

# Polytechnic Statewide

## Polytechnic Statewide

The Purdue Polytechnic Institute Statewide is a unique partnership between education and business, industry and government. Polytechnic Statewide was created to extend Purdue's existing technology programs across the state where highly skilled workers with problem-solving skills are in great demand. Polytechnic Statewide also provides a mechanism for training presently employed people in state-of-the-industry technology.

Polytechnic Statewide represents a direct academic and administrative extension of the Purdue Polytechnic Institute at the West Lafayette campus. Although usually located on the campus of another university, academic, administrative and financial control rests with Purdue.

A technology advisory council, representative of key executives of business, industry, government and education, counsels on the development of the overall program. This partnership assists in the identification of general needs.

**Registration.** Admitted students are enrolled at each Purdue location.

**Fees.** Fees are charged per credit hour and vary by location. Fees are either set to match West Lafayette fees or those of the host institution at the location.

**Degrees.** All course credits apply toward a Purdue University degree and are transferable to other Purdue locations.

**Counseling Services.** Student counseling services are available at each Purdue program location.

**Program Design.** The programs are designed to prepare technologists for highly technical positions. Both part-time and full-time students are encouraged to enroll. All programs are of the highest quality and are operated in close cooperation with local business and industrial advisory committees. All programs follow the curricula offered at West Lafayette. Technical courses are similar to those on the West Lafayette campus, follow the same learning outcomes and are taught by Purdue faculty members.

The Statewide Technology program includes locations in Anderson, Columbus, Greensburg, Indianapolis, Kokomo, Lafayette, New Albany, Richmond, South Bend and Vincennes. Other communities in Indiana may be served as needs arise.

2021-2022 Program Listings and Locations

In addition to Purdue University's main campus in West Lafayette, Indiana, Purdue Polytechnic offers select degree programs in nine Indiana locations: Anderson, Columbus, Indianapolis, Kokomo, Lafayette, New Albany, Richmond, South Bend, and Vincennes.

Prospective and enrolled students at these locations can contact their advisor or visit [polytechnic.purdue.edu/locations](http://polytechnic.purdue.edu/locations) to review plans of study.

Degree requirements at these locations are consistent with those at main campus - West Lafayette.

## Associate

## Polytechnic Statewide Mechanical Engineering Technology, AS

## Degree Requirements

# 60 Credits Required

## Departmental/Program Major Courses (27 credits)

### Required Major Courses (27 credits)

- ENGT 18200 - Gateway To Engineering Technology
- MET 10200 - Production Design And Specifications ♦
- MET 11100 - Applied Statics ♦
- MET 14300 - Materials And Processes I or
- Capstone Selective - Credit Hours: 2.00
- MET 14400 - Materials And Processes II ♦
- MET Elective - Credit Hours: 12.00

## Other Departmental/Program Course Requirements (30 Credits)

- ECET 22400 - Electronic Systems
- CHM 11100 - General Chemistry
- PHYS 22000 - General Physics
- TECH 12000 - Design Thinking In Technology
- Freshman Speech Selective - Credit Hours: 3.00 (*satisfies Oral Communication for core*)
- Freshman Composition Selective - Credit Hours: 3.00 (*satisfies Written Communication for core*)
- Math Selective - Credit Hours:3.00 (*satisfies Quantitative Reasoning for core*)
- General Education Human Cultures: Behavior/Social Sciences - Credit Hours: 3.00 (*satisfies Human Cultures: Behavioral Sciences for core*)
- General Education Human Cultures: Humanities Selective - Credit Hours: 3.00 (*satisfies Human Cultures Humanities for core*)
- CAD Selective - Credit Hours: 2.00

## Tech Electives (3 credits)

## Additional Requirements

Click here for Mechanical Engineering Technology, AS Supplemental Information

## University Requirements

## University Core Requirements

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

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

## Civics Literacy Proficiency Requirement

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

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

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

## Upper Level Requirement

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

## Civics Literacy Proficiency Requirement

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

## Resident Study Requirement

Required resident study at Purdue University for at least two semesters and the enrollment in and completion of at least 32 semester hours of coursework required and approved for the completion of the degree.

## Notes

1. 60 semester credits and a 2.0 Graduation GPA are required for the Associate of Science degree.
2. Students must earn a "D-" or better in all courses unless otherwise noted.
3. Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.

## Program Requirements

### Fall 1st Year

- TECH 12000 - Design Thinking In Technology
- CAD Selective - Credit Hours: 2.00
- Freshman Composition Selective - Credit Hours: 3.00
- Math Selective - Credit Hours: 3.00
- ENGT 18200 - Gateway To Engineering Technology

### 15 Credits

### Spring 1st Year

- MET 10200 - Production Design And Specifications ♦
- MET 11100 - Applied Statics ♦
- Freshman Speech Selectives - Credit Hours: 3.00
- Behavioral Social Sciences Foundational Selective - Credit Hours: 3.00
- MET 14300 - Materials And Processes I  
Or
- MET 14400 - Materials And Processes II ♦

### 15 Credits

### Fall 2nd Year

- ECET 22400 - Electronic Systems
- CHM 11100 - General Chemistry
- PHYS 22000 - General Physics
- MET Elective - Credit Hours: 6.00

### 16 Credits

### Spring 2nd Year

- General Education Human Cultures: Humanities Selective - Credit Hours: 3.00
- MET Elective - Credit Hours: 6.00
- Tech Elective - Credit Hours: 3.00

- Capstone Selective - Credit Hours: 2.00

## 14 Credits

## Critical Course

The ♦ course is considered critical.

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

## Disclaimer

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

Consultation with an advisor may result in an altered plan customized for an individual student.

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

## Baccalaureate

## Polytechnic Statewide Aeronautical Technology, BS

## About the Program

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

### Special features:

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

### Course topics include:

- Operations management
- Safety problems
- Aviation finance

- Human factors in aviation
- Aviation law

Click here for plan of study.

## Degree Requirements (120 Credits)

### Departmental/Program Major Requirements (107 Credits)

#### Required Major Requirements (33 Credits)

- AT 23300 - Ethics And Aviation
- AT 33800 - Airline Management
- AT 35900 - Airport Management
- AT 38100 - Aviation Security
- AT 41200 - Aviation Finance
- AT 45400 - Human Factors In Aviation
- AT 48100 - Aviation Safety Problems
- AT 49000 - Aviation Project
- AT 49800 - Aviation Technology Capstone
- TLI 21300 - Project Management

#### Other Departmental Course Requirements (74 Credits)

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

**Credit Hours:** 55.0

- TECH 12000 - Design Thinking In Technology

#### Electives (13 Credits)

#### Non-Course/Non-Credit Requirement

- Complete a Globalization Requirement

## Program Notes

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

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

## University Requirements

### University Core Requirements

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

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

### Civics Literacy Proficiency Requirement

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

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

### Upper Level Requirement

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

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

## Supplemental List

# Polytechnic Statewide Animation, BS

## About the Program

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

The Polytechnic Statewide Animation major in New Albany is part of the Computer Graphics Technology program. The Computer Graphics Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

The Animation major is part of the Computer Graphics Technology program. The Computer Graphics Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

Animation Website

Animation 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
- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 12300 - Animation Foundations
- CGT 14100 - Internet Foundations Technologies And Development
- CGT 14700 - Visual Effects Introduction
- CGT 17208 - User Experience Design Studio I: Fundamentals
- CGT 20500 - Portfolio Review
- CGT 24100 - Introduction To Computer Animation
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 27000 - Introduction To Data Visualization
- CGT 30505 - Portfolio II

- CGT 40500 - Senior Portfolio Review
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 44200 - Production For Computer Animation (course must be taken twice for total of 6 credits)
- CGT 45001 - Computer Graphics Professional Practices II
- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

## CGT Entertainment Selectives (15 credits)

## Other Departmental/Program Course Requirements (55 credits)

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

## Additional Degree Requirements

Click here for Animation Supplemental Information.

Cornerstone Certificate Required. Click here for Cornerstone Certificate.

## Electives (11 Credits)

- Electives (any course, any subject) - Credit Hours: 11.00

## University Requirements

### University Core Requirements

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

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- 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.

# Program Requirements

## Fall 1st Year

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

## 15 Credits

## Spring 1st Year

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

## 15 Credits

## Fall 2nd Year

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

## 15 Credits

## Spring 2nd Year

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

## 14 Credits

### Fall 3rd Year

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

## 15 Credits

### Spring 3rd Year

- CGT 30505 - Portfolio II
- CGT 44200 - Production For Computer Animation
- 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
- CGT Entertainment Selective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00
- Technical Elective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Science, Technology, and Society (STS) Core - Credit Hours: 3.00

## 16 Credits

### Spring 4th Year

- CGT 40500 - Senior Portfolio Review
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- Technical Elective - Credit Hours: 3.00

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- **Advanced English Selective - 1 Course (possible Cornerstone Selective)**
- ENGL 20500 - Introduction To Creative Writing or
- ENGL 30400 - Advanced Composition or
- ENGL 41900 - Multimedia Writing or
- ENGL 42000 - Business Writing or
- ENGL 42100 - Technical Writing

15 Credits

## Notes

- Students must earn a "C-" or better in all CGT courses.
- Pass/No Pass may be allowed for CGT 20500, 30501, 40500, Electives or Technical Electives only.
- 120 semester credits & 2.00 Graduation GPA required for Bachelor of Science degree.
- Purdue policy states that a student may attempt a course no more than three (3) times. An attempt is defined as all courses displayed on a student's transcript including, but not limited to A,B,C,D,E,F,W,WF,I and IF
- 32 credit hours of 30000 or 40000 level Purdue courses for graduation.
- Cornerstone Certificate required with this major.

## Critical Course

The ♦ course is considered critical.

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

## Disclaimer

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

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.

# **Polytechnic Statewide Computer and Information Technology, BS**

## **About the Program**

The Computer and Information Technology major is part of the Computer and Information Technology program. The Computer and Information Technology program is accredited by the Computing Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

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

Computer and Information Technology Website

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

## Programming Selective (3 credits)

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

## Database Selective (3 credits)

- CNIT 37200 - Database Programming or
- CNIT 39200 - Enterprise Data Management

## 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  
or
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

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

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

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

- MA 16010 - Applied Calculus I

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

- MA 16020 - Applied Calculus II

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

- TECH 12000 - Design Thinking In Technology

**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 in the following link: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

## 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 in the following  
link: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

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

Science(SCI)

Three credits required from the Science(SCI) list in the following  
link: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

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

Science (SCI) - with Lab Component

Three credits required from the Science(SCI) list in the following  
link: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

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
- MGMT 21200 - Business Accounting

## 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
- ECON 21000 - Principles Of Economics
- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics

## Communication Selective - Credit Hours: 3.00

- COM 21000 - Addressing Public Issues or
- COM 21200 - Approaches To The Study Of Interpersonal Communication or
- COM 22400 - Communicating In The Global Workplace or
- COM 25100 - Communication, Information, And Society or
- COM 30300 - Intercultural Communication or
- COM 31400 - Advanced Presentational Speaking 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 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 or
- COM 32400 - Introduction To Organizational Communication

### Professional Speaking Selective - Credit Hours: 3.00

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

### Professional Writing Selective - Credit Hours: 3.00

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

### Professional IT Experience Requirement

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

### 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)

- Foundations of Organizational Leadership TLI 11200 - Foundations Of Organizational Leadership

## Statistics Selective - Credit Hours: 3.00

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

## General Business - Credit Hours: 3.00

- TLI 15200 - Business Principles For Organizational Leadership

## Interdisciplinary Selective - Credit Hours: 15.00

## Globalization Requirement - Credit Hours: 0.00

## Free Elective (3 credits)

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

## Additional Degree Requirements

Click here for Computer and Information Technology Supplemental Information.

## University Requirements

## University Core Requirements

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

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

## Civics Literacy Proficiency Requirement

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

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

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

## Upper Level Requirement

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

## Program Requirements

### Fall 1st Year

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

### 15 Credits

### Spring 1st Year

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

### 15 Credits

### Fall 2nd Year

- CNIT 27200 - Database Fundamentals
- CNIT 28000 - Systems Analysis And Design Methods

- CNIT 24200 - System Administration
- TLI 15200 - Business Principles For Organizational Leadership
- Science Selective - Credit Hours: 3.00

## 15 Credits

### Spring 2nd Year

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

## 15 Credits

### Fall 3rd Year

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

## 15 Credits

## Spring 3rd Year

- CNIT 37200 - Database Programming or
- CNIT 39200 - Enterprise Data Management
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- Information Technology Selective - Credit Hours: 3.00
- ENGL 41900 - Multimedia Writing or
- ENGL 42000 - Business Writing or
- ENGL 42100 - Technical Writing or
- Interdisciplinary Selective - Credit Hours: 3.00
- ENGL 42400 - Writing For High Technology Industries

15 Credits

## Fall 4th Year

- CNIT 48000 - Managing Information Technology Projects
- 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

## Notes

- Students must select courses from Computer and Information Technology Supplemental Information.
- Students must earn a C- or better in all CNIT courses that are a prerequisite to another CNIT course
- 120 semester credits listed above are required for the Bachelor of Science degree
- 2.0 Cumulative GPA required for Bachelor of Science degree
- 2.0 Cumulative GPA in all CNIT courses required for Bachelor of Science degree
- Any course taken at Purdue can be attempted no more than three times (inclusive of W, WF, WN, I, and IF)
- Courses with the ♦ are essential for the CIT degree critical path to graduation
- Credit cannot be earned for both AGECE 21700 and ECON 21000 to fulfill degree requirements
- Credit cannot be earned for both COM 31400 and COM 31500 to fulfill degree requirements

- A single course may not fulfill multiple requirements within the CIT BS degree
- Co-Curricular Requirements include the following:
  - Professional IT Experience
  - Globalization requirement

## Critical Course

The ♦ course is considered critical.

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

## Disclaimer

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

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.

## **Polytechnic Statewide Computer Graphics Technology, BS**

The Polytechnic Statewide Computer Graphics Technology major in New Albany is part of the Computer Graphics Technology program. The Computer Graphics Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

The Polytechnic Statewide Computer Graphics Technology major in Richmond is part of the Computer Graphics Technology program. The Computer Graphics Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

## About the Program

### Degree Requirements

## **120 Credits Required**

### Departmental/Program Major Courses (109 credits)

### Required Major Courses (21 credits)

- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 14100 - Internet Foundations Technologies And Development

- CGT 17208 - User Experience Design Studio I: Fundamentals
- CGT 21500 - Computer Graphics Programming I
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 27000 - Introduction To Data Visualization
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II

### Major Selectives\* - Select 8 of the following courses (24 credits)

- CGT 10000 - 10000 Level Selective
- CGT Selective
- CGT Selective
- CGT Selective
- CGT Selective
- CGT Selective - 30000 or 40000 Level Selective
- CGT Selective - 30000 or 40000 Level Selective
- CGT Selective - 40000 Level Selective

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

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World
- ECON 21000 - Principles Of Economics
- MA 15800 - Precalculus - Functions And Trigonometry
- MA 16010 - Applied Calculus I
- MGMT 45500 - Legal Background For Business I
- PHYS 22000 - General Physics
- Human Cultures: Humanities for core - Credit Hours: 3.00
- Human Cultures: Behavioral/Social Science for core - Credit Hours: 3.00
- Science, Tech, & Society for core - Credit Hours: 3.00
- Science Selective for core - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 6.00
- Technical Electives - Credit Hours: 9.00
- Advanced English Selective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00
- CGT Global Selective - Credit Hours: 3.00

### Electives (11 credits)

### Additional Requirements

Click here for Computer Graphics Technology Supplemental Information

## University Requirements

### University Core Requirements

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

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

### Civics Literacy Proficiency Requirement

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

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

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

### Upper Level Requirement

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

## Program Requirements

### Fall 1st Year

- CGT 17208 - User Experience Design Studio I: Fundamentals
- CGT 11800 - Fundamentals Of Imaging Technology  
CGT Selective **Credit Hours:** 3.00
- MA 15800 - Precalculus - Functions And Trigonometry

- TECH 12000 - Design Thinking In Technology

15 Credits

## Spring 1st Year

- CGT Selective

**Credit Hours:** 3.00

- CGT 14100 - Internet Foundations Technologies And Development
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 27000 - Introduction To Data Visualization
- MA 16010 - Applied Calculus I
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

16 Credits

## Fall 2nd Year

- CGT 21500 - Computer Graphics Programming I
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity
- Human Cultures: Humanities Core - Credit Hours: 3.00
- Human Cultures: BSS Core - Credit Hours: 3.00
- PHYS 22000 - General Physics

16 Credits

## Spring 2nd Year

- ECON 21000 - Principles Of Economics
- CGT Selective Credit Hours: 3.00
- Technical Elective Credit Hours: 3.00
- Humanities Elective: 3.00
- Free Elective: 3.00

15 Credits

## Fall 3rd Year

- CGT Selective - Credit Hours: 3.00
- CGT Selective - Credit Hours: 3.00
- CGT Selective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- CGT Selective (30000 or 40000 level) - Credit Hours: 3.00
- CGT Selective (30000 or 40000 level) - Credit Hours: 3.00
- CGT Globalization Selective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00

15 Credits

## Fall 4th Year

- MGMT 45500 - Legal Background For Business I
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- Science Foundation Selective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

14 Credits

## Spring 4th Year

- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- Advanced English Selective - Credit Hours 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 5.00

14 Credits

## Notes

\*Satisfies a University Core Requirement

Students must earn a C- or better in all CGT courses.

120 semester credits required for bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Purdue Policy states that a student may attempt a course no more than (3) times. An attempt is defined as all courses displayed on a student's transcript including, but not limited to A,B,C,D,F,W,WF,I,IF.

Each student must have 32 credit hours of 30000 or 40000 level Purdue courses for graduation.

## Critical Course

The ♦ course is considered critical.

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

## Disclaimer

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

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.

## Polytechnic Statewide Cybersecurity, BS

### About the Program

The Cybersecurity major is part of the Computer and Information Technology program. The Computer and Information Technology program is accredited by the Computing Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

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

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

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

Cybersecurity Website

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
- CNIT 17600 - Information Technology Architectures
- CNIT 18200 - System And Organizational Security
- CNIT 24200 - System Administration
- CNIT 25501 - Object-Oriented Programming Introduction
- CNIT 27000 - Cybersecurity Fundamentals I
- CNIT 27200 - Database Fundamentals
- CNIT 34000 - UNIX Administration
- CNIT 34220 - Network Administration 3 credits required
- CNIT 34400 - Network Engineering Fundamentals
- CNIT 48000 - Managing Information Technology Projects

### **Cybersecurity Courses**

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

## Cybersecurity Selectives (9 credits)

Not all courses will be available every semester.

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

## 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 or
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

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

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

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

- MA 16010 - Applied Calculus I

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

- MA 16020 - Applied Calculus II

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

- TECH 12000 - Design Thinking In Technology

**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 in the following link: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

**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 in the following link: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

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

Science(SCI)

Three credits required from the Science(SCI) list in the following

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

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

Science (SCI) - with Lab Component

Three credits required from the Science(SCI) list in the following

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

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
- MGMT 21200 - Business Accounting

## 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
- ECON 21000 - Principles Of Economics
- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics

## Communication Selective - Credit Hours: 3.00

- COM 21000 - Addressing Public Issues or
- COM 21200 - Approaches To The Study Of Interpersonal Communication or
- COM 22400 - Communicating In The Global Workplace or
- COM 25100 - Communication, Information, And Society or
- COM 30300 - Intercultural Communication or
- COM 31400 - Advanced Presentational Speaking 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 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 or
- COM 32400 - Introduction To Organizational Communication

## Professional Speaking Selective - Credit Hours: 3.00

- COM 31500 - Speech Communication Of Technical Information or

- COM 32000 - Small Group Communication or
- COM 32500 - Interviewing: Principles And Practice or
- COM 41500 - Discussion Of Technical Problems

## Professional Writing Selective - Credit Hours: 3.00

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

## Professional IT Experience Requirement

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

## 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 or
  - STAT 30100 - Elementary Statistical Methods or
  - STAT 50100 - Experimental Statistics I or
  - STAT 51100 - Statistical Methods
- Cybersecurity Interdisciplinary Selective - Credit Hours: 9.00
- IT Professional Experience Requirement - Credit Hours: 0.00
  - Globalization Requirement - Credit Hours: 0.00

## Additional Degree Requirements

Click here for Cybersecurity Supplemental Information.

## University Requirements

### University Core Requirements

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

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

### Civics Literacy Proficiency Requirement

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

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

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

### Upper Level Requirement

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

## Program Requirements

### Fall 1st Year

- CNIT 17600 - Information Technology Architectures
- CNIT 18200 - System And Organizational Security ♦
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
or

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- MA 16010 - Applied Calculus I
- TECH 12000 - Design Thinking In Technology ♦

## 15 Credits

### Spring 1st Year

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

## 15 Credits

### Fall 2nd Year

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

## 15 Credits

### Spring 2nd Year

- CNIT 24200 - System Administration
- CNIT 27200 - Database Fundamentals
- COM 21000 - Addressing Public Issues or
- COM 21200 - Approaches To The Study Of Interpersonal Communication or
- COM 22400 - Communicating In The Global Workplace or
- COM 25100 - Communication, Information, And Society or
- COM 30300 - Intercultural Communication or
- COM 31400 - Advanced Presentational Speaking or
- COM 31500 - Speech Communication Of Technical Information or
- COM 31800 - Principles Of Persuasion or
- COM 32000 - Small Group Communication or
- COM 32400 - Introduction To Organizational Communication or

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

## 15 Credits

### Fall 3rd Year

- CNIT 34000 - UNIX Administration
- CNIT 34400 - Network Engineering Fundamentals  
Cyber Security Selective
- CNIT 37000 - Introduction To Cryptography  
Cybersecurity Interdisciplinary Selective

## 15 Credits

### Spring 3rd Year

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

## 15 Credits

### Fall 4th Year

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

## 15 Credits

### Spring 4th Year

- CNIT 42200 - Cyber Criminology
- CNIT 47100 - Vulnerability Analysis And Testing

- CNIT 48000 - Managing Information Technology Projects
- ENGL 41900 - Multimedia Writing or
- ENGL 42000 - Business Writing or
- ENGL 42100 - Technical Writing Cybersecurity Selective - Credit Hours: 3.00

## 15 Credits

## Notes

- Students must select courses from Cybersecurity Supplemental Information.
- Students must earn a C- or better in all CNIT courses that are a prerequisite to another CNIT course
- 120 semester credits listed above are required for the Bachelor of Science degree
- 2.0 Cumulative GPA required for Bachelor of Science degree
- 2.0 Cumulative GPA in all CNIT courses required for Bachelor of Science degree
- Any course taken at Purdue can be attempted no more than three times (inclusive of W, WF, WN, I, and IF)
- Courses with the ♦ are essential for the CIT degree critical path to graduation
- Credit cannot be earned for both AGECE 21700 and ECON 21000 to fulfill degree requirements
- Credit cannot be earned for both COM 31400 and COM 31500 to fulfill degree requirements
- A single course may not fulfill multiple requirements within the CIT BS degree
- Co-Curricular Requirements include the following:
  - Professional IT Experience
  - Globalization requirement

## Critical Course

The ♦ course is considered critical.

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

## Disclaimer

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

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.

## **Polytechnic Statewide Electrical Engineering Technology, BS**

## **About the Program**

The Electrical Engineering Technology major is part of the Electrical Engineering Technology program. The Electrical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

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

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

Electrical Engineering Technology Website

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
- ECET 17700 - Data Acquisition And Systems Control
- ECET 17900 - Introduction To Digital Systems
- ECET 22700 - DC And Pulse Electronics
- ECET 22900 - Concurrent Digital Systems
- ECET 27000 - Electronics Prototype Development And Construction
- ECET 27400 - Wireless Communications
- ECET 27700 - AC And Power Electronics
- ECET 27900 - Embedded Digital Systems
- ECET 37600 - Electrical Energy Systems
- ECET 38001 - Global Professional Issues In Engineering Technology
- ECET Advanced Analysis Selective - Credit Hours: 3.00
- ECET 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)

- CNIT 10500 - Introduction To C Programming ♦
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- PHYS 22000 - General Physics ♦ (satisfies Science for core)
- PHYS 22100 - General Physics ♦ (satisfies Science for core)
- TECH 12000 - Design Thinking In Technology & Society; (satisfies Information Literacy and Science, Technology & Society for core)
- **English Composition Selective** (satisfies Written Communication for core):
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
**Freshman Speech Selective** (satisfies Oral Communication for core)
- COM 11400 - Fundamentals Of Speech Communication or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World  
**Written Communication Selective**
- ENGL 20500 - Introduction To Creative Writing or
- ENGL 30400 - Advanced Composition or
- ENGL 42000 - Business Writing ♦ or
- ENGL 42100 - Technical Writing ♦ or
- ENGL 42400 - Writing For High Technology Industries
- **Statistics Selective**
- STAT 22500 - Introduction To Probability Models ♦ or
- STAT 30100 - Elementary Statistical Methods ♦
- **Industrial Economics Selective**
- AGECE 33000 - Management Methods For Agricultural Business or
- AGECE 35200 - Quantitative Techniques For Firm Decision Making or
- IET 33400 - Economic Analysis For Technology Systems or
- MGMT 20000 - Introductory Accounting or
- MGMT 21200 - Business Accounting
- **Business Selective** - Credit Hours: 3.00
- **General Education Selectives:** 12.00
  - One must satisfy the Human Cultures: Humanities requirement for core - Credit Hours: 3.00
  - Human Cultures: Behavioral/Social Sciences requirement for core can be met either through a General Education or Business Selective - 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.

## 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 Requirements

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

### Program Requirements

#### Fall 1st Year

- CNIT 10500 - Introduction To C Programming ♦
- ENGT 18200 - Gateway To Engineering Technology
- TECH 12000 - Design Thinking In Technology ♦
- **English Composition Selective:**
- ENGL 10600 - First-Year Composition ♦ or
- ENGL 10800 - Accelerated First-Year Composition ♦ or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity ♦
- **General Education Selective - 3.00**

16 Credits

Spring 1st Year

- MA 16010 - Applied Calculus I
- ECET 17700 - Data Acquisition And Systems Control
- ECET 17900 - Introduction To Digital Systems ♦
- **Freshman Speech Selective:**
- COM 11400 - Fundamentals Of Speech Communication ♦ or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦
- **General Education Selective - Credit Hours: 3.00**

15 Credits

Fall 2nd Year

- ECET 22700 - DC And Pulse Electronics
- ECET 22900 - Concurrent Digital Systems
- MA 16020 - Applied Calculus II
- PHYS 22000 - General Physics ♦
- **Written Communication Selective:**
- ENGL 20500 - Introduction To Creative Writing ♦ or
- ENGL 30400 - Advanced Composition ♦ or
- ENGL 42000 - Business Writing ♦ or
- ENGL 42100 - Technical Writing ♦ or
- ENGL 42400 - Writing For High Technology Industries ♦

16 Credits

### Spring 2nd Year

- ECET 27000 - Electronics Prototype Development And Construction
- ECET 27400 - Wireless Communications
- ECET 27700 - AC And Power Electronics
- PHYS 22100 - General Physics

13 Credits

### Fall 3rd Year

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

**Statistics Selective:**

- STAT 22500 - Introduction To Probability Models ♦ or
- STAT 30100 - Elementary Statistical Methods ♦

15 Credits

### Spring 3rd Year

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

**Industrial Economics Selective:**

- AGECE 33000 - Management Methods For Agricultural Business or
- AGECE 35200 - Quantitative Techniques For Firm Decision Making or
- IET 33400 - Economic Analysis For Technology Systems or
- MGMT 20000 - Introductory Accounting or
- MGMT 21200 - Business Accounting

15 Credits

### Fall 4th Year

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

## 15 Credits

### Spring 4th Year

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

## 12 Credits

### Notes

- Human Cultures Behavioral/Social Science for University Core may be selected to satisfy either the Business Selective or a General Education Selective requirement.
- 2.0 Graduation GPA is required for the Bachelor of Science degree.
- Students must earn a "D-" or better in all courses. Pass/no pass grading allowed for General Education Selectives and Electives (up to 15 hrs).
- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.
- Senior Capstone Selective I/II and 12 hours of ECET lab-based courses at the 300-level or higher must be taken at Purdue University West Lafayette and/or Polytechnic Statewide.
- 32 credit hours of 300-level or higher courses must be completed at Purdue University.
- The Electrical Engineering Technology (EETC) major is within the Electrical Engineering Technology program.
- Intercultural Requirement (ungraded) must be completed.
- Professional Requirement (ungraded) must be completed.
- Professional and Intercultural requirements will be satisfied by completion of experiences, assessments, and courses that are pre-approved by the EET Curriculum Subcommittee. Approved courses may fulfill other degree requirements.

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

## Critical Course

The ♦ course is considered critical.

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

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# Polytechnic Statewide Engineering Technology, BS

## About the Program

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (49 credits)

- ENGT 18200 - Gateway To Engineering Technology
- MET 11100 - Applied Statics
- MET 14300 - Materials And Processes I or
- MET 14400 - Materials And Processes II
- MET 21100 - Applied Strength Of Materials
- MET 24500 - Manufacturing Systems
- Computer Graphics Technology Selective - Credit Hours: 2.00
- IET 21400 - Introduction To Supply Chain Management Technology
- IET 31600 - Statistical Quality Control
- IET 33400 - Economic Analysis For Technology Systems or

## Concentration: Technology Integration (37 credits)

- Lab Science Foundation Selective - Credit Hours: 4.00 (satisfies Science for core)
- Humanities/Liberal Arts Elective - Credit Hours: 3.00

- Technical Selectives - Credit Hours: 24.00 (At least 6 credit hours must be in the same discipline) (15 credit hours must be 30000/40000 level, included in required major credits)
- Elective - Credit Hours: 6.00 (any course , any subject)

### Concentration: Robotics (37 credits)

- Lab Science Foundation Selective - Credit Hours: 4.00 (satisfies Science for core)
- ECET 27900 Embedded Digital Systems - Credit Hours: 3.00
- ECET 32700 Data Acquisitions and Signal Processing - Credit Hours: 3.00
- MET 21300 Dynamics - Credit Hours: 3.00
- MET 23000 Fluid Power - Credit Hours: 3.00
- MET 28400 Introduction to Industrial Controls - Credit Hours: 3.00
- MFET 24800 Introduction to Robotics - Credit Hours: 3.00
- MFET 34400 Automated Manufacturing Processes - Credit Hours: 3.00
- Robotics Technical Selectives - Credit Hours: 9.00
- Free Elective - Credit Hours: 3.00

### Concentration: Mechatronics (37 credits)

- MA 16020 Applied Calculus II - Credit Hours: 3.00
- PHYS 22100 General Physics II - Credit Hours: 4.00
- ECET 27900 Embedded Digital Systems - Credit Hours: 3.00
- ECET 32700 Data Acquisitions and Signal Processing - Credit Hours: 3.00
- ECET 33700 Analog Signal Processing - Credit Hours: 3.00
- MET 23000 Fluid Power - Credit Hours: 3.00
- MET 28400 Introduction to Industrial Controls - Credit Hours: 3.00
- MET 38200 Controls and Instrumentation - Credit Hours: 3.00
- MET 48200 Mechatronics - Credit Hours: 3.00
- MFET 24800 Introduction to Robotics - Credit Hours: 3.00
- MFET 34400 Automated Manufacturing Processes - Credit Hours: 3.00
- MFET 37400 Manufacturing Integration - Credit Hours: 3.00

### Other Departmental/Program Course Requirements (34 credits)

- TECH 12000 - Design Thinking In Technology (satisfies Science, Technology, & Society Selective and Information Literacy for core)
- MA 15800 - Precalculus - Functions And Trigonometry (satisfies Quantitative Reasoning for core)
- MA 16010 - Applied Calculus I
- PHYS 22000 - General Physics
- TLI 11200 - Foundations Of Organizational Leadership
- ECON 21000 - Principles Of Economics (satisfies Human Culture Behavioral/Social Science for core) (satisfies Oral Communication for core) (satisfies Written Communication for core) (satisfies Human Cultures: Humanities for core)
- Freshman Speech Selective
- Freshman Composition Selective
- Humanities Foundation Selective
- Technical Writing Selective

Advanced Oral Communication Selective

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

## Supplemental List

Click here for Engineering Technology Supplemental Information

## Grade Requirements

*Clearly list any/all grade requirements within the program.*

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

## GPA Requirements

- 2.0 Graduation GPA required for Bachelor of Science degree

## Course Requirements and Notes

*Double-counting policy - where is it allowed and not allowed; specific notes or requirements about courses; repeatable limits, study abroad, etc.*

## Non-course / Non-credit Requirements

- Complete a Professional Requirement or Intercultural Requirement.

## Pass/No Pass Policy

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

## Transfer Credit Policy

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

## University Requirements

## University Core Requirements

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

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)

- Information Literacy (IL)
- Oral Communication (OC)
- Quantitative Reasoning (QR)
- Science #1 (SCI)
- Science #2 (SCI)
- Science, Technology, and Society (STS)
- Written Communication (WC)

## Civics Literacy Proficiency Requirement

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

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

- Attending six approved civics-related events and completing an assessment for each; or
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- Earning a passing grade for one of **these approved courses** (or transferring in approved AP or departmental credit in lieu of taking a course).

## Upper Level Requirement

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

## Additional Information

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

## Sample 4-Year Plan

### Fall 1st Year

- TECH 12000 - Design Thinking In Technology  
Freshman Composition Selective - Credit Hours: 3.00
- ENGT 18200 - Gateway To Engineering Technology
- MA 15800 - Precalculus - Functions And Trigonometry
- Computer Graphics Selective - Credit Hours: 2.00

15 Credits

### Spring 1st Year

- MA 16010 - Applied Calculus I
- Freshman Speech Selective - Credit Hours: 3.00
- MET 11100 - Applied Statics
- MET 14300 - Materials And Processes I or
- MET 14400 - Materials And Processes II
- TLI 11200 - Foundations Of Organizational Leadership

## 15 Credits

### Fall 2nd Year

- IET 21400 - Introduction To Supply Chain Management Technology
- MET 21100 - Applied Strength Of Materials
- PHYS 22000 - Credit Hours: 4.00
- ECET Selective - Credit Hours: 3.00

## 14 Credits

### Spring 2nd Year

- ECON 21000 - Principles Of Economics
- IET 31600 - Statistical Quality Control  
OR
- STAT 30100 - Elementary Statistical Methods
- Computer-Aided Design Selective - Credit Hours: 3.00
- ECET Selective - Credit Hours: 3.00
- Concentration Course - Credit Hours: 4.00

## 16 Credits

### Fall 3rd Year

- MET 24500 - Manufacturing Systems
- Programming Selective - Credit Hours: 3.00
- Concentration Course - Credit Hours: 9.00

## 15 Credits

### Spring 3rd Year

- Global/Professional Selective - Credit Hours: 3.00
- Humanities Foundation Selective - Credit Hours: 3.00
- Advanced Oral Communication Selective - Credit Hours: 3.00
- Concentration Course - Credit Hours: 6.00

15 Credits

Fall 4th Year

- IET 33400 - Economic Analysis For Technology Systems

Or

15 Credits

Spring 4th Year

- Senior Capstone Project Selective II - Credit Hours: 3.00
- Concentration Course - Credit Hours: 12.00

15 Credits

**Critical Course**

The ♦ course is considered critical.

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**Polytechnic Statewide Game Development and Design, BS**

**About the Program**

Whether you want to contribute to blockbuster AAA titles, study virtual reality, or use gaming to help with medical therapies, Purdue University's game studies major has a place for you. Purdue has been a leader in preparing students for careers in the games and animation industries. Because our professors are interested in new ideas and uses for computer games, they will help you stretch your imagination throughout the program. You will take classes in game development and design, animation, visualization, rendering and programming.

Research projects open to undergraduate students have focused on the use of games for sustainable energy, therapy and medicine, entertainment, information visualization and more.

The Polytechnic Statewide Game Development and Design major in New Albany is part of the Computer Graphics Technology program. The Computer Graphics Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

Game Studies Website

Game Development and Design Major Change (CODO) Requirements

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (54 credits)

### Required Major Courses (39 credits)

- CGT 10501 - Introduction To Games
- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 14100 - Internet Foundations Technologies And Development
- CGT 17208 - User Experience Design Studio I: Fundamentals
- CGT 20500 - Portfolio Review
- CGT 21500 - Computer Graphics Programming I
- CGT 24500 - Game Development I: Core Skills And Technologies
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 25500 - Game Development II: Design And Psychology
- CGT 27000 - Introduction To Data Visualization
- CGT 30505 - Portfolio II
- CGT 36500 - Game Development Practicum
- CGT 40500 - Senior Portfolio Review
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- Intercultural Requirements - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

### CGT Entertainment Selectives (15 credits)

### Other Departmental/Program Course Requirements (55 credits)

- MA 15800 - Precalculus - Functions And Trigonometry (*satisfies Quantitative Reasoning Selective for core*)
- MA 16010 - Applied Calculus I (*satisfies Quantitative Reasoning Selective for core*)
- PHYS 22000 - General Physics ♦ (*satisfies Science for core*)

- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦ (satisfies Written Communication for core & a Cornerstone Area A)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦  
(satisfies Oral Communication for core & a Cornerstone Area A)
- **Advanced English Selective - 1 Course (possible Cornerstone Selective)**
- ENGL 20500 - Introduction To Creative Writing or
- ENGL 30400 - Advanced Composition or
- ENGL 41900 - Multimedia Writing or
- ENGL 42000 - Business Writing or
- ENGL 42100 - Technical Writing
- **Statistics Selective - 1 Course**
- IET 31600 - Statistical Quality Control or
- PSY 20100 - Introduction To Statistics In Psychology or
- STAT 22500 - Introduction To Probability Models or
- STAT 30100 - Elementary Statistical Methods or
- STAT 35000 - Introduction To Statistics
- Human Cultures: Humanities (HUM) Core (satisfies Humanities for Core & possible Cornerstone Selective) -  
Credit Hours: 3.00
- Human Cultures: Behavioral/Social Sciences (BSS) Core (satisfies Behavioral/Social Sciences for core) -  
Credit Hours: 3.00
- Humanities Elective (possible Cornerstone Selective) - Credit Hours: 6.00
- Science (SCI) Core (satisfies Science Selective for core) - Credit Hours: 3.00
- Science Technology & Society (STS) Core (satisfies Science, Technology, and Society for core) -  
Credit Hours: 3.00
- CGT Global Selective (possible Cornerstone Selective) - Credit Hours: 3.00
- Technical Electives - Credit Hours: 12.00

## Electives (11 credits)

- Any course, any subject - Credit Hours: 11.00

## Additional Degree Requirements

Click here for Game Development and Design Supplemental Information.

Cornerstone Certificate requirements. Click here for Cornerstone Certificate.

## 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](#).

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## Upper Level Requirement

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

## Program Requirements

### Fall 1st Year

- CGT 10501 - Introduction To Games
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 14100 - Internet Foundations Technologies And Development
- CGT 24500 - Game Development I: Core Skills And Technologies
- MA 15800 - Precalculus - Functions And Trigonometry

### 15 Credits

### Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 17208 - User Experience Design Studio I: Fundamentals
- CGT 25500 - Game Development II: Design And Psychology
- CGT 27000 - Introduction To Data Visualization
- MA 16010 - Applied Calculus I

## 15 Credits

### Fall 2nd Year

- CGT 21500 - Computer Graphics Programming I
- Human Cultures: Humanities (HUM) Core - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- CGT Entertainment Selective - Credit Hours: 3.00
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦ or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦

## 15 Credits

### Spring 2nd Year

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

## 14 Credits

### Fall 3rd Year

- CGT 36500 - Game Development Practicum
- Science (SCI) Core - Credit Hours: 3.00
- CGT Entertainment Selective: Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- **Statistics Selective - 1 Course**
- IET 31600 - Statistical Quality Control or
- PSY 20100 - Introduction To Statistics In Psychology or
- STAT 22500 - Introduction To Probability Models or
- STAT 30100 - Elementary Statistical Methods or
- STAT 35000 - Introduction To Statistics

## 15 Credits

### Spring 3rd Year

- CGT 30505 - Portfolio II
- CGT 36500 - Game Development Practicum

- CGT Entertainment Selective - Credit Hours: 3.00
- CGT Globalization Selective - Credit Hours: 3.00
- Human Cultures: Behavioral/Social Science (BSS) Core - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00

## 15 Credits

### Fall 4th Year

- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT Entertainment Selective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Science Technology and Society (STS) Core - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

## 16 Credits

### Spring 4th Year

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

## 15 Credits

## Notes

- Students must earn a "C-" or better in all CGT courses.
- Pass/No Pass may be allowed for CGT 20500, 30501, 40500, Electives or Technical Electives only.
- 120 semester credits & 2.00 Graduation GPA required for Bachelor of Science degree.
- Purdue policy states that a student may attempt a course no more than three (3) times.
- An attempt is defined as all courses displayed on a student's transcript including, but not limited to A,B,C,D,E,F,W,WF,I and IF32 credit hours of 30000 or 40000 level Purdue courses for graduation.

- Cornerstone Certificate is required with this major.

## Critical Course

The ♦ course is considered critical.

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

# **Polytechnic Statewide Industrial Engineering Technology, BS**

## **About the Program**

The Industrial Engineering Technology major is part of the Industrial Engineering Technology program. The Industrial Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

When you major in industrial engineering technology at Purdue University, you will gain skills to prepare you for a wide variety of career options: manufacturing plants, government agencies, hospitals, healthcare organizations, retail companies, and more. You will focus on both technical and human-centered approaches to technology management. You will learn how to manage and coordinate engineering operations and lead projects from design to implementation. Coursework is enhanced with an overview of business and economics.

[Industrial Engineering Technology Website](#)

[Industrial Engineering Technology Major Change \(CODO\) Requirements](#)

## Degree Requirements

### **120 Credits Required**

Department/Program Major Courses (40 credits)

Required Department Courses (40 credits)

- ENGT 18200 - Gateway To Engineering Technology
- IET 21400 - Introduction To Supply Chain Management Technology
- IET 23500 - Introduction To Systems Thinking And Process Improvement
- IET 31600 - Statistical Quality Control
- IET 33400 - Economic Analysis For Technology Systems
- IET 33520 - Human Factors For Technology Systems
- IET 33620 - Total Productive Maintenance
- IET 43530 - Operations Planning And Management
- IET 43540 - Facilities Planning And Material Handling
- IET 43630 - Design Of Experiments
- IET 43640 - Lean Six Sigma
- ENGT 48000 - Engineering Technology Capstone I
- ENGT 48100 - Engineering Technology Capstone II
- Professional Requirement - Credit Hours: 0.00
- Global/Intercultural Requirement - Credit Hours: 0.00

## Other Departmental Courses (72 credits)

- ECON 21000 - Principles Of Economics ♦
- ECET 22400 - Electronic Systems
- MET 24500 - Manufacturing Systems ♦
- PHYS 22000 - General Physics ♦ (satisfies Science for core)
- STAT 30100 - Elementary Statistical Methods ♦
- TECH 12000 - Design Thinking In Technology ♦ (*satisfies both Information Literacy and Science, Technology and Society for core*)
- TLI 11200 - Foundations Of Organizational Leadership ♦
- TLI 21300 - Project Management ♦
- Behavioral/Social Science Selective (*satisfies Behavioral/Social Science for core*) - Credit Hours: 3.00
- Humanities Selective (*satisfies Humanities for core*) - Credit Hours: 3.00
- Lab Science Selective (*satisfies Science for core*) - Credit Hours: 3.00
- Mathematics Selective (*satisfies Quantitative Reasoning for core*) - Credit Hours: 3.00
- Advanced Oral Communication Selective - Credit Hours: 3.00
- Advanced Written Communication Selective - Credit Hours: 3.00 ♦
- Computer Programming Selective - Credit Hours: 3.00 ♦
- Technical Electives - Credit Hours: 12.0
- **Oral Communication Selective** (*satisfies Oral Communication for core*)
- COM 11400 - Fundamentals Of Speech Communication or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World
- **Written Communication Selective** (*satisfies Written Communication for core*)
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity
- **Manufacturing Automation Selective** ♦
- MET 28400 - Introduction To Industrial Controls or
- MFET 24800 - Industrial Robot Programming And Applications or
- MFET 30000 - Applications Of Automation In Manufacturing or
- MFET 34400 - Automated Manufacturing Processes
- **Materials & Processes Selective** ♦

- MET 14300 - Materials And Processes I or
- MET 14400 - Materials And Processes II
- **Technical Graphic Selective ♦**
- MFET 10301 - Geometric Modeling Applications ♦ or
- CGT 11000 - Technical Graphics Communications ♦ or
- MFET 16300 - Graphical Communication And Spatial Analysis ♦ or
- ENGT 10500 - Industrial Technology Introduction To Design

## Electives (8 credits)

Any course, any subject - Credit Hours: 8.00

## University Requirements

### University Core Requirements

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

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- 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 Requirements

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

## Program Requirements

### Fall 1st Year

- ENGT 18200 - Gateway To Engineering Technology
- TECH 12000 - Design Thinking In Technology ♦
- COM 11400 - Fundamentals Of Speech Communication or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World
- Computer Programming Selective - Credit Hours: 3.00 ♦
- MFET 10301 - Geometric Modeling Applications ♦ or
- CGT 11000 - Technical Graphics Communications ♦ or
- MFET 16300 - Graphical Communication And Spatial Analysis ♦ or
- ENGT 10500 - Industrial Technology Introduction To Design

### 15 Credits

### Spring 1st Year

- TLI 11200 - Foundations Of Organizational Leadership ♦
- IET 21400 - Introduction To Supply Chain Management Technology
- MET 14300 - Materials And Processes I or
- MET 14400 - Materials And Processes II
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity
- Mathematics Selective - Credit Hours: 3.00

### 15 Credits

### Fall 2nd Year

- IET 23500 - Introduction To Systems Thinking And Process Improvement
- ECET 22400 - Electronic Systems
- MET 24500 - Manufacturing Systems
- PHYS 22000 - General Physics ♦
- Humanities Selective - Credit Hours: 3.00

### 16 Credits

## Spring 2nd Year

- ECON 21000 - Principles Of Economics
- STAT 30100 - Elementary Statistical Methods ♦
- TLI 21300 - Project Management
- Behavioral/Social Science Selective - Credit Hours: 3.00
- Lab Science Selective - Credit Hours: 3.00

15 Credits

## Fall 3rd Year

- IET 31600 - Statistical Quality Control
- IET 33400 - Economic Analysis For Technology Systems
- IET 33620 - Total Productive Maintenance
- Advanced Written Communication Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- IET 33520 - Human Factors For Technology Systems
- IET 43630 - Design Of Experiments
- IET 43640 - Lean Six Sigma
- MET 28400 - Introduction To Industrial Controls or
- MFET 24800 - Industrial Robot Programming And Applications or
- MFET 30000 - Applications Of Automation In Manufacturing or
- MFET 34400 - Automated Manufacturing Processes
- Advanced Oral Communication Selective - Credit Hours: 3.00 ♦

15 Credits

## Fall 4th Year

- ENGT 48000 - Engineering Technology Capstone I
- IET 43530 - Operations Planning And Management
- Technical Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

## Spring 4th Year

- ENGT 48100 - Engineering Technology Capstone II
- IET 43540 - Facilities Planning And Material Handling
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

## 14 Credits

## Notes

- 2.0 Graduation GPA required for Bachelor of Science degree.
- TIET majors allow Pass/No Pass grading for (Free) electives only all other degree requirements must be taken for a grade.
- 32 credits of upper division courses (30000 level or higher) must be taken at Purdue University, West Lafayette.
- ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, I AND IF).

## Critical Course

The ♦ course is considered critical.

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

## Disclaimer

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

Consultation with an advisor may result in an altered plan customized for an individual student.

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

# Polytechnic Statewide Mechanical Engineering Technology, BS

## About the Program

The Mechanical Engineering Technology major is part of the Mechanical Engineering Technology program. The Mechanical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

The careers of mechanical engineering technology graduates take them to a variety of employers (e.g. Rockwell Automation, Fender Guitars, Lockheed Martin, Caterpillar) yet they have many skills in common: problem-solving, leadership and teamwork. The program focuses on the methods, materials, machinery and manpower necessary to

effectively operate in a manufacturing environment. You'll learn how to manage people, machines, and production resources to ensure maximum efficiency and safety.

Mechanical Engineering Technology Website

Mechanical Engineering Technology Major Change (CODO) Requirements

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (120 credits)

### Required Major Courses (59 credits)

- ENGT 18200 - Gateway To Engineering Technology (SoET Gateway Course)
- MET 10200 - Production Design And Specifications
- MET 11100 - Applied Statics
- MET 14300 - Materials And Processes I
- MET 14400 - Materials And Processes II
- MET 21100 - Applied Strength Of Materials
- MET 21300 - Dynamics
- MET 22000 - Heat And Power
- MET 23000 - Fluid Power
- MET 24500 - Manufacturing Systems
- MET 28400 - Introduction To Industrial Controls
- MET 31300 - Applied Fluid Mechanics
- MET 32000 - Applied Thermodynamics
- MET 34600 - Advanced Materials In Manufacturing
- Professional Requirement - Credit Hours: 0.00
- Intercultural Requirement - Credit Hours: 0.00

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

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

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

- CHM 11100 - General Chemistry
- ECET 22400 - Electronic Systems
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II

- PHYS 22000 - General Physics ♦ (satisfies Science for core)
- PHYS 22100 - General Physics ♦ (satisfies Science for core)
- STAT 30100 - Elementary Statistical Methods ♦
- TECH 12000 - Design Thinking In Technology ♦ (satisfies Information Literacy and Science, Technology & Society for core)
- IET 33400 - Economic Analysis For Technology Systems  
**Freshman Composition Selective** (satisfies Written Communication for core)
- ENGL 10600 - First-Year Composition ♦ or
- ENGL 10800 - Accelerated First-Year Composition ♦ or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity ♦ or
- HONR 19903 - Interdisciplinary Approaches In Writing  
**Computer Graphics Technology Selective**
- MFET 10301 - Geometric Modeling Applications ♦ or
- CGT 11000 - Technical Graphics Communications ♦ or
- MFET 16300 - Graphical Communication And Spatial Analysis ♦ or
- ENGT 10500 - Industrial Technology Introduction To Design  
**Freshman Speech Selective** (satisfies Oral Communication for Core)
- COM 11400 - Fundamentals Of Speech Communication or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World  
**Communications Selective** ♦
- COM 31500 - Speech Communication Of Technical Information ♦ or
- COM 32000 - Small Group Communication ♦ or
- COM 41500 - Discussion Of Technical Problems ♦ or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills ♦  
**Technical Writing Selective** ♦
- ENGL 42000 - Business Writing ♦ or
- ENGL 42100 - Technical Writing ♦ or
- ENGL 42400 - Writing For High Technology Industries ♦
- 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

## 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 Requirements

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

## Program Requirements

### Fall 1st Year

- TECH 12000 - Design Thinking In Technology
- COM 11400 - Fundamentals Of Speech Communication or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World
- ENGT 18200 - Gateway To Engineering Technology
- MET 14300 - Materials And Processes I
- CGT 11000 - Technical Graphics Communications ♦ or
- MFET 16300 - Graphical Communication And Spatial Analysis ♦ or
- MFET 10301 - Geometric Modeling Applications ♦ or
- ENGT 10500 - Industrial Technology Introduction To Design

15 Credits

## Spring 1st Year

- MA 16010 - Applied Calculus I
- ENGL 10600 - First-Year Composition ♦ or
- ENGL 10800 - Accelerated First-Year Composition ♦ or
- HONR 19903 - Interdisciplinary Approaches In Writing ♦ or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity ♦
- MET 11100 - Applied Statics ♦
- MET 10200 - Production Design And Specifications
- MET 14400 - Materials And Processes II

15 Credits

## Fall 2nd Year

- ECET 22400 - Electronic Systems
- MA 16020 - Applied Calculus II
- MET 21100 - Applied Strength Of Materials
- PHYS 22000 - General Physics

14 Credits

## Spring 2nd Year

- MET 21300 - Dynamics
- MET 23000 - Fluid Power
- MET 28400 - Introduction To Industrial Controls
- PHYS 22100 - General Physics ♦
- Humanities Selective - Credit Hours: 3.00

16 Credits

## Fall 3rd Year

- MET 22000 - Heat And Power
- MET 24500 - Manufacturing Systems
- CHM 11100 - General Chemistry  
Mechanics Selective - Credit Hours: 3.00  
Programming Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- MET 34600 - Advanced Materials In Manufacturing
- MET 32000 - Applied Thermodynamics
- STAT 30100 - Elementary Statistical Methods
- Economics/Finance Selective - Credit Hours: 3.00
- Global/Professional Selective - Credit Hours: 3.00

## 15 Credits

### Fall 4th Year

- MET 31300 - Applied Fluid Mechanics
- IET 33400 - Economic Analysis For Technology Systems
- ENGL 42100 - Technical Writing ♦ or
- ENGL 42400 - Writing For High Technology Industries ♦ or
- ENGL 42000 - Business Writing
- MET Capstone Selective I - Credit Hours: 3.00
- Technical/Management (TECH/MGMT) Selective - Credit Hours: 3.00

## 15 Credits

### Spring 4th Year

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

## 15 Credits

### Notes

- 2.0 Graduation GPA are required for the Bachelor of Science degree.
- Students must earn a "D-" or better in all courses unless otherwise noted.
- 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.
- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.
- 32 credit hours of 300-level or higher courses must be completed at Purdue University.
- Complete a Professional Requirement.
- Complete an Intercultural Requirement.
- + denotes optional Cornerstone Certificate course.

## Critical Course

The ♦ course is considered critical.

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

## Disclaimer

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

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.

# **Polytechnic Statewide Mechatronics Engineering Technology, BS**

## **About the Program**

The Mechatronics Engineering Technology major is part of the Manufacturing Engineering Technology program. The Manufacturing Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

This is one of three majors offered for students who seek to contribute at the interface between manufacturing, electrical, mechanical, and computing areas in primarily industrial environments. When you major in mechatronics engineering technology, you will focus on the development of the electromechanical products that are ubiquitous in modern life, dealing with interconnections that allow electronic control of mechanical, pneumatic, and hydraulic systems.

[Mechatronics Engineering Technology Website](#)

[Mechatronics Engineering Technology Major Change \(CODO\) Requirements](#)

## Degree Requirements

### **120 Credits Required**

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

#### Required Major Courses (62 credits)

- CNIT 10500 - Introduction To C Programming ♦

- ECET 17900 - Introduction To Digital Systems
- ECET 27900 - Embedded Digital Systems
- ECET 32700 - Instrumentation And Data Acquisition Design
- ECET 33700 - Continuous Systems Analysis And Design
- ENGT 18200 - Gateway To Engineering Technology
- MET 10200 - Production Design And Specifications
- MET 11100 - Applied Statics
- MET 11300 - Mechanics Applications
- MET 23000 - Fluid Power
- MET 24500 - Manufacturing Systems
- MET 28400 - Introduction To Industrial Controls
- MET 38200 - Controls And Instrumentation For Automation
- MFET 34400 - Automated Manufacturing Processes
- MFET 37400 - Manufacturing Integration I
- **Materials and Processes Selective**
- MET 14300 - Materials And Processes I or
- MET 14400 - Materials And Processes II
- Manufacturing Selective - Credit Hours: 3.00
- Mechatronics Selective - Credit Hours: 3.00
- Controls Selective - Credit Hours: 3.00
- **Capstone Selective I**
- ENGT 48000 - Engineering Technology Capstone I or
- **Capstone Selective II**
- ENGT 48100 - Engineering Technology Capstone II or

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

- CHM 11100 - General Chemistry ♦ (satisfies Science for core)
- ECET 22400 - Electronic Systems
- ECET 38001 - Global Professional Issues In Engineering Technology
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- TECH 12000 - Design Thinking In Technology ♦ (satisfies Science Technology and Society and Information Literacy for core)
- IET 33400 - Economic Analysis For Technology Systems
- **Freshman Composition Selective + (satisfies Written Communication for core)**
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity
- **Freshman Speech Selective + (satisfies Oral Communication for Core)**
- COM 11400 - Fundamentals Of Speech Communication or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World
- **Physics Selective (satisfies Science for core) ♦**
- PHYS 22000 - General Physics ♦ or
- PHYS 17200 - Modern Mechanics ♦
- **Computer Graphics Selective**
- MFET 10301 - Geometric Modeling Applications ♦ or
- CGT 11000 - Technical Graphics Communications ♦ or

- MFET 16300 - Graphical Communication And Spatial Analysis ♦ or
- ENGT 10500 - Industrial Technology Introduction To Design ♦  
**Statistics or Quality Selective**
- IET 31600 - Statistical Quality Control ♦ or
- STAT 30100 - Elementary Statistical Methods ♦  
**Technical Writing Selective +**
- ENGL 42000 - Business Writing ♦ or
- ENGL 42100 - Technical Writing ♦ or
- ENGL 42400 - Writing For High Technology Industries ♦  
**Communications Selective +**
- COM 31500 - Speech Communication Of Technical Information ♦ or
- COM 32000 - Small Group Communication ♦ or
- COM 41500 - Discussion Of Technical Problems ♦ or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills ♦
- Science Selective - Credit Hours: 3.00
- Human Cultures: Humanities Foundational Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Human Cultures: Behavior/Social Science Foundational Selective (satisfies Human Cultures: Behavioral Sciences for core) - Credit Hours: 3.00
- Humanities/Social Science Elective - Credit Hours: 3.00
- Professional Requirement - Credit Hours: 0.00
- Intercultural Requirement - Credit Hours: 0.00

## Electives (4 credits)

Any non-remedial course

## 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 Requirements

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

## Program Requirements

### Fall 1st Year

- CNIT 10500 - Introduction To C Programming ♦
- ENGT 18200 - Gateway To Engineering Technology
- MA 16010 - Applied Calculus I
- **Materials and Processes Selective**
- MET 14300 - Materials And Processes I ♦ or
- MET 14400 - Materials And Processes II ♦
- **Freshman Composition Selective +**
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

### 16 Credits

### Spring 1st Year

- ECET 22400 - Electronic Systems
- MA 16020 - Applied Calculus II
- MET 11100 - Applied Statics
- TECH 12000 - Design Thinking In Technology ♦
- Humanities Foundational Selective - Credit Hours: 3.00

### 15 Credits

## Fall 2nd Year

- CHM 11100 - General Chemistry
- ECET 17900 - Introduction To Digital Systems
- MET 11300 - Mechanics Applications
- MET 28400 - Introduction To Industrial Controls
- **Computer Graphics Selective**
- MFET 10301 - Geometric Modeling Applications ♦ or
- CGT 11000 - Technical Graphics Communications ♦ or
- MFET 16300 - Graphical Communication And Spatial Analysis ♦ or
- ENGT 10500 - Industrial Technology Introduction To Design ♦
- **Freshman Speech Selective +**
- COM 11400 - Fundamentals Of Speech Communication or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World

15 Credits

## Spring 2nd Year

- ECET 27900 - Embedded Digital Systems
- MET 10200 - Production Design And Specifications
- MET 24500 - Manufacturing Systems
- **Physics Selective ♦**
- PHYS 22000 - General Physics ♦ or
- PHYS 17200 - Modern Mechanics ♦
- Behavioral/Social Science Foundational Selective - Credit Hours: 3.00

16 Credits

## Fall 3rd Year

- MET 23000 - Fluid Power
- MFET 34400 - Automated Manufacturing Processes
- ECET 32700 - Instrumentation And Data Acquisition Design
- **Technical Writing Selective + ♦**
- ENGL 42000 - Business Writing ♦ or
- ENGL 42100 - Technical Writing ♦ or
- ENGL 42400 - Writing For High Technology Industries ♦
- Science Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- MFET 37400 - Manufacturing Integration I
- ECET 38001 - Global Professional Issues In Engineering Technology

- ECET 33700 - Continuous Systems Analysis And Design  
**Statistics or Quality Selective** ♦
- STAT 30100 - Elementary Statistical Methods ♦ or
- IET 31600 - Statistical Quality Control ♦
- Manufacturing Selective - Credit Hours: 3.00

## 15 Credits

### Fall 4th Year

- IET 33400 - Economic Analysis For Technology Systems
- Controls Selective - Credit Hours: 3.00 ♦
- Mechatronics Selective - Credit Hours: 3.00 ♦  
**Communications Selective** +
- COM 31500 - Speech Communication Of Technical Information ♦ or
- COM 32000 - Small Group Communication ♦ or
- COM 41500 - Discussion Of Technical Problems ♦ or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills ♦  
**Capstone Selective I**
- ENGT 48000 - Engineering Technology Capstone I or

## 15 Credits

### Spring 4th Year

- **Capstone Selective II**
- ENGT 48100 - Engineering Technology Capstone II or
- MET 38200 - Controls And Instrumentation For Automation
- Humanities/Social Science Elective - Credit Hours: 3.00
- Elective - Credit Hours: 4.00

## 13 Credits

### Notes

- A 2.0 Graduation GPA are required for the Bachelor of Science degree.
- MFET majors do not allow P/NP grading for any classes that are used to meet degree requirements, all degree requirements must be taken for a grade.
- Students must earn a "D-" or better in all courses.
- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.
- 32 credit hours of 300-level or higher courses must be completed at Purdue University.
- Complete a Professional Requirement.
- Complete an Intercultural Requirement.

- "D-" or better required in all major courses.
- + denotes options Cornerstone Certificate course.

## Degree Requirements

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

Degree Works is knowledge source for specific requirements and completion.

## Critical Course

The ♦ course is considered critical.

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

## Disclaimer

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

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.

## Polytechnic Statewide Multidisciplinary Technology, BS

### About the Program

From businesses to industries to government, Purdue's multidisciplinary technology program will give you the skills to focus on the management, operation, and maintenance of complex technological systems. In this program you'll prepare for a career that requires knowledge in industrial and manufacturing technologies as well as quality assurance and plant supervision. The skills you gain will help your employers become more efficient and safe.

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

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

[Click here to view the plan of study based on AS degree completion.](#)

# Polytechnic Statewide Robotics Engineering Technology, BS

## About the Program

The Robotics Engineering Technology major is part of the Manufacturing Engineering Technology program. The Manufacturing Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

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

Robotics Engineering Technology Website

Robotics Engineering Technology Major Change (CODO) Requirements

## Degree Requirements

### 120 Credits Required

#### Departmental/Program Major Courses (74 credits)

#### Required Major Courses (74 credits)

- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications
- MET 11100 - Applied Statics
- CNIT 10500 - Introduction To C Programming ♦
- MET 28400 - Introduction To Industrial Controls
- MFET 24800 - Industrial Robot Programming And Applications
- Technical Graphics Selective - Credit Hours: 3.00 ♦
- MET 21300 - Dynamics
- CS 17700 - Programming With Multimedia Objects ♦
- MET 31500 - Applied Mechanism Kinematics And Dynamics
- ECET 36900 - Applied Computer Vision For Sensing And Automation
- MFET 36100 - Machine Learning And Manufacturing Analytics
- MFET 44200 - Programming Robots With ROS
- MFET 44000 - Smart Manufacturing Autonomous Human Robot Systems
- MFET 34800 - Introduction To Robot Kinematics
- Capstone Selective I - Credit hours: 3.00

- Capstone Selective II - Credit Hours: 3.00
- Technical Selectives - Credit Hours: 18.00
- Professional Requirement - Credit Hours: 0.00
- Global/Intercultural Requirement - Credit Hours: 0.00
- ECET 33700 - Continuous Systems Analysis And Design
- Instrument and DAQ Design Selective - Credit Hours: 3.00

## Other Departmental/Program Course Requirements (40 credits)

- CHM 11100 - General Chemistry ♦ (satisfies Science for Core)
- ECET 22400 - Electronic Systems
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy and Science, Technology & Society for core) ♦
- Physics Selective (satisfies Science for core) - Credit Hours: 4.00 ♦
- Math Selective I (satisfies Quantitative Reasoning for core) - Credit Hours: 3.00
- Math Selective II - Credit Hours: 3.00
- STAT 30100 - Elementary Statistical Methods ♦
- Oral Communication Selective + (satisfies Oral Communication for core) - Credit Hours: 3.00 ♦
- Advanced Oral Communication Selective + - Credit Hours: 3.00 ♦
- Technical Writing Selective + - Credit Hours: 3.00 ♦
- Freshman Composition Selective (satisfies Written Communication for core) - Credit Hours: 3.00 ♦
- Human Cultures: Humanities Foundational Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Human Cultures: Behavior/Social Science Foundational Selective (satisfies Human Cultures: Behavioral Sciences for core) - Credit Hours: 3.00

## Electives (6 credits)

Any non-remedial course

## 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 Requirements

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

## Program Requirements

### Fall 1st Year

- Technical Graphics Selective ♦
- TECH 12000 - Design Thinking In Technology ♦
- Oral Communication Selective - Credit Hours: 3.00 ♦
- ENGT 18000 - Engineering Technology Foundations
- Math Selective I
- ENGT 18100 - Engineering Technology Applications

### 16 Credits

### Spring 1st Year

- CS 17700 - Programming With Multimedia Objects ♦
- MET 11100 - Applied Statics
- Math Selective II
- CHM 11100 - General Chemistry
- Humanities Selective

## 16 Credits

### Fall 2nd Year

- CNIT 10500 - Introduction To C Programming ♦
- Freshman Composition Selective ♦
- ECET 22400 - Electronic Systems
- MET 21300 - Dynamics
- Behavioral/Social Science Foundation Selective

## 15 Credits

### Spring 2nd Year

- MFET 24800 - Industrial Robot Programming And Applications
- Physics Selective - Credit Hours: 4.00 ♦
- Technical Selective - Credit Hours: 3.00
- MET 28400 - Introduction To Industrial Controls
- STAT 30100 - Elementary Statistical Methods ♦

## 16 Credits

### Fall 3rd Year

- MET 31500 - Applied Mechanism Kinematics And Dynamics
- Instrument & DAQ Design Selective - Credit Hours: 3.00
- Advanced Oral Communication Selective ♦
- Technical Selective
- MFET 36100 - Machine Learning And Manufacturing Analytics

## 15 Credits

### Spring 3rd Year

- ECET 33700 - Continuous Systems Analysis And Design
- ECET 36900 - Applied Computer Vision For Sensing And Automation
- MFET 44200 - Programming Robots With ROS
- Technical Selective
- Elective

## 15 Credits

### Fall 4th Year

- MFET 34800 - Introduction To Robot Kinematics

- MFET 44000 - Smart Manufacturing Autonomous Human Robot Systems
- Technical Writing Selective + - Credit Hours: 3.00 ♦
- Technical Selective - Credit Hours: 3.00
- Capstone Selective I - Credit Hours: 3.00

## 15 Credits

### Spring 4th Year

- Capstone Selective II - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 12 Credits

### Notes

- 2.0 Graduation GPA are required for the Bachelor of Science degree.
- MFET majors do not allow P/NP grading for any classes that are used to meet degree requirements, all degree requirements must be taken for a grade.
- Students must earn a "D-" or better in all courses.
- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.
- 32 credit hours of 300-level or higher courses must be completed at Purdue University.
- Technical Selectives must come from the same subject area.
- Complete a Professional Requirement.
- Complete an Global/Intercultural Requirement.
- + denotes Cornerstone Certificate option.

### Critical Course

The ♦ course is considered critical.

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

### Disclaimer

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

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.

# Polytechnic Statewide Web Programming & Design, BS

## About the Program

Before most web sites and mobile applications are launched, there is a vast amount of planning, programming and testing that takes place. When you study web programming and design at Purdue University, you will gain expertise in all aspects of this development process.

Each web and mobile project has its own set of requirements. Will it need to allow financial transactions? Does it need to store and retrieve customer information? How will it operate on different platforms? The courses in the web programming and design major will help you answer those questions and design a final product that is functional, secure, and user-friendly.

From front-end design using HTML5, JavaScript and CSS to back-end Programming using PHP and MySQL or .Net and SQL Server environments, you will gain a broad spectrum of programming capabilities and concepts that will allow you to prosper and adapt in this constantly changing industry.

The Polytechnic Statewide Web Programming & Design major in New Albany is part of the Computer Graphics Technology program. The Computer Graphics Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

Web Programming and Design Website

Web Programming & Design Major Change (CODO) Requirements

## Degree Requirements

### 120 Credits Required

#### Departmental/Program Major Courses (45 credits)

#### Required Major Courses (36 credits)

- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 14100 - Internet Foundations Technologies And Development
- CGT 17208 - User Experience Design Studio I: Fundamentals
- CGT 21500 - Computer Graphics Programming I
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 27000 - Introduction To Data Visualization
- CGT 31500 - Computer Graphics Programming II
- CGT 35300 - Principles Of Interactive And Dynamic Media
- CGT 35600 - Web Programming, Development And Data Integration
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- CGT 45600 - Advanced Web Programming, Development And Data Integration

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

## Major Selectives\* - Choose three courses (9 credits)

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

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

- ECON 21000 - Principles Of Economics ♦ (*satisfies Human Culture Behavior/Social Science for core*)
- MA 15800 - Precalculus - Functions And Trigonometry (*satisfies Quantitative Reasoning Selective for core*)
- MA 16010 - Applied Calculus I (*satisfies Quantitative Reasoning Selective for core*)
- MGMT 45500 - Legal Background For Business I ♦
- PHYS 22000 - General Physics ♦ (*satisfies Science for core*)
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity ♦ (*satisfies Written Communication for core & Cornerstone Area A*)
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦ (*satisfies Oral Communication for core & a Cornerstone Area A*)
- **Advanced English Selective - 1 Course (possible Cornerstone Selective)**
- ENGL 20500 - Introduction To Creative Writing or
- ENGL 30400 - Advanced Composition or
- ENGL 41900 - Multimedia Writing or
- ENGL 42000 - Business Writing or
- ENGL 42100 - Technical Writing
- **Statistics Selective - 1 Course**
- IET 31600 - Statistical Quality Control or
- PSY 20100 - Introduction To Statistics In Psychology or
- STAT 22500 - Introduction To Probability Models or
- STAT 30100 - Elementary Statistical Methods or
- STAT 35000 - Introduction To Statistics
- Human Cultures: Humanities (HUM) Core (*satisfies Humanities for core & possible Cornerstone Selective*)- Credit Hours: 3.00
- Human Cultures: Behavioral/Social Sciences Selective (BSS) Core (*satisfies Human Cultures: Behavioral/Social Sciences for core*)- Credit Hours: 3.00
- Humanities Elective (*possible Cornerstone Selective*) - Credit Hours: 6.00
- Science, Technology and Society (STS) Core (*satisfies Science, Technology and Society for core*) - Credit Hours: 3.00
- Science (SCI) Core (*satisfies Science Selective for core*) - Credit Hours: 3.00
- Communication Selective (*possible Cornerstone Selective*) - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00
- CGT Global Selective (*possible Cornerstone Selective*) - Credit Hours: 3.00
- Technical Electives - Credit Hours: 9.00

## Electives (11 credits)

Any course, any subject. Credit Hours: 11.00

## University Requirements

### University Core Requirements

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

- Human Cultures: Behavioral/Social Science (BSS)
- Human Cultures: Humanities (HUM)
- Information Literacy (IL)
- Oral Communication (OC)
- 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 Requirements

[Click here for Web Programming & Design Supplemental Information](#).

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

# Program Requirements

## Fall 1st Year

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

## 15 Credits

## Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 17208 - User Experience Design Studio I: Fundamentals
- MA 16010 - Applied Calculus I ♦
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity  
♦ or  
Human Cultures: Behavioral/Social Science (BSS) Core
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World ♦

## 15 Credits

## Fall 2nd Year

- CGT 21500 - Computer Graphics Programming I
- PHYS 22000 - General Physics
- Human Cultures: Humanities (HUM) Core - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Science, Technology & Society (STS) Core - Credit Hours: 3.00

## 16 Credits

## Spring 2nd Year

- CGT 25001 - Computer Graphics Professional Practices I
- CGT 31500 - Computer Graphics Programming II
- ECON 21000 - Principles Of Economics ♦
- CGT Selective - Credit Hours: 3.00
- Science (SCI) Core - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 16 Credits

### Fall 3rd Year

- CGT 35600 - Web Programming, Development And Data Integration  
**Advanced English Selective - 1 Course (possible Cornerstone Selective)**
- ENGL 20500 - Introduction To Creative Writing or
- ENGL 30400 - Advanced Composition or
- ENGL 41900 - Multimedia Writing or
- ENGL 42000 - Business Writing or
- ENGL 42100 - Technical Writing
- CGT Selective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

## 15 Credits

### Spring 3rd Year

- CGT 45600 - Advanced Web Programming, Development And Data Integration  
**Statistics Selective - 1 Course**
- IET 31600 - Statistical Quality Control or
- PSY 20100 - Introduction To Statistics In Psychology or
- STAT 22500 - Introduction To Probability Models or
- STAT 30100 - Elementary Statistical Methods or
- STAT 35000 - Introduction To Statistics
- CGT Selective - Credit Hours: 3.00
- CGT Globalization Selective (possible Cornerstone Selective)- Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00

## 15 Credits

### Fall 4th Year

- CGT 35300 - Principles Of Interactive And Dynamic Media
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- MGMT 45500 - Legal Background For Business I ♦
- Humanities Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

## 16 Credits

### Spring 4th Year

- CGT 41201 - Contemporary Problems In Applied Computer Graphics II

- CGT 45001 - Computer Graphics Professional Practices II
- Elective - Credit Hours: 3.00
- Communication Selective (possible Cornerstone Selective)- Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

## 12 Credits

## Notes

- Students must earn a "C-" or better in all CGT courses.
- Pass/No Pass may be allowed for Electives or Technical Electives only.
- 120 semester credits & 2.00 Graduation GPA required for Bachelor of Science degree.
- Purdue policy states that a student may attempt a course no more than three (3) times. An attempt is defined as all courses displayed on a student's transcript including, but not limited to A,B,C,D,E,F,W,WF,I and IF
- 32 Credit Hours of 30000 or 40000 level Purdue courses for graduation.
- Cornerstone Certificate is required with this major.

## Critical Course

The ♦ course is considered critical.

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

## Disclaimer

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## Certificate

# **Polytechnic Statewide Human Resource Management Certificate**

## 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
- TLI 15200 - Business Principles For Organizational Leadership
- OLS 37500 - Training Methods

## Phase 2: Broadening (9 Credits)

- OLS 37600 - Human Resource Issues
- OLS 38600 - Leadership For Organizational Change And Innovation
- OLS 37800 - Labor And Management Relations

# **Polytechnic Statewide Industrial Engineering Technology Certificate**

## **About this Program**

### Requirements for the Certificate (18 credits)

#### Industrial Engineering Technology (Choose 18 credits)

- IET 21400 - Introduction To Supply Chain Management Technology
- IET 23500 - Introduction To Systems Thinking And Process Improvement
- IET 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- IET 31600 - Statistical Quality Control
- IET 33100 - Advanced Industrial Safety And Health Management
- IET 33400 - Economic Analysis For Technology Systems
- IET 33520 - Human Factors For Technology Systems
- IET 33620 - Total Productive Maintenance
- IET 34200 - Warehouse And Inventory Management
- IET 34300 - Technical And Service Selling
- IET 43640 - Lean Six Sigma

## Notes

- Students must earn a "C-" or higher in all courses.
- Transfer credit applied to the certificate is limited to no more than 6 credits.

## 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.

# **Polytechnic Statewide Leadership Series Certificate**

## **Required Courses (18 Credits)**

A minimum grade of C required in all courses.

### **Phase 1: Foundation (6 Credits)**

- TLI 11200 - Foundations Of Organizational Leadership
- TLI 15200 - Business Principles For Organizational Leadership

### **Phase 2: Broadening (6 Credits)**

- TLI 21300 - Project Management
- OLS 38600 - Leadership For Organizational Change And Innovation

### **Phase 3: Specialization (6 Credits)**

Choose two of the following:

- IET 21400 - Introduction To Supply Chain Management Technology
- IET 23500 - Introduction To Systems Thinking And Process Improvement
- TLI 31400 - Leading Innovation In Organizations

# **Polytechnic Statewide Organizational Leadership Certificate**

## **Requirements for the Certificate (18 Credits)**

### **Foundation (6 Credits)**

- TLI 11200 - Foundations Of Organizational Leadership
- TLI 15200 - Business Principles For Organizational Leadership

### **Broadening (6 Credits)**

- TLI 21300 - Project Management
- OLS 38600 - Leadership For Organizational Change And Innovation

### **Specialization (6 Credits)**

Choose two courses:

- IET 21400 - Introduction To Supply Chain Management Technology
- IET 23500 - Introduction To Systems Thinking And Process Improvement
- TLI 31400 - Leading Innovation In Organizations

## Notes

Students must earn a "C" or higher required in all courses.

## 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.

## Program Information

### Multidisciplinary Technology Supplemental Information

#### Approved Polytechnic Location Selective (33 credits)

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

May include the following courses:

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

#### Mathematics Selective (3 credits)

(satisfies Quantitative Reasoning Selective for core)

- MA 15300 - College Algebra
- MA 15555 - Quantitative Reasoning
- MA 15800 - Precalculus - Functions And Trigonometry

#### Mathematics/Statistics Selective (3 credits)

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

## Oral Communication Selective (3 credits)

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

## English Composition Selective (3 credits)

SCLA Critical Thinking & Communication

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

## Advanced Communication Selective (3 credits)

## Lab Science Foundation Selective (3 credits)

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

## Science Foundation Selective (3 credits)

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

## Behavioral/Social Science Foundational Selective (3 credits)

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

## Humanities Foundational Selective (3 credits)

(satisfies Human Cultures Humanities for core)

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

## Global/Professional Selective (3 credits)

## Approved Polytechnic Statewide Selective (45 credits)

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

May include the following courses: AD10000:29900, ANTH 10000:29900, ASTR 10000:29900, AT10000:499000, CGT 10000:49900, CHM10000:CHM29900, CNIT10000:CNIT49900, COM 10000:49900, EAPS 10000:29900, ECET 10000:49900, ECON 10000:29900, ENGL 10000:49900, ENGT 1 0000:49900, HIST10000:39900, IET

10000:49900, MA10000:29900, MET10000:49900, MFET10000:49900, MGMT10000:29900, OLS10000:49900, PHIL10000:29900, PHYS10000:29900, POL10000:29900, SCLA10000:29900, STAT10000:49900, SOC10000:29900, TECH10000:49900, TLI10000:49900

## Civics Literacy Requirement

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

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

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

## Polytechnic Statewide Electrical Engineering Technology Supplemental Information

### ECET Electives (12 hours)

Please note that not all ECET Electives are offered every year.

- ECET 30201 - Introduction To Industrial Controls
- ECET 31800 - Foundations Of Audio Electronics
- ECET 32100 - Introduction To Nanotechnology
- ECET 32300 - Introduction To Electric Vehicle Systems
- ECET 32700 - Instrumentation And Data Acquisition Design
- ECET 32900 - Advanced Embedded Digital Systems
- ECET 33300 - Power Electronics In Energy Systems
- ECET 33500 - Computer Architecture And Performance Evaluation
- ECET 33700 - Continuous Systems Analysis And Design
- ECET 33900 - Digital Signal Processing
- ECET 34900 - Advanced Digital Systems
- ECET 35901 - Computer Based Data Acquisition Applications
- ECET 36400 - Fundamentals Of Electromagnetics
- ECET 36900 - Applied Computer Vision For Sensing And Automation
- ECET 37201 - Continuous Control Electronics
- ECET 37300 - Applied Electronic Drives
- ECET 38600 - Building Electrical Codes And Standard Practices
- ECET 38800 - Analog IC Applications
- ECET 42301 - Electrical Vehicle Integration And Fabrication
- ECET 42800 - Audio Electronics-Selected Topics
- ECET 43600 - Electrical Power Transmissions, Distribution, And Smart Control
- ECET 43900 - Advanced Digital Signal Processing

- ECET 44400 - Wireless Systems: Design And Measurement  
ECET 49900 Smart Grid

## Advanced Analysis Selectives (3 hours)

- ECET 33700 - Continuous Systems Analysis And Design
- ECET 33900 - Digital Signal Processing

## Senior Capstone I & II Selectives (6 hours)

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 and
- ENGT 48100 - Engineering Technology Capstone II

or

- ECET 43000 - Electrical And Electronic Product And Program Management and
- ECET 46000 - Project Design And Development

or

- ECET 43100 - International Capstone Project Planning And Design and
- ECET 46100 - International Capstone Project Execution

or

## Technical Selectives (9 hours)

- ECET: ECET 29900 and other lab assistant courses are limited to 3 credit hours.
- College of Engineering: ME 29700 and Engineering Projects in Community Service (EPICS) are each limited to 3 credit hours. First Year Engineering (ENGR) courses cannot be used.
- Purdue Polytechnic Institute: CNIT 13600 and CNIT 15501 cannot be used.
- College of Science: Additional lab-based physics (PHYS), chemistry (CHM) and biology (BIOL) courses; computer Science (CS) courses; and higher-level mathematics (MA) courses: MA 26100, MA 26500, and MA 26600. CS 11000, CS 23500, CS 15900 cannot be used.
- College of Liberal Arts: Up to 9 hours of THTR 25300, THTR 35300, THTR 55300, FVS 26100, FVS 33200, FVS 33700, or FVS 33800.
- ECET Co-op sessions 1, 2 and 3 with seminar
- ECET 49900 - Electrical Engineering Technology  
Sust Engy Tech: Intl Perspectv Purdue In Germany

## English Composition Selective (3 hours)

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

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

## Freshman Speech Selective (3 hours)

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

## Written Communication Selective (3 hours)

- ENGL 20500 - Introduction To Creative Writing
- ENGL 30400 - Advanced Composition
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing
- ENGL 42400 - Writing For High Technology Industries

## Oral Communication Selective (3 hours)

- Any communication (COM) course at the 20000 level or higher.

## Business Selective (3 hours)

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
- AGEC 20400 - Introduction To Resource Economics And Environmental Policy
- AGEC 21700 - Economics
- AGEC 25000 - Economic Geography Of World Food And Resources
- CSR 34200 - Personal Finance
- ECON 21000 - Principles Of Economics
- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 15200 - Business Principles For Organizational Leadership
- TLI 21300 - Project Management
- IET 21400 - Introduction To Supply Chain Management Technology
- IET 34200 - Warehouse And Inventory Management
- IET 34250 - Purchasing And Contract Management
- IET 34300 - Technical And Service Selling

## General Education Selectives (12 hours)

Select 12 hours in one or more of the subject areas (disciplines) listed below, subject to the following conditions:

Foreign languages (except for courses in a student's native language); African American Studies (AAS); Art and Design (AD); American Studies (AMST); Anthropology (ANTH); Asian American Studies (ASAM); American Sign language (ASL); Bands (BAND); Classics (CLCS); Comparative Literature (CMPL); Communication (COM); Economics (ECON); English (ENGL); History (HIST); Interdisciplinary Studies (IDIS); Linguistics (LING); Music History and Theory (MUS); Philosophy (PHIL); Political Science (POL); Psychology (PSY); Religious Studies (REL); Sociology (SOC); Theater (THTR); Women's Studies (WGSS); ROTC (AFT, MSL, NS)

- One course must be from the UCC approved list of Human Culture: Humanities.
- One course must be from the UCC approved list of Human Culture: Behavioral/Social Sciences, unless the student selects a Business Selective, which meets the Human Culture: Behavioral/Social Sciences requirement for core.
- Only one of AGECE 21700 Economics and ECON 21000 Principles of Economics can be applied to the Plan of Study.
- BAND courses are limited to 6 hours.

## Industrial Economics Selective (3 hours)

- IET 33400 - Economic Analysis For Technology Systems
- MGMT 20000 - Introductory Accounting
- MGMT 21200 - Business Accounting
- AGECE 33000 - Management Methods For Agricultural Business
- AGECE 35200 - Quantitative Techniques For Firm Decision Making

## Minors

Minors are offered through a variety of disciplines. The discipline offering the minor establishes the requirement. A minor is not required.

- The Electrical Engineering Technology minor cannot be added to this major.

## Double Majors within the Electrical Engineering Technology Program

Within the PIECET-BS Program, double majors of AUET or CEGT or ENET are allowed without restriction. A double major with EETC requires an additional 12 hours of ECET courses. The additional courses will fulfill the EETC major for the purposes of double majors. The additional courses have the following restrictions:

- No 100-level course may be used.
- Only three (3) credits of a 200-level course may be used, excluding: ECET 22400 Electronic Systems, ECET 29000 International Experience and ECET 29900 Selected EET Subjects, which may not be used.
- All courses must be taken on the PWL and/or PSW campuses.

## Intercultural Requirement

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

Step 2: Complete one (1) of the following global experiences:\*

- Participate in A Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in a full semester abroad program program, or
- Complete 3 credit hours from the Polytechnic list of recommended Global/Cultural courses.

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

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

\*Global experiences must take place during the time of enrollment in Polytechnic to complete Step 2. Experiences taken place prior to a student's initial enrollment will not serve to complete Step 2. Intercultural competencies gained on experiences prior to Polytechnic enrollment will be captured as baseline data on a student's IDI.

- AAS 27100 - Introduction To African American Studies
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 23300 - Ethics And Aviation
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 23500 - Learning And Motivation
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDF5 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights

- HIST 35000 - Science And Society In The Twentieth Century World
  - HIST 36600 - Hispanic Heritage Of The United States
  - HIST 37700 - History And Culture Of Native America
  - HIST 46900 - Black Civil Rights Movement
  - HTM 37000 - Sustainable Tourism And Responsible Travel
  - HTM 37200 - Global Tourism Geography
  - MSL 20100 - Leadership And Ethics
  - OLS 35000 - Creativity In Business And Industry
  - PHIL 11400 - Global Moral Issues
  - PHIL 43500 - Philosophy Of Mind
  - POL 22200 - Women, Politics, And Public Policy
  - POL 23500 - International Relations Among Rich And Poor Nations
  - POL 32600 - Black Political Participation In America
  - POL 32700 - Global Green Politics
  - POL 36000 - Women And The Law
  - POL 41300 - The Human Basis Of Politics
  - POL 42300 - International Environmental Policy
  - POL 42900 - It's A Complex World
  - POL 43300 - International Organization
  - PSY 12000 - Elementary Psychology
  - SOC 10000 - Introductory Sociology
  - SOC 31000 - Race And Ethnicity
  - SOC 33900 - Sociology Of Global Development
  - TECH 33000 - Technology And The Global Society
  - TLI 11200 - Foundations Of Organizational Leadership
  - TLI 31400 - Leading Innovation In Organizations
  - WGSS 28200 - Introduction To LGBTQ Studies
  - WGSS 38000 - Comparative Studies In Gender And Culture
  - WGSS 38300 - Women, Work, And Labor
- Any foreign language 20000 level or higher (20100, 20200, 30100, 30200)

## Professional Requirement

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

Table 1: Approved Professional Experiences

Approval by	Experience
Automatic	Any TECH Professional Practice course (co-op, intern, etc.)
Automatic	MET 29900 Internship for Credit
Automatic	EPICS courses, minimum of two

Advisor	Any approved internship (assuming student and/or employer provide documentation)
Advisor	Military service (ROTC completion, reservist, active duty, veteran)
Faculty	Supervised undergraduate research experiences or laboratory assistantships (e.g., employed in the AEL as lab technician)
Faculty	Independent study - by petition to ensure the project meets the spirit of the requirement
Faculty	Professional society/club activities (e.g., led the Solar Racing team) - by petition
Faculty	Any approved employment or industry project.

\*Approval Key:

- Automatic - student participation in this professional experience is already documented through existing means.
- Advisor - advisor reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.
- Faculty - designated committee reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.

## **Polytechnic Statewide Industrial Engineering Technology Supplemental Information**

### **Behavioral Social Science Elective (3 credits)**

Must be a Behavioral Social Science course from the approved UCC list:

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

### **Humanities Selective (3 credits)**

Must be a Humanities course from the approved UCC

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

### **Materials & Processes Selective (3 Credits)**

- MET 14300 - Materials And Processes I
- MET 14400 - Materials And Processes II

### **Mathematics Selective (3 Credits)**

- MA 15800 - Precalculus - Functions And Trigonometry
- MA 16010 - Applied Calculus I
- MA 16020 - Applied Calculus II
- MA 16100 - Plane Analytic Geometry And Calculus I
- MA 16200 - Plane Analytic Geometry And Calculus II

- MA 16500 - Analytic Geometry And Calculus I
- MA 16600 - Analytic Geometry And Calculus II

## Oral Communication Selective (3 Credits)

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

## Written Communication Selective (3 Credits)

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

## Computer Programming Selective (3 Credits)

- CNIT 10500 - Introduction To C Programming
- CNIT 15500 - Introduction To Object-Oriented Programming
- CNIT 15501 - Introduction To Software Development Concepts
- CNIT 17500 - Visual Programming
- CS 15900 - C Programming
- CS 17700 - Programming With Multimedia Objects
- CS 18000 - Problem Solving And Object-Oriented Programming
- MET 16400 - Computing In Engineering Technology

## Lab Science Selective (3 Credits)

- Must be at least a 3 credit hours lab based course from the approved UCC Science list:  
<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

## Technical Graphics Selective (2 Credits)

- MFET 10301 - Geometric Modeling Applications
- CGT 11000 - Technical Graphics Communications
- MFET 16300 - Graphical Communication And Spatial Analysis
- ENGT 10500 - Industrial Technology Introduction To Design

## Advanced Oral Communication Selective (3 Credits)

- COM 31400 - Advanced Presentational Speaking
- COM 31500 - Speech Communication Of Technical Information
- COM 31800 - Principles Of Persuasion

- COM 32000 - Small Group Communication
- COM 32400 - Introduction To Organizational Communication
- COM 32500 - Interviewing: Principles And Practice
- COM 41500 - Discussion Of Technical Problems
- COM 43500 - Communication And Emerging Technologies

## Advanced Written Communication Selective (3 Credits)

- ENGL 30400 - Advanced Composition
- ENGL 30600 - Introduction To Professional Writing
- ENGL 41900 - Multimedia Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing
- ENGL 42400 - Writing For High Technology Industries

## Manufacturing Automation Selective (3 Credits)

- MET 28400 - Introduction To Industrial Controls
- MFET 24800 - Industrial Robot Programming And Applications
- MFET 30000 - Applications Of Automation In Manufacturing
- MFET 34400 - Automated Manufacturing Processes

## Technical Elective (12 Credits)

- Any Polytechnic Institute or Engineering (ENGR or EPCS) course not already required on the plan of study.
- AT 10000-49999
  - CGT 10000-49999
  - CM 10000-49999
  - CNIT 10000-49999
  - ECET 10000-49999
  - ENGT 10000-49999
  - MET 10000-49999
  - MFET 10000-49999
  - OLS 10000-49999
  - TECH 10000-49999
  - TLI 10000-49999
  - AFT 30000-49999
  - MSL 30000-49999
  - NS 30000-49999
- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- ENTR 31000 - Marketing And Management For New Ventures
- ENTR 31500 - Business Planning For Social Entrepreneurship

## Free Elective (8 Credits)

Any non-remedial course

## Global/Intercultural Requirement (0 Credits)

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

Step 2: Complete one (1) of the following global experiences:\*

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- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies

- AT 22300 - Human Factors For Flight Crews
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFFS 28000 - Diversity In Individual And Family Life
- HDFFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Leadership And Ethics
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 32600 - Black Political Participation In America
- POL 32700 - Global Green Politics
- POL 36000 - Women And The Law
- POL 41300 - The Human Basis Of Politics
- POL 42300 - International Environmental Policy
- POL 42900 - Contemporary Political Problems - It's A Complex World
- POL 43300 - International Organization
- SOC 10000 - Introductory Sociology
- SOC 31000 - Race And Ethnicity
- SOC 33900 - Sociology Of Global Development
- TECH 33000 - Technology And The Global Society
- WGSS 28200 - Introduction To LGBTQ Studies
- WGSS 38000 - Comparative Studies In Gender And Culture
- WGSS 38300 - Women, Work, And Labor

## Professional Requirement (0 Credits)

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

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Faculty	Independent study - by petition to ensure the project meets the spirit of the requirement
Faculty	Professional society/club activities (e.g., led the Solar Racing team) - by petition
Faculty	Any approved employment or industry project.

\*Approval Key:

- Automatic - student participation in this professional experience is already documented through existing means.
- Advisor - advisor reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.
- Faculty - designated committee reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.

## Polytechnic Statewide Mechanical Engineering Technology Supplemental Information

### Computer Graphics Technology Selective

- MFET 10301 - Geometric Modeling Applications
- CGT 11000 - Technical Graphics Communications
- MFET 16300 - Graphical Communication And Spatial Analysis
- ENGT 10500 - Industrial Technology Introduction To Design

## Freshman Composition Selective +

- ENGL 10600 - First-Year Composition
- ENGL 10800 - Accelerated First-Year Composition
- HONR 19903 - Interdisciplinary Approaches In Writing
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity

## Freshman Speech Selective +

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

## Economics/Finance Selective

- AGECE 21700 - Economics
- CSR 34200 - Personal Finance
- ECON 21000 - Principles Of Economics
- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics
- ENTR 20000 - Introduction To Entrepreneurship And Innovation

## Communications Selective +

- COM 31500 - Speech Communication Of Technical Information
- COM 32000 - Small Group Communication
- COM 41500 - Discussion Of Technical Problems
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

## Technical Writing Selective +

- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing
- ENGL 42400 - Writing For High Technology Industries

## 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
- AT 27200 - Introduction To Composite Technology
- AT 27800 - Nondestructive Testing For Aircraft
- BCHM 22100 - Analytical Biochemistry

- BIOL 20300 - Human Anatomy And Physiology
- BIOL 22100 - Introduction To Microbiology
- MFET 11301 - Product Data Management
- MFET 30301 - Digital Manufacturing
- CE 35000 - Introduction To Environmental And Ecological Engineering
- CE 35500 - Engineering Environmental Sustainability
- CM 23301 - Mechanical, Electrical And Piping Systems In The Built Environment
- ECET 22700 - DC And Pulse Electronics
- ECET 27700 - AC And Power Electronics
- ECET 27900 - Embedded Digital Systems
- FNR 31110 - Identification And Basic Properties Of Wood
- FNR 41800 - Properties Of Wood Related To Manufacturing
- FNR 41910 - Furniture Product Development And Strength Design
- FNR 42500 - Secondary Wood Products Manufacturing
- HSCI 31200 - Radiation Science Fundamentals
- IE 57700 - Human Factors In Engineering
- MFET 28800 - Smart Manufacturing Operational And Information Networks
- NS 35000 - Naval Ship Systems-Engineering
- TECH 22000 - Designing Technology For People
- TECH 34000 - Prototyping Technology For People
- TLI 36700 - Teaching Design And Innovation I
- TLI 46000 - Teaching Design And Innovation II

## Management Selective

- AFT 35100 - Leading People And Effective Communication I
- AFT 36100 - Leading People And Effective Communication II
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENTR 31000 - Marketing And Management For New Ventures
- ENTR 31500 - Business Planning For Social Entrepreneurship
- IET 41400 - Financial Analysis For Technology Systems
- MFET 35800 - Smart Manufacturing And The Global Economy
- MGMT 20000 - Introductory Accounting
- MGMT 20100 - Management Accounting I
- MGMT 21200 - Business Accounting
- MGMT 45500 - Legal Background For Business I
- MSL 20200 - Army Doctrine And Decision Making
- MSL 30100 - Training Management And The Warfighting Function
- MSL 40100 - The Army Officer
- NS 21400 - Naval Leadership And Management
- NS 41300 - Naval Leadership And Ethics
- OLS 27400 - Applied Leadership
- OLS 36400 - Professional Development Program
- OLS 38600 - Leadership For Organizational Change And Innovation

- OLS 45600 - Leadership In A Global Environment
- PSY 27200 - Introduction To Industrial-Organizational Psychology
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 15200 - Business Principles For Organizational Leadership
- TLI 21300 - Project Management

## Mechanics Selective

- MET 31100 - Experimental Strength Of Materials
- MET 31400 - Applications Of Machine Elements
- MET 31500 - Applied Mechanism Kinematics And Dynamics
- MET 31601 - Mechanics Of Machine Design
- MET 31700 - Machine Diagnostics
- MET 41100 - Introduction To The Finite Element Method

## Programming Selective

- CNIT 10500 - Introduction To C Programming
- CNIT 15500 - Introduction To Object-Oriented Programming
- CNIT 15501 - Introduction To Software Development Concepts
- CNIT 17500 - Visual Programming
- CS 15900 - C Programming
- CS 17700 - Programming With Multimedia Objects
- CS 18000 - Problem Solving And Object-Oriented Programming
- MET 16400 - Computing In Engineering Technology

## MET Elective (3 credit hours)

- MET 30200 - CAD In The Enterprise  
\* 5 session co-op with completed seminar courses.
- MET 31100 - Experimental Strength Of Materials
- MET 31400 - Applications Of Machine Elements
- MET 31500 - Applied Mechanism Kinematics And Dynamics
- MET 31601 - Mechanics Of Machine Design
- MET 31700 - Machine Diagnostics
- MET 31800 - Applied Room Acoustics
- MET 33400 - Advanced Fluid Power
- MET 34900 - Stringed Instrument Design And Manufacture
- MET 38200 - Controls And Instrumentation For Automation
- MET 40000 - Mechanical Design
- MET 41100 - Introduction To The Finite Element Method
- MET 42100 - Air Conditioning And Refrigeration
- MET 42200 - Power Plants And Energy Conversion
- MET 42600 - Internal Combustion Engines
- MET 43200 - Hydraulic Motion Control Systems
- MET 43600 - Pneumatic Motion Control Systems

- MET 44301 - Joining Processes
- MET 44500 - Applied Metalcasting
- MET 45100 - Manufacturing Quality Control
- MET 45200 - Advanced GD&T Concepts Applied To Product Quality
- MET 48200 - Mechatronics
- MET 49000 - Special Topics In MET
- MET 49900 - Mechanical Engineering Technology  
- Independent Study

## MET Capstone Selectives I & II

- ENGT 48000 - Engineering Technology Capstone I
- ENGT 48100 - Engineering Technology Capstone II
- MET 33400 - Advanced Fluid Power
- MET 40000 - Mechanical Design
- MET 42100 - Air Conditioning And Refrigeration
- MET 42200 - Power Plants And Energy Conversion
- MET 42600 - Internal Combustion Engines
- MET 43200 - Hydraulic Motion Control Systems
- MET 43600 - Pneumatic Motion Control Systems

## Global/Professional Selective

- AFT 47100 - National Security/Commissioning Preparation I
- AFT 48100 - National Security/Commissioning Preparation II
- ANTH 20500 - Human Cultural Diversity
- ANTH 34100 - Culture And Personality
- ARAB 28000 - Arabic Culture
- CHNS 28000 - Topics In Chinese Civilization And Culture
- CHNS 28500 - Chinese Calligraphy
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- FR 33000 - French Cinema
- GER 23000 - German Literature In Translation
- GER 28000 - German Special Topics - Beer Brewing in the German Culture
- GER 33000 - German Cinema
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33300 - Science And Society In Western Civilization I
- HIST 33400 - Science And Society In Western Civilization II
- HIST 35000 - Science And Society In The Twentieth Century World
- JPNS 28000 - Introduction To Modern Japanese Civilization
- LC 23500 - East Asian Literature In Translation
- LC 23900 - Women Writers In Translation
- MFET 35800 - Smart Manufacturing And The Global Economy
- MGMT 45500 - Legal Background For Business I

- MSL 30200 - Applied Leadership In Small Unit Operations
- MUS 37600 - World Music
- NS 41300 - Naval Leadership And Ethics
- OLS 45600 - Leadership In A Global Environment
- PHIL 11400 - Global Moral Issues
- PHIL 20600 - Introduction To Philosophy Of Religion
- PHIL 29000 - Environmental Ethics
- POL 23100 - Introduction To United States Foreign Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- PSY 33500 - Stereotyping And Prejudice
- PTGS 33000 - Brazilian, Portuguese, And African Cinema
- SOC 31000 - Race And Ethnicity
- SPAN 23500 - Spanish American Literature In Translation
- SPAN 33000 - Spanish And Latin American Cinema
- SYS 30000 - It's A Complex World - Addressing Global Challenges  
Any foreign language 200 or higher (20100, 20200, 30100, 30200, 40100, 40200).
- TECH 33000 - Technology And The Global Society
- Approved Study Abroad Course

## Humanities Foundational Selective\*

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

## Behavioral/Social Science Foundational Selective\*

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

## Intercultural Requirement

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

Step 2: Complete one (1) of the following global experiences:\*

- Participate in A Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in a full semester abroad program program, or
- Complete 3 credit hours from the Polytechnic list of recommended Global/Cultural courses.

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

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

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- AAS 27100 - Introduction To African American Studies
- AAS 37300 - Issues In African American Studies
- AGR 20100 - Communicating Across Culture
- ANSC 38100 - Leadership For A Diverse Workplace
- ANTH 20300 - Biological Bases Of Human Social Behavior
- ANTH 20500 - Human Cultural Diversity
- ANTH 21000 - Technology And Culture
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 34100 - Culture And Personality
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- ASAM 24000 - Introduction To Asian American Studies
- AT 22300 - Human Factors For Flight Crews
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- COM 32000 - Small Group Communication
- COM 41200 - Theories Of Human Interaction
- COM 42300 - Leadership, Communication And Organizations
- ECET 29000 - International Experience
- ECET 38001 - Global Professional Issues In Engineering Technology
- EDPS 30000 - Student Leadership Development
- EDPS 30100 - Peer Counseling Training
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings
- EDPS 31700 - Collaborative Leadership: Mentoring
- ENGL 41400 - Studies In Literature And Culture
- HDFS 28000 - Diversity In Individual And Family Life
- HDFS 33200 - Stress And Coping In Contemporary Families
- HEBR 38500 - The Holocaust In Modern Hebrew Literature
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33805 - History Of Human Rights
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 36600 - Hispanic Heritage Of The United States
- HIST 37700 - History And Culture Of Native America
- HIST 46900 - Black Civil Rights Movement
- HTM 37000 - Sustainable Tourism And Responsible Travel
- HTM 37200 - Global Tourism Geography
- MSL 20100 - Leadership And Ethics
- OLS 35000 - Creativity In Business And Industry
- PHIL 11400 - Global Moral Issues
- PHIL 43500 - Philosophy Of Mind
- POL 22200 - Women, Politics, And Public Policy

- POL 23500 - International Relations Among Rich And Poor Nations
  - POL 32600 - Black Political Participation In America
  - POL 32700 - Global Green Politics
  - POL 36000 - Women And The Law
  - POL 41300 - The Human Basis Of Politics
  - POL 42300 - International Environmental Policy
  - POL 42900 It's a Complex World
  - POL 43300 - International Organization
  - PSY 12000 - Elementary Psychology
  - SOC 10000 - Introductory Sociology
  - SOC 31000 - Race And Ethnicity
  - SOC 33900 - Sociology Of Global Development
  - TECH 33000 - Technology And The Global Society
  - TLI 11200 - Foundations Of Organizational Leadership
  - TLI 31400 - Leading Innovation In Organizations
  - WGSS 28200 - Introduction To LGBTQ Studies
  - WGSS 38000 - Comparative Studies In Gender And Culture
  - WGSS 38300 - Women, Work, And Labor
- Any foreign language 20000 level or higher (20100, 20200, 30100, 30200)

## Professional Requirement

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

**Table 1: Approved Professional Experiences**

Approval by	Experience
Automatic	Any TECH Professional Practice course (co-op, intern, etc.)
Automatic	MET 29900 Internship for Credit
Automatic	EPICS courses, minimum of two
Advisor	Any approved internship (assuming student and/or employer provide documentation)

Advisor	Military service (ROTC completion, reservist, active duty, veteran)
Faculty	Supervised undergraduate research experiences or laboratory assistantships (e.g., employed in the AEL as lab technician)
Faculty	Independent study - by petition to ensure the project meets the spirit of the requirement
Faculty	Professional society/club activities (e.g., led the Solar Racing team) - by petition
Faculty	Any approved employment or industry project

\* Approval Key:

- Automatic - student participation in this professional experience is already documented through existing means.
- Advisor - advisor reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.
- Faculty - designated committee reviews student's experience to determine if it meets the spirit of the Professional Experience requirement

## **Polytechnic Statewide Mechatronics Engineering Technology Supplemental Information**

### **Freshman Composition Selective +**

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

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

## Freshman Speech Selective +

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

## Materials and Processes Selective

- MET 14300 - Materials And Processes I
- MET 14400 - Materials And Processes II

## Computer Graphics Selective

- MFET 10301 - Geometric Modeling Applications
- CGT 11000 - Technical Graphics Communications
- MFET 16300 - Graphical Communication And Spatial Analysis
- ENGT 10500 - Industrial Technology Introduction To Design

## Communications Selective +

- COM 31500 - Speech Communication Of Technical Information
- COM 32000 - Small Group Communication
- COM 41500 - Discussion Of Technical Problems
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

## Technical Writing Selective +

- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing
- ENGL 42400 - Writing For High Technology Industries

## Statistics or Quality Selective

- STAT 30100 - Elementary Statistical Methods
- IET 31600 - Statistical Quality Control

## Physics Selective

- PHYS 22000 - General Physics
- PHYS 17200 - Modern Mechanics

## Science Selective

- BIOL 11000 - Fundamentals Of Biology I
- BIOL 20300 - Human Anatomy And Physiology
- CHM 11200 - General Chemistry
- CHM 11600 - General Chemistry
- PHYS 22100 - General Physics
- PHYS 24100 - Electricity And Optics

## Mechatronics Selective

- MET 43200 - Hydraulic Motion Control Systems
- MET 43600 - Pneumatic Motion Control Systems
- MET 48200 - Mechatronics
- MET 58100 - Workshop In Mechanical Engineering Technology
- MFET 29200 - Projects In Automation, Robotics And Mechatronics
- MFET 34800 - Introduction To Robot Kinematics
- MFET 39200 - Advanced Projects In Automation, Robotics, And Mechatronics

## Controls Selective

- MET 33400 - Advanced Fluid Power
- MET 43200 - Hydraulic Motion Control Systems
- MET 43600 - Pneumatic Motion Control Systems
- MET 48200 - Mechatronics
- MFET 29200 - Projects In Automation, Robotics And Mechatronics
- MFET 39200 - Advanced Projects In Automation, Robotics, And Mechatronics
- ECET 27400 - Wireless Communications
- ECET 35901 - Computer Based Data Acquisition Applications
- ECET 36900 - Applied Computer Vision For Sensing And Automation

## Manufacturing Selective

- AT 27200 - Introduction To Composite Technology
- AT 30802 - Aircraft Materials Processes
- AT 47200 - Advanced Composite Technology
- CGT 32600 - Graphics Standards For Product Definition
- CGT 42300 - Product Data Management
- CGT 42600 - Industry Applications Of Simulation And Visualization
- ECET 27400 - Wireless Communications
- ECET 36900 - Applied Computer Vision For Sensing And Automation
- IET 33620 - Total Productive Maintenance
- IET 44275 - Global Transportation And Logistics Management
- MET 30200 - CAD In The Enterprise
- MET 33400 - Advanced Fluid Power
- MET 34600 - Advanced Materials In Manufacturing
- MET 34900 - Stringed Instrument Design And Manufacture
- MET 43200 - Hydraulic Motion Control Systems

- MET 43600 - Pneumatic Motion Control Systems
- MET 45100 - Manufacturing Quality Control
- MFET 24800 - Industrial Robot Programming And Applications
- MFET 29200 - Projects In Automation, Robotics And Mechatronics
- MFET 34800 - Introduction To Robot Kinematics
- MFET 39200 - Advanced Projects In Automation, Robotics, And Mechatronics
- MFET 49900 - Manufacturing Engineering Technology Independent Project - Technology, Innovation and Culture in Bavaria (Study Abroad)
- MGMT 45500 - Legal Background For Business I

## Capstone Selectives I

- ENGT 48000 - Engineering Technology Capstone I

## Capstone Selectives II

- ENGT 48100 - Engineering Technology Capstone II

## Behavioral/Social Science Foundational Selective

Must be a Behavioral Social Science course from the approved UCC list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

## Humanities Foundational Selective

Must be a Humanities course from the approved UCC list: <http://www.purdue.edu/provost/initiatives/curriculum/course.html>

## Humanities/Social Science Elective

any 20000 level course or higher in PSY, SOC, HIST, ECON, POL, PHIL, REL, ANTH, English Literature, or a foreign language

- AD 22600 - History Of Art To 1400
- AD 22700 - History Of Art Since 1400
- AD 25100 - History Of Photography I
- AD 25500 - Art Appreciation
- AD 30701 - History Of Contemporary Photography
- AD 31100 - Ancient Greek Art
- AD 31200 - Ancient Roman Art
- MUS 25000 - Music Appreciation
- MUS 37600 - World Music
- MUS 37800 - Jazz History
- MUS 38100 - Music History I: Antiquity To Mozart
- MUS 38200 - Music History II: Beethoven To The Present

## Elective

Any non-remedial course

## Intercultural Requirement

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

Step 2: Complete one (1) of the following global experiences:\*

- Participate in A Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), or
- Participate in a full semester abroad program program, or
- Complete 3 credit hours from the Polytechnic list of recommended Global/Cultural courses.

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

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## **Robotics Engr Tech Concentration for Engineering Technology (Polytechnic Statewide)**

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

### **Required Courses (37 credits)**

#### **General Education (3 credits)**

- Elective - Credit Hours: 3.00

#### **Science, Mathematics and Technology (13 credits)**

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

#### **Robotics (21 credits)**

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

### **Other Programs**

## **Mechatronics Engr Tech Concentration for Engineering Technology (Polytechnic Statewide)**

Mechatronics is one of the concentrations in the Engineering Technology major offered for students who seek to contribute at the intersection between manufacturing, electrical, mechanical, and computing areas in primarily industrial environments. While pursuing a mechatronics degree, students will focus on the development of the electromechanical products that are ubiquitous in modern life, dealing with interconnections that allow electronic control of mechanical, pneumatic, and hydraulic systems.

## Required Courses (37 credits)

### Science, Mathematics, and Technology (13 credits)

- ECET 27900 - Embedded Digital Systems
- MA 16020 - Applied Calculus II
- MET 23000 - Fluid Power
- PHYS 22100 - General Physics

### Mechatronics (24 credits)

- ECET 32700 - Instrumentation And Data Acquisition Design
- ECET 33700 - Continuous Systems Analysis And Design
- MET 28400 - Introduction To Industrial Controls
- MET 38200 - Controls And Instrumentation For Automation
- MET 48200 - Mechatronics
- MFET 24800 - Industrial Robot Programming And Applications
- MFET 34400 - Automated Manufacturing Processes
- MFET 37400 - Manufacturing Integration I