval required (Course recorded with a grade of “W”)  
Submit request via Scheduling Assistant |

REFUND Percentage of Fees & Tuition

<table>
<thead>
<tr>
<th>16 Weeks</th>
<th>1st 8 Weeks</th>
<th>2nd 8 Weeks</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before August 29</td>
<td>Before August 29</td>
<td>Before October 19</td>
<td>100%</td>
</tr>
<tr>
<td>August 29 - September 4</td>
<td>N/A</td>
<td>October 19 - 23</td>
<td>80%</td>
</tr>
<tr>
<td>September 5 - 18</td>
<td>August 29 - 30</td>
<td>October 24 - 28</td>
<td>60%</td>
</tr>
<tr>
<td>September 19 - October 2</td>
<td>August 31 - September 4</td>
<td>October 29 - November 2</td>
<td>40%</td>
</tr>
</tbody>
</table>

Fall 2024 Add/Drop

Please note the submission date is not the effective date. Your request cannot be processed until all required actions from campus partners are complete. This may affect your refund and/or if your request is canceled for not meeting the university established deadlines.

All required actions must be completed by 11:59 PM EST on said deadline day

Information on refunds from the University may be found at the following website:
https://www.purdue.edu/treasurer/finance/bursar-office/tuition/refund-and-withdrawals/

Students withdrawing from ALL course assignments after classes have begun should go to myPurdue, Registration tab, and look for Withdraw Information.

The revision/refund dates on this calendar apply to courses that exactly fit the time frames listed. Courses offered outside of these time frames have their own deadlines (2-week courses, etc.). Additional information for these courses can be found by viewing the Short Course Drop/Add Refund Dates here: https://www.purdue.edu/registrar/calendars/index.html

- 16 Weeks / Full term: August 19 - December 14 (79 days)
- 1st 8 Weeks: August 19 - October 15 (39 days)
- 2nd 8 Weeks: October 16 - December 14 (40 days)
- No Classes: September 2 (Labor Day)
- No Classes: October 7-8 (Fall Break)
- No Classes: November 27-30 (Thanksgiving Break)

To ADD or MODIFY a Course

<table>
<thead>
<tr>
<th>16 Weeks</th>
<th>1st 8 Weeks</th>
<th>2nd 8 Weeks</th>
<th>Authorizations Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 19 - August 23 (Week 1)</td>
<td>August 19 - August 21</td>
<td>October 16 - October 18</td>
<td>(COURSE SPACE AVAILABILITY REQUIRED) Students may add courses via the Scheduling Assistant.</td>
</tr>
<tr>
<td>August 24 - October 22 (Weeks 2 - 9)</td>
<td>August 22 - September 19</td>
<td>October 19 - November 14</td>
<td>Advisor and Instructor Submit request via the Scheduling Assistant</td>
</tr>
<tr>
<td>August 29</td>
<td>August 22</td>
<td>October 22</td>
<td>Last day to audit and/or request H grade mode. Submit change of grade mode to Audit / Honors after officially enrolled</td>
</tr>
<tr>
<td>August 27</td>
<td>August 27</td>
<td>October 17</td>
<td>Prepayment &amp; $200 Late Registration Fee begins.</td>
</tr>
</tbody>
</table>

To DROP a Course
### REFUND Percentage of Fees & Tuition

<table>
<thead>
<tr>
<th></th>
<th>16 Weeks</th>
<th>1st 8 Weeks</th>
<th>2nd 8 Weeks</th>
<th>Authorizations Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before August 27</td>
<td>Before August 27</td>
<td>Before October 17</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>August 27 - September 2</td>
<td>N/A</td>
<td>October 17 - October 21</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>September 3 - September 16</td>
<td>August 27- August 29</td>
<td>October 22 - October 26</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>September 17 - October 1</td>
<td>August 30 - September 3</td>
<td>October 27 - October 31</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>After October 1</td>
<td>After September 3</td>
<td>After October 31</td>
<td>NONE</td>
<td></td>
</tr>
</tbody>
</table>

### Spring 2024 Add/Drop

Please note the submission date is not the effective date. Your request cannot be processed until all required actions from campus partners are complete. This may affect your refund and/or if your request is canceled for not meeting the university established deadlines.

All required actions must be completed by 11:59 PM EST on said deadline day

Information on refunds from the University may be found at the following website: https://www.purdue.edu/treasurer/finance/bursar-office/tuition/refund-and-withdrawals/

Students withdrawing from ALL course assignments after classes have begun should go to myPurdue, Registration tab, and look for Withdraw Information.

The revision/refund dates on this calendar apply to courses that exactly fit the time frames listed. Courses offered outside of these time frames have their own deadlines (2-week courses, etc.). Additional information for these courses can be found by viewing the Short Course Drop/Add Refund Dates here: https://www.purdue.edu/registrar/calendars/index.html

- 16 Weeks / Full term: January 8 - May 4 (79 days)
- 1st 8 Weeks: January 8 - March 1 (39 days)
- 2nd 8 Weeks: March 4 - May 4 (40 days)
- No Classes: January 15 (MLK Day)
- No Classes: March 11-16 (Spring Break)

To ADD or MODIFY a Course
### To DROP a Course

<table>
<thead>
<tr>
<th>16 Weeks</th>
<th>1st 8 Weeks</th>
<th>2nd 8 Weeks</th>
<th>Authorizations Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 8 - January 12 (Week 1)</td>
<td>January 8 - January 9</td>
<td>March 4 - March 5</td>
<td>(COURSE SPACE AVAILABILITY REQUIRED) Students may add courses via the Scheduling Assistant.</td>
</tr>
<tr>
<td>January 13 - March 8 (Weeks 2 - 9)</td>
<td>January 9 - February 7</td>
<td>March 6 - April 9</td>
<td>Advisor and Instructor Submit request via the Scheduling Assistant.</td>
</tr>
<tr>
<td>January 22</td>
<td>January 12</td>
<td>March 8</td>
<td>Last day to audit and/or request H grade mode. Submit change of grade mode to Audit / Honors after officially enrolled.</td>
</tr>
</tbody>
</table>

### REFUND Percentage of Fees & Tuition

<table>
<thead>
<tr>
<th>16 Weeks</th>
<th>1st 8 Weeks</th>
<th>2nd 8 Weeks</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before January 17</td>
<td>Before January 17</td>
<td>Before March 6</td>
<td>100%</td>
</tr>
<tr>
<td>January 17-22</td>
<td>January 17-19</td>
<td>March 6-8</td>
<td>80%</td>
</tr>
<tr>
<td>January 23-February 5</td>
<td>January 20-25</td>
<td>March 9-13</td>
<td>60%</td>
</tr>
<tr>
<td>February 6-19</td>
<td>January 26-30</td>
<td>March 14-18</td>
<td>40%</td>
</tr>
<tr>
<td>After February 19</td>
<td>After January 30</td>
<td>After March 18</td>
<td>NONE</td>
</tr>
</tbody>
</table>

### Summer 2023 Add/Drop

- 12 Weeks / Full term: May 15 - August 4 (57 days)
- 1st 8 Weeks: May 15 - July 7 (38 days)
- 2nd 8 Weeks: June 12 - August 4 (39 days)
- 1st 4 Weeks: May 15- June 9 (19 days)
- 2nd 4 Weeks: June 12 - July 7 (19 days)
- 3rd 4 Weeks: July 10 - August 4 (20 days)
- 1st Half Semester: May 1 - June 25 (34 days)
- 2nd Half Semester: June 26 - August 20 (34 days)

**To ADD or MODIFY a Course**

<table>
<thead>
<tr>
<th>12 Weeks</th>
<th>1st 8 Weeks</th>
<th>2nd 8 Weeks</th>
<th>1st 4 Weeks</th>
<th>2nd 4 Weeks</th>
<th>3rd 4 Weeks</th>
<th>1st Half Semester</th>
<th>2nd Half Semester</th>
<th>Authorizations Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 15 - May 18</td>
<td>May 15</td>
<td>June 12</td>
<td>May 15</td>
<td>June 12</td>
<td>July 10</td>
<td>May 1 - May 2</td>
<td>June 26</td>
<td>(COURSE SPACE AVAILABILITY REQUIRED) Students may add courses via the Scheduling Assistant.</td>
</tr>
<tr>
<td>May 19 - June 5</td>
<td>May 16 - May 26</td>
<td>June 13 - June 23</td>
<td>May 16 - June 16</td>
<td>June 13 - July 14</td>
<td>May 3 - May 12</td>
<td>June 27 - July 10</td>
<td>Advisor and Instructor Submit request via the Scheduling Assistant.</td>
<td></td>
</tr>
<tr>
<td>May 23</td>
<td>May 19</td>
<td>June 16</td>
<td>May 16</td>
<td>June 13</td>
<td>July 12</td>
<td>May 5</td>
<td>June 30</td>
<td>Last day to audit and/or request H grade mode. Submit change of grade mode to Audit / Honors after officially enrolled.</td>
</tr>
<tr>
<td>June 6 - June 29</td>
<td>May 27 - June 13</td>
<td>June 24 - July 12</td>
<td>May 20 - June 26</td>
<td>June 17 - July 24</td>
<td>May 13 - July 26</td>
<td>Advisor, Instructor, and Head of Department in which the course is listed Submit via the Scheduling Assistant.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May 19</td>
<td>May 19</td>
<td>June 16</td>
<td>May 19</td>
<td>June 16</td>
<td>July 11</td>
<td>May 19</td>
<td>June 27</td>
<td>$200 Late Registration Fee Begins</td>
</tr>
</tbody>
</table>

**To DROP a Course**

<table>
<thead>
<tr>
<th>12 Weeks</th>
<th>1st 8 Weeks</th>
<th>2nd 8 Weeks</th>
<th>1st 4 Weeks</th>
<th>2nd 4 Weeks</th>
<th>3rd 4 Weeks</th>
<th>1st Half Semester</th>
<th>2nd Half Semester</th>
<th>Authorizations Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 15 - May 23</td>
<td>May 15 - May 19</td>
<td>June 12 - June 16</td>
<td>May 15 - June 16</td>
<td>June 12 - June 13</td>
<td>July 10 - July 12</td>
<td>May 1 - May 5</td>
<td>June 26 - June 30</td>
<td>No Authorizations required (Course not recorded) Students may drop courses via the Scheduling Assistant.</td>
</tr>
<tr>
<td>May 24 - June 5</td>
<td>May 20 - May 26</td>
<td>June 17 - June 23</td>
<td>May 17 - June 16</td>
<td>June 14 - July 13</td>
<td>July 13 - July 14</td>
<td>May 6 - May 12</td>
<td>July 1 - July 10</td>
<td>Advisor (Course recorded with a grade of &quot;W&quot;) Submit request via the Scheduling Assistant.</td>
</tr>
<tr>
<td>June 6 - June 29</td>
<td>May 27 - June 13</td>
<td>June 24 - July 12</td>
<td>May 20 - May 30</td>
<td>June 17 - June 26</td>
<td>July 15 - July 24</td>
<td>May 13 - May 31</td>
<td>July 11 - July 26</td>
<td>Advisor, Instructor (Instructor shall indicate whether passing or failing.) Grades of &quot;W&quot;, &quot;WF&quot;, or &quot;WN&quot; will be recorded. Students with a semester classification of 1 or 2 do not require response from instructor; grades will</td>
</tr>
</tbody>
</table>
Submit via the Scheduling Assistant.

## REFUND Percentage of Fees & Tuition

<table>
<thead>
<tr>
<th>12 Weeks</th>
<th>1st 8 Weeks</th>
<th>2nd 8 Weeks</th>
<th>1st 4 Weeks</th>
<th>2nd 4 Weeks</th>
<th>3rd 4 Weeks</th>
<th>1st Half Semester</th>
<th>2nd Half Semester</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before May 19</td>
<td>Before May 19</td>
<td>Before June 16</td>
<td>Before May 19</td>
<td>Before June 16</td>
<td>Before July 11</td>
<td>Before May 2</td>
<td>Before June 27</td>
<td>100%</td>
</tr>
<tr>
<td>May 19 - May 25</td>
<td>May 19 - May 22</td>
<td>June 16 - June 20</td>
<td>N/A</td>
<td>N/A</td>
<td>July 11 - July 13</td>
<td>May 2 - May 5</td>
<td>June 27 - June 30</td>
<td>80%</td>
</tr>
<tr>
<td>May 26 - June 1</td>
<td>May 23 - May 28</td>
<td>June 21 - June 26</td>
<td>May 19 - May 23</td>
<td>June 16 - June 19</td>
<td>July 14 - July 16</td>
<td>May 6 - May 11</td>
<td>July 1 - July 6</td>
<td>60%</td>
</tr>
<tr>
<td>June 2 - June 8</td>
<td>May 29 - June 2</td>
<td>June 27 - June 30</td>
<td>May 24 - May 29</td>
<td>June 20 - June 24</td>
<td>July 17 - July 21</td>
<td>May 12 - May 16</td>
<td>July 7 - July 11</td>
<td>40%</td>
</tr>
<tr>
<td>After June 8</td>
<td>After June 2</td>
<td>After June 30</td>
<td>After May 29</td>
<td>After June 24</td>
<td>After July 21</td>
<td>After July 21</td>
<td>After July 11</td>
<td>NONE</td>
</tr>
</tbody>
</table>

### Summer 2024 Add/Drop

Please note the submission date is not the effective date. Your request cannot be processed until all required actions from campus partners are complete. This may affect your refund and/or if your request is canceled for not meeting the university established deadlines.

**All required actions must be completed by 11:59 PM EST on said deadline day**

Information on refunds from the University may be found at the following website: https://www.purdue.edu/treasurer/finance/bursar-office/tuition/refund-and-withdrawals/

Students withdrawing from ALL course assignments after classes have begun should go to myPurdue, Registration tab, and look for Withdraw Information.

The revision/refund dates on this calendar apply to courses that exactly fit the time frames listed. Courses offered outside of these time frames have their own deadlines (2-week courses, etc.). Additional information for these courses can be found by viewing the Short Course Drop/Add Refund Dates here: https://www.purdue.edu/registrar/calendars/index.htm

- 12 Weeks / Full term: May 13 - August 2 (58 days)
- 1st 8 Weeks: May 13 - July 5 (38 days)
- 2nd 8 Weeks: June 10 - August 2 (39 days)
- 1st 4 Weeks: May 13 - June 7 (19 days)
- 2nd 4 Weeks: June 10 - July 5 (19 days)
- 3rd 4 Weeks: July 8 - August 2 (20 days)
- 1st Half Semester: Apr 29 - June 23 (39 days)
- 2nd Half Semester: June 24 - August 18 (39 days)
## To ADD or MODIFY a Course

<table>
<thead>
<tr>
<th>12 Weeks</th>
<th>1st 8 Weeks</th>
<th>2nd 8 Weeks</th>
<th>1st 4 Weeks</th>
<th>2nd 4 Weeks</th>
<th>3rd 4 Weeks</th>
<th>1st Half Semester</th>
<th>2nd Half Semester</th>
<th>Authorizations Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 13 - May 16</td>
<td>May 13 - May 14</td>
<td>June 10 - June 11</td>
<td>May 13</td>
<td>June 10</td>
<td>July 8</td>
<td>April 29 - April 30</td>
<td>June 24 - June 25</td>
<td>(COURSE SPACE AVAILABILITY REQUIRED) Students may add courses via the Scheduling Assistant.</td>
</tr>
<tr>
<td>May 17 - June 27</td>
<td>May 15 - June 11</td>
<td>June 12 - July 10</td>
<td>May 14 - May 28</td>
<td>June 11 - June 24</td>
<td>July 9 - July 22</td>
<td>May 1 - May 29</td>
<td>June 26 - July 24</td>
<td>Add/Modify with Advisor and Instructor approval Submit request via the Scheduling Assistant.</td>
</tr>
<tr>
<td>May 21</td>
<td>May 17</td>
<td>June 14</td>
<td>May 14</td>
<td>June 11</td>
<td>July 10</td>
<td>May 3</td>
<td>June 28</td>
<td></td>
</tr>
<tr>
<td>May 17</td>
<td>May 17</td>
<td>June 14</td>
<td>May 17</td>
<td>June 14</td>
<td>July 10</td>
<td>May 17</td>
<td>June 25</td>
<td>$200 Late Registration Fee Begins</td>
</tr>
</tbody>
</table>

## To DROP a Course

<table>
<thead>
<tr>
<th>12 Weeks</th>
<th>1st 8 Weeks</th>
<th>2nd 8 Weeks</th>
<th>1st 4 Weeks</th>
<th>2nd 4 Weeks</th>
<th>3rd 4 Weeks</th>
<th>1st Half Semester</th>
<th>2nd Half Semester</th>
<th>Authorizations Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 13 - May 21</td>
<td>May 13 - May 17</td>
<td>June 10 - June 14</td>
<td>May 13 - May 14</td>
<td>June 10 - June 11</td>
<td>July 8 - July 10</td>
<td>April 29 - May 3</td>
<td>June 24 - June 28</td>
<td>No Authorizations required (Course not recorded) Students may drop courses via the Scheduling Assistant.</td>
</tr>
<tr>
<td>May 22 - July 18</td>
<td>May 18 - June 25</td>
<td>June 15 - July 24</td>
<td>May 15 - June 3</td>
<td>June 12 - June 28</td>
<td>July 11 - July 29</td>
<td>May 4 - June 12</td>
<td>June 29 - Aug 7</td>
<td>Advisor (Course recorded with a grade of &quot;W&quot;) Submit request via the Scheduling Assistant.</td>
</tr>
</tbody>
</table>

## REFUND Percentage of Fees & Tuition

<table>
<thead>
<tr>
<th>12 Weeks</th>
<th>1st 8 Weeks</th>
<th>2nd 8 Weeks</th>
<th>1st 4 Weeks</th>
<th>2nd 4 Weeks</th>
<th>3rd 4 Weeks</th>
<th>1st Half Semester</th>
<th>2nd Half Semester</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before May 17</td>
<td>Before May 17</td>
<td>Before June 14</td>
<td>Before May 17</td>
<td>Before June 14</td>
<td>Before July 9</td>
<td>Before April 30</td>
<td>Before June 25</td>
<td>100%</td>
</tr>
<tr>
<td>May 17 - May 23</td>
<td>May 17 - May 20</td>
<td>June 14 - June 18</td>
<td>N/A</td>
<td>N/A</td>
<td>July 09 - July 11</td>
<td>Apr 30 - May 2</td>
<td>June 25 - June 28</td>
<td>80%</td>
</tr>
</tbody>
</table>
Summer 2025 Add/Drop

Please note the submission date is not the effective date. Your request cannot be processed until all required actions from campus partners are complete. This may affect your refund and/or if your request is canceled for not meeting the university established deadlines.

**All required actions must be completed by 11:59 PM EST on said deadline day**

Information on refunds from the University may be found at the following website: https://www.purdue.edu/treasurer/finance/bursar-office/tuition/refund-and-withdrawals/

Students withdrawing from ALL course assignments after classes have begun should go to myPurdue, Registration tab, and look for Withdraw Information.

The revision/refund dates on this calendar apply to courses that exactly fit the time frames listed. Courses offered outside of these time frames have their own deadlines (2-week courses, etc.). Additional information for these courses can be found by viewing the Short Course Drop/Add Refund Dates here: https://www.purdue.edu/registrar/calendars/index.htm

- 12 Weeks / Full term: May 13 - August 2 (58 days)
- 1st 8 Weeks: May 13 - July 5 (38 days)
- 2nd 8 Weeks: June 10 - August 2 (39 days)
- 1st 4 Weeks: May 13 - June 7 (19 days)
- 2nd 4 Weeks: June 10 - July 5 (19 days)
- 3rd 4 Weeks: July 8 - August 2 (20 days)
- 1st Half Semester: Apr 29 - June 23 (39 days)
- 2nd Half Semester: June 24 - August 18 (39 days)

**To ADD or MODIFY a Course**

<table>
<thead>
<tr>
<th>12 Weeks</th>
<th>1st 8 Weeks</th>
<th>2nd 8 Weeks</th>
<th>1st 4 Weeks</th>
<th>2nd 4 Weeks</th>
<th>3rd 4 Weeks</th>
<th>1st Half Semester</th>
<th>2nd Half Semester</th>
<th>Authorizations Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 15 - May 18</td>
<td>May 15</td>
<td>June 12</td>
<td>May 15</td>
<td>June 12</td>
<td>July 10</td>
<td>May 1 - May 2</td>
<td>June 26</td>
<td>(COURSE SPACE AVAILABILITY REQUIRED) Students may add courses via the Scheduling Assistant.</td>
</tr>
<tr>
<td>May 19 - June 5</td>
<td>May 16</td>
<td>June 13</td>
<td>May 16</td>
<td>June 13</td>
<td>July 11</td>
<td>May 3 - May 12</td>
<td>June 27</td>
<td>Advisor and Instructor Submit request via the Scheduling Assistant.</td>
</tr>
</tbody>
</table>
To DROP a Course

<table>
<thead>
<tr>
<th>12 Weeks</th>
<th>1st 8 Weeks</th>
<th>2nd 8 Weeks</th>
<th>1st 4 Weeks</th>
<th>2nd 4 Weeks</th>
<th>3rd 4 Weeks</th>
<th>1st Half Semester</th>
<th>2nd Half Semester</th>
<th>Authorizations Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 23</td>
<td>May 19</td>
<td>June 16</td>
<td>May 16</td>
<td>June 13</td>
<td>July 12</td>
<td>May 5</td>
<td>June 30</td>
<td>Last day to audit and/or request H grade mode. Submit change of grade mode to Audit / Honors after officially enrolled.</td>
</tr>
<tr>
<td>May 6 - June 29</td>
<td>May 27 - June 13</td>
<td>June 24 - July 12</td>
<td>May 20 - May 30</td>
<td>June 17 - June 26</td>
<td>July 15 - July 24</td>
<td>May 13 - May 31</td>
<td>July 11 - July 26</td>
<td>Advisor, Instructor, and Head of Department in which the course is listed Submit via the Scheduling Assistant.</td>
</tr>
<tr>
<td>May 19</td>
<td>May 19</td>
<td>June 16</td>
<td>May 19</td>
<td>June 16</td>
<td>July 11</td>
<td>May 19</td>
<td>June 27</td>
<td>$200 Late Registration Fee Begins</td>
</tr>
</tbody>
</table>

REFUND Percentage of Fees & Tuition

<table>
<thead>
<tr>
<th>12 Weeks</th>
<th>1st 8 Weeks</th>
<th>2nd 8 Weeks</th>
<th>1st 4 Weeks</th>
<th>2nd 4 Weeks</th>
<th>3rd 4 Weeks</th>
<th>1st Half Semester</th>
<th>2nd Half Semester</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before May 19</td>
<td>Before May 19</td>
<td>Before June 16</td>
<td>Before May 19</td>
<td>Before June 16</td>
<td>Before July 11</td>
<td>Before May 2</td>
<td>Before June 27</td>
<td>100%</td>
</tr>
<tr>
<td>May 19 - May 25</td>
<td>May 19 - May 22</td>
<td>June 16 - June 20</td>
<td>N/A</td>
<td>N/A</td>
<td>July 11 - July 13</td>
<td>May 2 - May 5</td>
<td>June 27 - June 30</td>
<td>80%</td>
</tr>
</tbody>
</table>
Winter 2024 Add/Drop

Please note the submission date is not the effective date. Your request cannot be processed until all required actions from campus partners are complete. This may affect your refund and/or if your request is canceled for not meeting the university established deadlines.

All required actions must be completed by 11:59 PM EST on said deadline day

Information on refunds from the University may be found at the following website: https://www.purdue.edu/treasurer/finance/bursar-office/tuition/refund-and-withdrawals/

Students withdrawing from ALL course assignments after classes have begun should go to myPurdue, Registration tab, and look for Withdraw Information.

The revision/refund dates on this calendar apply to courses that exactly fit the time frames listed. Courses offered outside of these time frames have their own deadlines (2-week courses, etc.). Additional information for these courses can be found by viewing the Short Course Drop/Add Refund Dates here: https://www.purdue.edu/registrar/calendars/index.html

- 3 Weeks / Full term: December 16 - January 3 (10 days)
- No Classes: December 23 (President's Designated Holiday)
- No Classes: December 24-25 (Christmas Holiday)
- No Classes: January 1 (New Year's Day)

To ADD or MODIFY a Course

<table>
<thead>
<tr>
<th>3 Weeks</th>
<th>Authorizations Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 16</td>
<td>(COURSE SPACE AVAILABILITY REQUIRED) Students may add courses via the Scheduling Assistant.</td>
</tr>
<tr>
<td>December 17</td>
<td>Last day to audit a course, submit change of grade mode to Audit after officially enrolled</td>
</tr>
<tr>
<td>December 17 - December 20</td>
<td>Advisor and Instructor Submit request via the Scheduling Assistant.</td>
</tr>
</tbody>
</table>

To DROP a Course

<table>
<thead>
<tr>
<th>3 Weeks</th>
<th>Authorizations Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 16</td>
<td>No authorizations required (Course not recorded) Students may drop courses via Scheduling Assistant.</td>
</tr>
<tr>
<td>3 Weeks</td>
<td>PERCENTAGE</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Before December 18</td>
<td>100%</td>
</tr>
<tr>
<td>December 18 - 19</td>
<td>80%</td>
</tr>
<tr>
<td>December 20 - 21</td>
<td>60%</td>
</tr>
<tr>
<td>December 22 - 23</td>
<td>40%</td>
</tr>
<tr>
<td>After December 23rd</td>
<td>NONE</td>
</tr>
</tbody>
</table>

**Authorizations Required**

December 17 - December 31

Advisor approval required (Course recorded with a grade of "W")

Submit request via Scheduling Assistant
IUPUI Plans of Study for Continuing Students at Purdue in Indianapolis

Navigation:

- Undergraduate Programs
- Undergraduate Certificates
- Graduate Programs
- Graduate Certificates

<table>
<thead>
<tr>
<th>Applied Computer Science BA</th>
<th>Artificial Intelligence BS</th>
<th>Biochemistry BS</th>
<th>Biology BS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2022 - Fall 2024</td>
<td>Fall 2022 - Fall 2024</td>
<td>Fall 2022 and beyond</td>
<td>Fall 2022 and beyond</td>
</tr>
<tr>
<td>Fall 2021 - Summer 2022</td>
<td>Fall 2021 - Summer 2022</td>
<td>Fall 2021 - Summer 2022</td>
<td>Fall 2015 - Summer 2022</td>
</tr>
<tr>
<td>Fall 2015 - Summer 2021</td>
<td>Fall 2020 - Summer 2021</td>
<td>Fall 2014 - Summer 2015</td>
<td></td>
</tr>
<tr>
<td>Fall 2014 - Summer 2015</td>
<td>Fall 2019 - Summer 2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fall 2018 - Summer 2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fall 2017 - Summer 2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fall 2015 - Summer 2017</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fall 2014 - Summer 2015</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Biomedical Engineering BS</th>
<th>Biomedical Engineering Tech Associates</th>
<th>Biotechnology BS</th>
<th>Computer &amp; Info Technology -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Management BS</td>
<td>Computer &amp; Info Technology - Information Security BS</td>
<td>Computer &amp; Info Technology - Networking Systems BS</td>
<td>Computer Engineering BSCE</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------------</td>
<td>------------------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Fall 2022 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
</tr>
<tr>
<td>Fall 2021 - Summer 2022</td>
<td>Fall 2022 - Summer 2023</td>
<td>Fall 2022 - Summer 2023</td>
<td>Fall 2022 - Summer 2023</td>
</tr>
<tr>
<td>Fall 2019 - Summer 2021</td>
<td>Fall 2018 - Summer 2022</td>
<td>Fall 2018 - Summer 2019</td>
<td>Fall 2018 - Summer 2019</td>
</tr>
<tr>
<td>Fall 2018 - Summer 2019</td>
<td>Fall 2017 - Summer 2018</td>
<td>Fall 2017 - Summer 2018</td>
<td>Fall 2017 - Summer 2018</td>
</tr>
<tr>
<td>Fall 2017 - Summer 2018</td>
<td>Fall 2016 - Summer 2017</td>
<td>Fall 2016 - Summer 2017</td>
<td>Fall 2016 - Summer 2017</td>
</tr>
<tr>
<td>Fall 2016 - Summer 2017</td>
<td>Fall 2015 - Summer 2016</td>
<td>Fall 2015 - Summer 2016</td>
<td>Fall 2015 - Summer 2016</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Animation/Spatial Graphics BS</th>
<th>Technology - Interactive Multimedia Development BS</th>
<th>Technology - Motion Graphics Design BS</th>
<th>Technology - Themed Attraction Design BS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2022 and beyond</td>
<td>Fall 2022 and beyond</td>
<td>Fall 2022 and beyond</td>
<td>Fall 2022 and beyond</td>
</tr>
<tr>
<td>Fall 2019 - Summer 2022</td>
<td>Fall 2019 - Summer 2022</td>
<td>Fall 2020 - Summer 2022</td>
<td>Fall 2020 - Fall 2021</td>
</tr>
<tr>
<td>Fall 2018 - Summer 2019</td>
<td>Fall 2018 - Summer 2019</td>
<td></td>
<td>Spring 2020 - Summer 2020</td>
</tr>
<tr>
<td>Fall 2017 - Summer 2018</td>
<td>Fall 2017 - Summer 2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2016 - Summer 2017</td>
<td>Fall 2016 - Summer 2017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2015 - Summer 2016</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2014 - Summer 2015</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Computer Science BS</th>
<th>Construction Management BS</th>
<th>Cybersecurity BS</th>
<th>Data Science BS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2022 and beyond</td>
<td>Fall 2022 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
</tr>
<tr>
<td>Fall 2021 - Summer 2022</td>
<td>Fall 2020 - Summer 2022</td>
<td>Fall 2022 - Summer 2023</td>
<td></td>
</tr>
<tr>
<td>Fall 2018 - Summer 2021</td>
<td>Fall 2019 - Summer 2020</td>
<td>Fall 2021 - Summer 2022</td>
<td></td>
</tr>
<tr>
<td>Fall 2017 - Summer 2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2015 - Summer 2017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2014 - Summer 2015</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electrical Engineering BSEE</th>
<th>Energy Engineering BS</th>
<th>Forensic &amp; Investigative</th>
<th>Forensic &amp; Investigative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science - Forensic Biology BS</td>
<td>Science - Forensic Chemistry BS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer 2022 and beyond</td>
<td>Fall 2022 and beyond</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2019 - Spring 2022</td>
<td>Fall 2019 - Summer 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2018 - Summer 2019</td>
<td>Fall 2018 - Summer 2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2017 - Summer 2018</td>
<td>Fall 2017 - Summer 2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2016 - Summer 2017</td>
<td>Fall 2016 - Summer 2017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2015 - Summer 2016</td>
<td>Fall 2015 - Summer 2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2014 - Summer 2015</td>
<td>Fall 2014 - Summer 2015</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Healthcare Engineering Tech Management BS</th>
<th>Interdisciplinary Engineering BS</th>
<th>Interdisciplinary Studies BS</th>
<th>Interior Design AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2022 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2022 and beyond</td>
</tr>
<tr>
<td>Fall 2019 - Summer 2022</td>
<td></td>
<td></td>
<td>Fall 2019 - Summer 2022</td>
</tr>
<tr>
<td>Fall 2018 - Summer 2019</td>
<td></td>
<td></td>
<td>Fall 2018 - Summer 2019</td>
</tr>
<tr>
<td>Fall 2017 - Summer 2018</td>
<td></td>
<td></td>
<td>Fall 2017 - Summer 2018</td>
</tr>
<tr>
<td>Fall 2016 - Summer 2017</td>
<td></td>
<td></td>
<td>Fall 2016 - Summer 2017</td>
</tr>
<tr>
<td></td>
<td><strong>Interior Design Technology BS</strong></td>
<td><strong>Mathematics - Actuarial Science BS</strong></td>
<td><strong>Mathematics - Applied Statistics BS</strong></td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------------</td>
<td>---------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Fall 2015</td>
<td>Fall 2015 - Summer 2016</td>
<td>Fall 2015 - Summer 2016</td>
<td>Fall 2015 - Summer 2016</td>
</tr>
<tr>
<td>Fall 2016</td>
<td>Fall 2016 - Summer 2017</td>
<td>Fall 2016 - Summer 2017</td>
<td>Fall 2016 - Summer 2017</td>
</tr>
<tr>
<td>Fall 2017</td>
<td>Fall 2017 - Summer 2018</td>
<td>Fall 2017 - Summer 2018</td>
<td>Fall 2017 - Summer 2018</td>
</tr>
<tr>
<td>Fall 2018</td>
<td>Fall 2018 - Summer 2019</td>
<td>Fall 2018 - Summer 2019</td>
<td>Fall 2018 - Summer 2019</td>
</tr>
<tr>
<td>Fall 2019</td>
<td>Fall 2019 - Summer 2020</td>
<td>Fall 2019 - Summer 2020</td>
<td>Fall 2019 - Summer 2020</td>
</tr>
<tr>
<td>Fall 2020</td>
<td>Fall 2020 - Summer 2021</td>
<td>Fall 2020 - Summer 2021</td>
<td>Fall 2020 - Summer 2021</td>
</tr>
<tr>
<td>Fall 2021</td>
<td>Fall 2021 - Summer 2022</td>
<td>Fall 2021 - Summer 2022</td>
<td>Fall 2021 - Summer 2022</td>
</tr>
<tr>
<td>Fall 2022</td>
<td>Fall 2022 - Summer 2023</td>
<td>Fall 2022 - Summer 2023</td>
<td>Fall 2022 - Summer 2023</td>
</tr>
<tr>
<td>Fall 2023</td>
<td>Fall 2023 - Summer 2024</td>
<td>Fall 2023 - Summer 2024</td>
<td>Fall 2023 - Summer 2024</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>Mechanical Engineering BSME</strong></th>
<th><strong>Motorsports Engineering BS</strong></th>
<th><strong>Neuroscience BS</strong></th>
<th><strong>Organizational Leadership BS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2015</td>
<td>Fall 2015 - Summer 2016</td>
<td>Fall 2015 - Summer 2016</td>
<td>Fall 2015 - Summer 2016</td>
<td></td>
</tr>
<tr>
<td>Fall 2016</td>
<td>Fall 2016 - Summer 2017</td>
<td>Fall 2016 - Summer 2017</td>
<td>Fall 2016 - Summer 2017</td>
<td></td>
</tr>
<tr>
<td>Fall 2017</td>
<td>Fall 2017 - Summer 2018</td>
<td>Fall 2017 - Summer 2018</td>
<td>Fall 2017 - Summer 2018</td>
<td></td>
</tr>
<tr>
<td>Fall 2018</td>
<td>Fall 2018 - Summer 2019</td>
<td>Fall 2018 - Summer 2019</td>
<td>Fall 2018 - Summer 2019</td>
<td></td>
</tr>
<tr>
<td>Fall 2019</td>
<td>Fall 2019 - Summer 2020</td>
<td>Fall 2019 - Summer 2020</td>
<td>Fall 2019 - Summer 2020</td>
<td></td>
</tr>
<tr>
<td>Fall 2020</td>
<td>Fall 2020 - Summer 2021</td>
<td>Fall 2020 - Summer 2021</td>
<td>Fall 2020 - Summer 2021</td>
<td></td>
</tr>
<tr>
<td>Fall 2021</td>
<td>Fall 2021 - Summer 2022</td>
<td>Fall 2021 - Summer 2022</td>
<td>Fall 2021 - Summer 2022</td>
<td></td>
</tr>
<tr>
<td>Fall 2022</td>
<td>Fall 2022 - Summer 2023</td>
<td>Fall 2022 - Summer 2023</td>
<td>Fall 2022 - Summer 2023</td>
<td></td>
</tr>
<tr>
<td>Fall 2023</td>
<td>Fall 2023 - Summer 2024</td>
<td>Fall 2023 - Summer 2024</td>
<td>Fall 2023 - Summer 2024</td>
<td></td>
</tr>
<tr>
<td>Physics BS</td>
<td>Psychology BS</td>
<td>Technical Communication BS (Online)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------</td>
<td>-------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer 2022 and beyond</td>
<td>Fall 2022 and beyond</td>
<td>Fall 2022 and beyond</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2015 - Summer 2022</td>
<td>Fall 2018 - Summer 2022</td>
<td>Fall 2019 - Summer 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2014 - Summer 2015</td>
<td>Fall 2017 - Summer 2018</td>
<td>Fall 2018 - Summer 2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2015 - Summer 2017</td>
<td>Fall 2017 - Summer 2017</td>
<td>Fall 2017 - Summer 2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2014 - Summer 2015</td>
<td>Fall 2016 - Summer 2017</td>
<td>Fall 2015 - Summer 2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2014 - Summer 2015</td>
<td></td>
<td>Fall 2014 - Summer 2015</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
</tr>
<tr>
<td>Leadership Studies Certificate</td>
<td>Lean Six Sigma Certificate</td>
<td>Medical Device Cybersecurity Certificate</td>
<td>Motorsports Engineering Technology Certificate</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------</td>
<td>------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Biomedical Engineering MS</th>
<th>Biomedical Engineering PhD</th>
<th>Computer Information Science MS</th>
<th>Computer Science PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cybersecurity and Trusted Systems MS</th>
<th>Electrical &amp; Computer Engineering PhD</th>
<th>Electrical &amp; Computer Engineering MS</th>
<th>Facilities Management MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information Assurance &amp; Security MS</th>
<th>Mechanical Engineering MS</th>
<th>Mechanical Engineering PhD</th>
<th>Motorsports Engineering MSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2023 and beyond</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology - Applied Data Management &amp; Analytics MS</td>
<td>Pharmaceutical Engineering</td>
<td>Pre-Veterinary Science</td>
<td>Technology Organizational Leadership MS</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>-----------------------------</td>
<td>-----------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technology - Technical Communication MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2023 and beyond</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
</tr>
<tr>
<td>Graduate Certificate</td>
<td>Graduate Certificate</td>
<td>Graduate Certificate</td>
<td>Graduate Certificate</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------</td>
<td>----------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
<td>Fall 2023 and beyond</td>
</tr>
</tbody>
</table>

**Systems Engineering Graduate Certificate**

Fall 2023 and beyond