# Polytechnic Institute

# Polytechnic Institute

## College Overview

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

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

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

## Admissions

http://www.admissions.purdue.edu/majors/colleges.php?ClgCd=TECH

## Admission to Teacher Education

Teacher Education Program Guidelines 2017-18

## Advising

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

### Meeting with your Advisor

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

### Preparing for your Advising Session

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

## Topics Typically Covered in an Advising Session

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

# Contact Information

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

# Polytechnic Statewide

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.

For Program Listings and Locations click 2016-17 Program Listings and Locations.

# Polytechnic Institute Administration

# Overview

## Propel ideas into reality

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

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

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

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

Polytechnic Institute Website

# Faculty

https://polytechnic.purdue.edu/college-directory.

# Contact Information

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

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

# Graduate Information

For Graduate Information please see Polytechnic Administration Graduate Program Information.

## Baccalaureate

## Transdisciplinary Studies in Engineering Technology, BSTS

Design a personalized plan of study in our new transdisciplinary studies in engineering technology major, blending fields like humanities and business with engineering technology-focused disciplines.

Featuring hands-on team-based projects, transdisciplinary studies in engineering technology will help you become a lifelong learner. It's a program especially for the trailblazers, the challenge-seekers, the pioneers with an interest in engineering technology - the students who are independent minded, ambitious, creative, passionate, reflective, and inventive.

Transdisciplinary studies in engineering technology is an educational experience unlike any other because it combines individualized learning with close mentoring by faculty experts and a competency based curriculum which clearly defines each ability, skill, behavior, and body of knowledge that you'll master.

Employers today have many positions with job titles that didn't exist only a few years ago. This major provides you with broad technical competence and the abilities to think critically, to communicate effectively, and to adapt and thrive in our ever-changing world.

This is one of two competency-based degrees offered by the Purdue Polytechnic Institute.

**Special features**

- In each semester's Design Lab and Seminar learning environments, you will learn discipline-specific theory and how to apply it to real-world problems.
- It's a student-centered culture called "competency-based education" focuses more on "show us what you can do with what you know" and less on memorization.
- You will create an electronic portfolio which documents your abilities and mastery of subjects - which you may choose to share with potential employers.

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (36 credits)

### Required Major Courses (36 credits)

- PTEC 10800 - Guided Exploration
- PTEC 20700 - ePortfolio I
- PTEC 20800 - Formation And Immersion
- PTEC 30800 - Deep Immersion
- PTEC 40700 - ePortfolio II
- PTEC 40800 - Capstone And Planning

## Other Departmental/Program Course Requirements (84 credits)

- UCC Written Communication - Credit Hours: 4.00
- UCC Oral Communication - Credit Hours: 3.00
- UCC Information Literacy - Credit Hours: 3.00

- UCC Quantitative Reasoning - Credit Hours: 3.00
- UCC Science - Credit Hours: 7.00
- UCC Science, Technology and Society - Credit Hours: 3.00
- UCC Human Cultures - Credit Hours: 3.00
- UCC Behavioral/Social Science - Credit Hours: 3.00
- Advanced MA (>15999) or STAT (>19999) - Credit Hours: 3.00
- >20000 Humanities or Social Sci - Credit Hours: 3.00
- >30000 level Oral Comm or Written Comm - Credit Hours: 3.00
- >09999 Technology Selective (Any AT, BCM, CGT, CNIT, ECET, ENGT, IET, IT, MET, MFET, OLS, TECH, TLI course 10000 level or higher) - Credit Hours: 3.00
- >10000 Disciplinary Knowledge - Credit Hours: 9.00
- >20000 Disciplinary Knowledge - Credit Hours: 14.00
- >30000 Disciplinary Knowledge - Credit Hours: 12.00
- >40000 Disciplinary Knowledge - Credit Hours: 9.00
- Professional Experience - Credit Hours: 0.00
- Intercultural Experience - Credit Hours: 0.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Program Requirements

## Fall 1st Year

- PTEC 20700 - ePortfolio I [2]
- PTEC 10800 - Guided Exploration [2]
- >09999 Technology Selective - Credit Hours: 3.00
- Oral Communication* (UCC)[3,4] - Credit Hours: 3.00
- Math Quant Reasoning* (UCC)[3,4] - Credit Hours: 3.00
- >10000 level Disciplinary Knowledge[4] - Credit Hours: 3.00

16.5 Credits

## Spring 1st Year

- PTEC 20700 - ePortfolio I [2]
- PTEC 10800 - Guided Exploration [2]
- Humanities* (UCC)[3,4] - Credit Hours: 3.00
- Written Communication* (UCC)[3,4]- Credit Hours: 3.00
- Science* (UCC)[3,4] - Credit Hours: 4.00

14.5 Credits

## Fall 2nd Year

- PTEC 20700 - ePortfolio I [2] [2]
- PTEC 20800 - Formation And Immersion
- >09999 level ET/Related Area - CreditHours: 6.00
- Science, Tech, and Society* (UCC)[3,4] - CreditHours: 3.00

13.5 Credits

## Spring 2nd Year

- PTEC 20700 - ePortfolio I [2]
- PTEC 20800 - Formation And Immersion [2]
- >19999 level ET/Related Area - CreditHours: 3.00
- Science* (UCC)[3,4] - Credit Hours: 3.00
- >19999 level Humanities[4] - Credit Hours: 3.00
- Information Literacy* (UCC)[3,4] - Credit Hours: 3.00

16.5 Credits

## Fall 3rd Year

- PTEC 40700 - ePortfolio II [2]
- PTEC 30800 - Deep Immersion [2]
- Advanced MA (>15999) or STAT (>19999) - Credit Hours: 3.00
- >19999 level ET/Related Area - CreditHours: 8.00

15.5 Credits

## Spring 3rd Year

- PTEC 40700 - ePortfolio II [2]
- PTEC 30800 - Deep Immersion [2]
- Advanced MA (>15999) or STAT (>19999) - Credit Hours: 3.00
- >19999 level ET/Related Area - Credit Hours: 8.00

16.5 Credits

## Fall 4th Year

- PTEC 40700 - ePortfolio II [2]
- PTEC 40800 - Capstone And Planning [2]
- >29999 level ET/Related Area - CreditHours: 9.00

13.5 Credits

## Spring 4th Year

- PTEC 40700 - ePortfolio II [2]
- PTEC 40800 - Capstone And Planning [2]
- >39999 level ET/Related Area - CreditHours: 9.00

13.5 Credits

## Notes

1. Non-course degree requirement: Student demonstration of expertise in eight broad competencies. Monitored and reviewed continuously in Transdisciplinary Learning Experiences (PTEC 10800, 20800, ...). ePortfolio is formally assessed 4 times during the plan of study to satisfy this requirement.
2. These are courses specifically designed for this degree. ePortfolio (PTEC 20700, 40700) are pass/no pass. Transdisciplinary Learning Experiences (PTEC 10800-40800) are variable credit.
3. Any courses from the Undergraduate Curriculum Council (UCC) Approved Course List to satisfy the appropriate foundational core requirement. Acronyms are as follows: BSS - Behavioral/Social Sciences, HUM - Humanities, IL - Information Literacy, OC - Oral Communication, QR - Quantitative Reasoning, STS - Science, Technology and Society, WC - Written Communication. It is preferred that students take one course from physical sciences and one from life sciences.

4. Any course for which the student meets the prerequisites and meets their personal and professional goals as determined by the student in consultation with their faculty mentor.
5. By the end of the Semester 3, students identify their mission and, with the help of their faculty mentor, develop a detailed plan of learning. At this time, they identify one or more technology disciplines and at least one humanities discipline. For example, Computing (CIT, CGT or ECET), Engineering Technology (ECET, MET or MFET), Built environment (CM), Aviation (AT), or Technology Leadership and Innovation (TLI), and non-technology areas such as history, philosophy, communication, etc.

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Transdisciplinary Studies in Technology, BSTS

Follow your passions and discover new ones in a Bachelor of Science program at Purdue University. You will design a personalized plan of study in our new transdisciplinary studies in technology major, blending fields like humanities and business with these technology-focused disciplines:

- Computing and graphics
- Construction management
- Engineering technologies
- Leadership and innovation
- Aviation technologies

Featuring hands-on team-based projects, transdisciplinary studies in technology will help you become a lifelong learner. It's a program especially for the trailblazers, the challenge-seekers, the pioneers - the students who are independent minded, ambitious, creative, passionate, reflective, and inventive.

A new major which made national headlines, transdisciplinary studies in technology is an educational experience unlike any other because it combines individualized learning with close mentoring by faculty experts and a competency based curriculum which clearly defines each ability, skill, behavior, and body of knowledge that you'll master.

Employers today have many positions with job titles that didn't exist only a few years ago. Want to forge your own path? Transdisciplinary studies in technology will provide you with broad technical competence and the abilities to think critically, to communicate effectively, and to adapt and thrive in our ever-changing world.

This unique competency-based degree is offered only by the Purdue Polytechnic Institute, one of the 10 academic colleges at Purdue University's main campus.

**Special features**

- In each semester's unique Design Lab and Seminar learning environments, you will learn discipline-specific theory and how to apply it to real-world problems.
- It's a student-centered culture called "" which focuses more on "show us what you can do with what you know" and less on memorization.

- You will create an electronic portfolio which documents your abilities and mastery of subjects - which you may choose to share with potential employers.
- Your peers might be studying different disciplines, so each of you will learn about different topics and contribute unique skills to make projects successful - a parallel of work environments common in industry.

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (36 credits)

## Transdisciplinary Studies in Technology Required Major Courses (36 credits)

- PTEC 10800 - Guided Exploration
- PTEC 20700 - ePortfolio I
- PTEC 20800 - Formation And Immersion
- PTEC 30800 - Deep Immersion
- PTEC 40700 - ePortfolio II
- PTEC 40800 - Capstone And Planning

## Other Departmental /Program Course Requirements (84 credits)

- UCC Written Communication - Credit Hours: 4.00
- UCC Oral Communication - Credit Hours: 3.00
- UCC Information Literacy - Credit Hours: 3.00
- UCC Quantitative Reasoning - Credit Hours: 3.00
- UCC Science - Credit Hours: 7.00
- UCC Science, Technology and Society - Credit Hours: 3.00
- UCC Human Cultures - Credit Hours: 3.00
- UCC Behavioral/Social Science - Credit Hours: 3.00
- Advanced MA (>15999) or STAT (>19999) - Credit Hours: 3.00
- >20000 Humanities - Credit Hours: 3.00
- >30000 level Oral Comm or Written Comm - Credit Hours: 3.00
- >09999 Technology Selective (Any AT, BCM, CGT, CNIT, ECET, ENGT, IET, IT, MET, MFET, OLS, TECH, TLI 10000 level or higher) - Credit Hours: 3.00
- >10000 Disciplinary Knowledge - Credit Hours: 9.00
- >20000 Disciplinary Knowledge - Credit Hours: 13.00
- >30000 Disciplinary Knowledge - Credit Hours: 12.00

- >40000 Disciplinary Knowledge - Credit Hours: 9.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Select here for additional lists.

## Program Requirements

### Fall 1st Year

- PTEC 20700 - ePortfolio I [2]
- PTEC 10800 - Guided Exploration [2]
- >09999 Technology Selective - Credit Hours: 3.00
- Oral Communication* (UCC)[3,4] - Credit Hours: 3.00
- Math Quant Reasoning* (UCC)[3,4] - Credit Hours: 3.00
- >10000 level Disciplinary Knowledge[4] - Credit Hours: 3.00

#### 16.5 Credits

### Spring 1st Year

- PTEC 20700 - ePortfolio I [2]
- PTEC 10800 - Guided Exploration [2]
- Humanities* (UCC)[3,4] - Credit Hours: 3.00
- Written Communication* (UCC)[3,4]- Credit Hours: 4.00

- Science* (UCC)[3,4] - Credit Hours: 4.00

15.5 Credits

## Fall 2nd Year

- PTEC 20700 - ePortfolio I [2]
- PTEC 20800 - Formation And Immersion [2]
- >10000 level Disciplinary Knowledge[4] - CreditHours: 3.00
- Science, Tech, and Society* (UCC)[3,4] - CreditHours: 3.00
- >10000 level Disciplinary Knowledge[4] - CreditHours: 3.00

13.5 Credits

## Spring 2nd Year

- PTEC 20700 - ePortfolio I [2]
- PTEC 20800 - Formation And Immersion [2]
- >20000 level Disciplinary Knowledge[4] - Credit Hours: 3.00
- Science* (UCC)[3,4] - Credit Hours: 3.00
- >20000 level Humanities[4] - Credit Hours: 3.00
- Information Literacy* (UCC)[3,4] - Credit Hours: 3.00

16.5 Credits

## Fall 3rd Year

- PTEC 40700 - ePortfolio II [2]
- PTEC 30800 - Deep Immersion [2]
- Advanced MATH (>15999) or STAT (>19999) - Credit Hours: 3.00
- >20000 level Disciplinary Knowledge[4] - Credit Hours: 3.00
- >20000 level Disciplinary Knowledge[4] - Credit Hours: 4.00

14.5 Credits

## Spring 3rd Year

- PTEC 40700 - ePortfolio II [2]

- PTEC 30800 - Deep Immersion [2]
- >20000 level Disciplinary Knowledge[4] - Credit Hours: 3.00
- >30000 level Disciplinary Knowledge[4] - Credit Hours: 3.00
- >30000 level OC or WC[4] - Credit Hours: 3.00
- Behavior Social Sciences* (UCC)[3,4] - Credit Hours: 3.00

16.5 Credits

## Fall 4th Year

- PTEC 40700 - ePortfolio II [2]
- PTEC 40800 - Capstone And Planning [2]
- >30000 level Disciplinary Knowledge[4] - Credit Hours: 3.00
- >30000 level Disciplinary Knowledge[4] - Credit Hours: 3.00
- >30000 level Disciplinary Knowledge[4] - Credit Hours: 3.00

13.5 Credits

## Spring 4th Year

- PTEC 40700 - ePortfolio II [2]
- PTEC 40800 - Capstone And Planning [2]
- >40000 level Disciplinary Knowledge[4] - Credit Hours: 3.00
- >40000 level Disciplinary Knowledge[4] - Credit Hours: 3.00
- >40000 level Disciplinary Knowledge[4] - Credit Hours: 3.00

13.5 Credits

## Notes

* Fulfills University Core

1. Non-course degree requirement: Student demonstration of expertise in eight broad competencies. Monitored and reviewed continuously in Transdisciplinary Learning Experiences (PTEC 10800, 20800, ...). ePortfolio is formally assessed 4 times during the plan of study to satisfy this requirement.

2. These are courses specifically designed for this degree. ePortfolio (PTEC 20700, 40700) are pass/no pass. Transdisciplinary Learning Experiences (PTEC 10800-40800) are variable credit.

3. Any courses from the Undergraduate Curriculum Council (UCC) Approved Course List to satisfy the appropriate foundational core requirement. Acronyms are as follows: BSS - Behavioral/Social Sciences, HUM - Humanities, IL - Information Literacy,

OC - Oral Communication, QR - Quantitative Reasoning, STS - Science, Technology and Society, WC - Written Communication. It is preferred that students take one course from physical sciences and one from life sciences.

4. Any course for which the student meets the prerequisites and meets their personal and professional goals as determined by the student in consultation with their faculty mentor.

5. By the end of the Semester 3, students identify their mission and, with the help of their faculty mentor, develop a detailed plan of learning. At this time, they identify one or more technology disciplines and at least one humanities discipline. For example, Computing (CIT, CGT or ECET), Engineering Technology (ECET, MET or MFET), Built environment (CM), Aviation (AT), or Technology Leadership and Innovation (TLI), and non-technology areas such as history, philosophy, communication, etc.

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# School of Aviation and Transportation Technology

# Overview

Purdue Aviation has been a leader in aviation education since before the Purdue Polytechnic Institute was founded in 1964. The School of Aviation and Transportation Technology offers seven majors at the bachelor's degree level. The curriculum touches all areas of the aviation industry, from flight to design to the business aspects.

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

# Faculty

https://polytechnic.purdue.edu/departments/aviation-technology/directory

# Contact Information

### School of Aviation and Transportation Technology

1401 Aviation Drive
West Lafayette IN 47907-2015
Phone: 765.494.5782
Email: atinfo@purdue.edu
Fax: 765.494.2305

# Graduate Information

For Graduate Information please see Aviation and Transportation Technology Graduate Program Information.

## Baccalaureate

## Aeronautical Engineering Technology, BS

# About the Program

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

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

Aeronautical Engineering Technology Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (116 credits)

### Required Major Courses (59 credits)

- AT 10000 - Introduction To Aviation Technology
- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- AT 10600 - Basic Aircraft Science
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 20300 - Aviation Operations Management
- AT 20802 - Aircraft Materials
- AT 26502 - Aircraft Electrical Systems
- AT 26700 - Fixed And Rotary Wing Assemblies
- AT 27200 - Introduction To Composite Technology
- AT 27800 - Nondestructive Testing For Aircraft

- AT 30702 - Advanced Aircraft Systems
- AT 30802 - Aircraft Materials Processes
- AT 33502 - Avionics Systems
- AT 37002 - Advanced Aircraft Powerplants
- AT 37600 - Aircraft Gas Turbine Engine Technology I
- AT 38500 - Design Support Analysis
- AT 44502 - Aircraft Elecronics
- AT 47600 - Aircraft Gas Turbine Engine Technology II
- AT 49600 - Applied Research Proposal
- AT 49700 - Applied Research Project
- Globalization - Credit Hours: 0.00
- Internship - Credit Hours: 0.00

## Other Departmental /Program Course Requirements (57 credits)

- Humanities Foundational Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective for core)
- PHYS 21800 - General Physics (satisfies Science Selective for core)
- Science Foundational Selective (satisfies Science Selective for core) - Credit Hours: 3.00

- ENGL 10600 - First-Year Composition
  or
- ENGL 10800 - Accelerated First-Year Composition (satisfies Written Communication for core)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning Selective for core)

- MA 16010 - Applied Calculus I
  or
- MA 22100 - Calculus For Technology I (satisfies Quantitative Reasoning Selective for core)

- Economics Selective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Technical Communications Selective - Credit Hours: 3.00
- STAT 30100 - Elementary Statistical Methods
- AT 20501 - Statics For Aerostructures
- CGT 16300 - Graphical Communication And Spatial Analysis
- Any University-approved minor or departmentally-approved thematic area of study - Credit Hours: 12.00

## Electives (4 credits)

- Free Electives - Credit Hours: 4.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

See AT Curriculum Details or AUAS Selectives List.

## Program Requirements

### Fall 1st Year

- AT 10000 - Introduction To Aviation Technology
- AT 10200 - Aviation Business
- AT 10600 - Basic Aircraft Science
- MA 15800 - Precalculus- Functions And Trigonometry
- TECH 12000 - Design Thinking In Technology
- English Composition Selective - Credit Hours: 3.00

#### 16 Credits

### Spring 1st Year

- AT 20802 - Aircraft Materials
- CGT 16300 - Graphical Communication And Spatial Analysis
- COM 11400 - Fundamentals Of Speech Communication
- Humanities Foundational Selective - Credit Hours: 3.00
- Calculus Selective - Credit Hours: 3.00

#### 14 Credits

## Fall 2nd Year

- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 20300 - Aviation Operations Management
- AT 26700 - Fixed And Rotary Wing Assemblies
- AT 27200 - Introduction To Composite Technology

15 Credits

## Spring 2nd Year

- AT 20501 - Statics For Aerostructures
- AT 26502 - Aircraft Electrical Systems
- AT 27800 - Nondestructive Testing For Aircraft
- PHYS 21800 - General Physics
- Free Elective - Credit Hours: 2.00

15 Credits

## Fall 3rd Year

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

15 Credits

## Spring 3rd Year

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

15 Credits

## Fall 4th Year

- AT 37002 - Advanced Aircraft Powerplants
- AT 44502 - Aircraft Elecronics
- AT 47600 - Aircraft Gas Turbine Engine Technology II
- AT 49600 - Applied Research Proposal
- Economics Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 2.00

15 Credits

## Spring 4th Year

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

15 Credits

## Note

2.0 Graduation GPA required for Bachelor of Science degree.

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Aerospace Financial Analysis, BS

# About the Program

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

Aerospace Financial Analysis Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (59 credits)

## Required Major Courses (59 credits)

- AT 10000 - Introduction To Aviation Technology
- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- AT 10600 - Basic Aircraft Science
- AT 14400 - Private Pilot Lectures
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 20300 - Aviation Operations Management
- AT 25200 - Aviation Projects
- AT 34001 - Aerospace Business Statistics
- AT 36201 - Aviation Operations
- AT 41200 - Aviation Finance
- AT 42101 - Managerial Economics In Aviation
- AT 42201 - Aerospace Risk Management
- AT 47500 - Aviation Law
- AT 48100 - Aviation Safety Problems
- AT 49401 - Capstone Project Proposal
- AT 49501 - Applied Capstone Research Project
- MGMT 20000 - Introductory Accounting
- MGMT 20100 - Management Accounting I
- MGMT 30400 - Introduction To Financial Management
- Aviation Management Selectives - Credit Hours: 3.00
- Globalization - Credit Hours: 0.00
- Internship - Credit Hours: 0.00

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

- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective for core)
- PHYS 21800 - General Physics (satisfies Science Selective for core)

- ENGL 10600 - First-Year Composition
  or
- ENGL 10800 - Accelerated First-Year Composition (satisfies Written Communication for core)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quant Reasoning Selective for core)

- MA 16010 - Applied Calculus I
  or
- MA 22100 - Calculus For Technology I (satisfies Quantitative Reasoning Selective for core)

- STAT 30100 - Elementary Statistical Methods
- Humanities Foundational Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- Science Foundational Selective (satisfies Science Selective for core) - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Technical Communications Selective - Credit Hours: 3.00
- Any University-approved minor or departmentally-approved thematic area of study - Credit Hours: 12.00

## Electives (9 credits)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

For additional curriculum details click here.

## Program Requirements

### Fall 1st Year

- AT 10000 - Introduction To Aviation Technology
- AT 10600 - Basic Aircraft Science
- AT 14400 - Private Pilot Lectures
- MA 15800 - Precalculus- Functions And Trigonometry
- English Composition Selective - Credit Hours: 3.00

14 Credits

### Spring 1st Year

- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- PHYS 21800 - General Physics
- TECH 12000 - Design Thinking In Technology
- Calculus Selective - Credit Hours: 3.00

16 Credits

### Fall 2nd Year

- AT 20300 - Aviation Operations Management
- AT 25200 - Aviation Projects
- COM 11400 - Fundamentals Of Speech Communication
- MGMT 20000 - Introductory Accounting
- Humanities Foundational Selective - Credit Hours: 3.00

15 Credits

### Spring 2nd Year

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

15 Credits

## Fall 3rd Year

- AT 34001 - Aerospace Business Statistics
- MGMT 30400 - Introduction To Financial Management
- STAT 30100 - Elementary Statistical Methods
- Thematic Area Selective - Credit Hours: 3.00
- Behavioral/Social Science Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

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

15 Credits

## Fall 4th Year

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

17 Credits

### Spring 4th Year

- AT 42201 - Aerospace Risk Management
- AT 49501 - Applied Capstone Research Project
- Thematic Area Selective - Credit Hours: 3.00
- Technical Communication Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Globalization - Credit Hours:  0.00
- Internship - Credit Hours:  0.00

### 13 Credits

## Notes

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

2.0 Graduation GPA required for Bachelor of Science degree.

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Airline Management and Operations, BS

# About the Program

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

Airline Management Operations Website

Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (111 credits)

### Required Major Courses (59 credits)

- AT 10000 - Introduction To Aviation Technology
- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- AT 10600 - Basic Aircraft Science
- AT 14400 - Private Pilot Lectures
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 20300 - Aviation Operations Management
- AT 25200 - Aviation Projects
- AT 33800 - Airline Management
- AT 36201 - Aviation Operations
- AT 41200 - Aviation Finance
- AT 42101 - Managerial Economics In Aviation
- AT 43800 - Airline Operations
- AT 47500 - Aviation Law
- AT 48100 - Aviation Safety Problems
- AT 49401 - Capstone Project Proposal
- AT 49501 - Applied Capstone Research Project
- MGMT 20000 - Introductory Accounting
- MGMT 20100 - Management Accounting I
- Aviation Management Selectives - Credit Hours: 6.00
- Globalization - Credit Hours: 0.00
- Internship - Credit Hours: 0.00

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

- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective for core)
- PHYS 21800 - General Physics (satisfies Science Selective for core)

- ENGL 10600 - First-Year Composition
  or
- ENGL 10800 - Accelerated First-Year Composition (satisfies Written Communication for core)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning Selective for core)

- MA 16010 - Applied Calculus I
  or
- MA 22100 - Calculus For Technology I (satisfies Quantitative Reasoning Selective for core)

- STAT 30100 - Elementary Statistical Methods
- Humanities Foundational Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- Science Foundational Selective (satisfies Science Selective for core) - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Technical Communications Selective - Credit Hours: 3.00
- Any University-approved minor or departmentally-approved thematic area of study - Credit Hours: 12.00

## Electives (9 credits)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

### Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

For curriculum details click here.

## Program Requirements

### Fall 1st Year

- AT 10000 - Introduction To Aviation Technology
- AT 10600 - Basic Aircraft Science

- AT 14400 - Private Pilot Lectures
- MA 15800 - Precalculus- Functions And Trigonometry
- English Composition Selective - Credit Hours: 3.00

14 Credits

## Spring 1st Year

- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- PHYS 21800 - General Physics
- TECH 12000 - Design Thinking In Technology
- Calculus Selective - Credit Hours: 3.00

16 Credits

## Fall 2nd Year

- AT 20300 - Aviation Operations Management
- AT 25200 - Aviation Projects
- COM 11400 - Fundamentals Of Speech Communication
- MGMT 20000 - Introductory Accounting
- Humanities Foundational Selective - Credit Hours: 3.00

15 Credits

## Spring 2nd Year

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

15 Credits

## Fall 3rd Year

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

15 Credits

## Spring 3rd Year

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

15 Credits

## Fall 4th Year

- AT 41200 - Aviation Finance
- AT 43800 - Airline Operations
- AT 48100 - Aviation Safety Problems
- AT 49401 - Capstone Project Proposal
- Thematic Area Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

17 Credits

## Spring 4th Year

- AT 49501 - Applied Capstone Research Project
- Thematic Area Selective - Credit Hours: 3.00
- Aviation Management Selective - Credit Hours: 3.00
- Technical Communication Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Globalization - Credit Hours: 0.00
- Internship - Credit Hours:  0.00

13 Credits

## Notes

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

2.0 Graduation GPA required for Bachelor of Science degree.

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Airport Management and Operations, BS

# About the Program

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

Airport Management Operations Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (59 credits)

## Required Major Courses (59 credits)

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

- AT 10600 - Basic Aircraft Science
- AT 14400 - Private Pilot Lectures
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 20300 - Aviation Operations Management
- AT 25200 - Aviation Projects
- AT 35900 - Airport Management
- AT 36201 - Aviation Operations
- AT 41200 - Aviation Finance
- AT 42101 - Managerial Economics In Aviation
- AT 45100 - Airport Operations
- AT 45900 - Airport Manager Certification
- AT 47500 - Aviation Law
- AT 48100 - Aviation Safety Problems
- AT 49401 - Capstone Project Proposal
- AT 49501 - Applied Capstone Research Project
- MGMT 20000 - Introductory Accounting
- MGMT 20100 - Management Accounting I
- Aviation Management Selectives - Credit Hours: 3.00
- Globalization - Credit Hours: 0.00
- Internship - Credit Hours: 0.00

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

- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective for core)
- PHYS 21800 - General Physics (satisfies Science Selective for core)

- ENGL 10600 - First-Year Composition
  or
- ENGL 10800 - Accelerated First-Year Composition (satisfies Written Communication for core)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning Selective for core)

- MA 16010 - Applied Calculus I
  or
- MA 22100 - Calculus For Technology I (satisfies Quantitative Reasoning Selective for core)

- STAT 30100 - Elementary Statistical Methods
- Humanities Foundational Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- Science Foundational Selective (satisfies Science Selective for core) - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Technical Communications Selective - Credit Hours: 3.00
- Any University-approved minor or departmentally-approved thematic area of study - Credit Hours: 12.00

## Electives (9 credits)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

For curriculum details click here.

## Program Requirements

### Fall 1st Semester

- AT 10000 - Introduction To Aviation Technology
- AT 10600 - Basic Aircraft Science
- AT 14400 - Private Pilot Lectures
- MA 15800 - Precalculus- Functions And Trigonometry
- English Composition Selective - Credit Hours: 3.00

### 14 Credits

### Spring 1st Year

- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- PHYS 21800 - General Physics

- TECH 12000 - Design Thinking In Technology
- Calculus Selective - Credit Hours: 3.00

16 Credits

## Fall 2nd Year

- AT 20300 - Aviation Operations Management
- AT 25200 - Aviation Projects
- COM 11400 - Fundamentals Of Speech Communication
- MGMT 20000 - Introductory Accounting
- Humanities Foundational Selective - Credit Hours: 3.00

15 Credits

## Spring 2nd Year

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

15 Credits

## Fall 3rd Year

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

15 Credits

## Spring 3rd Year

- AT 42101 - Managerial Economics In Aviation

- AT 47500 - Aviation Law
- Thematic Area Selective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

15 Credits

## Fall 4th Year

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

17 Credits

## Spring 4th Year

- AT 45900 - Airport Manager Certification
- AT 49501 - Applied Capstone Research Project
- Thematic Area Selective - Credit Hours: 3.00
- Technical Communication Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Globalization - Credit Hours: 0.00
- Internship - Credit Hours: 0.00

13 Credits

## Notes

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

2.0 Graduation GPA required for Bachelor of Science degree.

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Aviation Management, BS

# About the Program

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

Aviation Management Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (59 credits)

### Required Major Courses (59 credits)

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

- Aviation Management Selectives - Credit Hours: 12.00
- Globalization - Credit Hours: 0.00
- Internship - Credit Hours: 0.00

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

- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective for core)
- PHYS 21800 - General Physics (satisfies Science Selective for core)

- ENGL 10600 - First-Year Composition
  or
- ENGL 10800 - Accelerated First-Year Composition (satisfies Written Communication for core)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning Selective for core)

- MA 16010 - Applied Calculus I
  or
- MA 22100 - Calculus For Technology I (satisfies Quantitative Reasoning Selective for core)

- Humanities Foundational Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Technical Communications Selective - Credit Hours: 3.00
- STAT 30100 - Elementary Statistical Methods
- Science Foundational Selective (satisfies Science Selective for core) - Credit Hours: 3.00
- Any University-approved minor or departmentally-approved thematic area of study - Credit Hours: 12.00

## Electives (9 credits)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

For curriculum details click here.

## Program Requirements

### Fall 1st Year

- AT 10000 - Introduction To Aviation Technology
- AT 10600 - Basic Aircraft Science
- AT 14400 - Private Pilot Lectures
- MA 15800 - Precalculus- Functions And Trigonometry
- English Composition Selective - Credit Hours: 3.00

14 Credits

### Spring 1st Year

- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- PHYS 21800 - General Physics
- TECH 12000 - Design Thinking In Technology
- Calculus Selective - Credit Hours: 3.00

16 Credits

### Fall 2nd Year

- AT 20300 - Aviation Operations Management
- AT 25200 - Aviation Projects
- COM 11400 - Fundamentals Of Speech Communication
- MGMT 20000 - Introductory Accounting
- Humanities Foundational Selective - Credit Hours: 3.00

15 Credits

## Spring 2nd Year

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

15 Credits

## Fall 3rd Year

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

15 Credits

## Spring 3rd Year

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

15 Credits

## Fall 4th Year

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

17 Credits

## Spring 4th Year

- AT 49501 - Applied Capstone Research Project
- Thematic Area Selective - Credit Hours: 3.00
- Aviation Management Selective - Credit Hours: 3.00
- Technical Communication Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Globalization - Credit Hours: 0.00
- Internship - Credit Hours: 0.00

13 Credits

## Note

2.0 Graduation GPA required for Bachelor of Science degree.

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Professional Flight Technology, BS

# About the Program

Purdue offers a bachelor's degree in professional flight that provides you with a larger perspective of the aviation industry. Your classes range from how an airplane is built to decision-making in the airline industry. You will learn by flying in our state-of-art fleet and matching simulators, and from aviation professionals with significant industry experience. The School of Aviation and Transportation Technology encourages you to obtain the highest level of medical and student certificates possible during your time at Purdue.

Flight (Professional Flight Technology) Website

Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (112 credits)

### Required Major Courses (60 credits)

- AT 10000 - Introduction To Aviation Technology
- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- AT 14400 - Private Pilot Lectures
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 20300 - Aviation Operations Management

- AT 14500 - Private Pilot Flight
  or
- AT 14502 - Private Pilot Flight Under Federal Aviation Regulations Part 141

- AT 21000 - Ground Trainer I
- AT 21100 - Ground Trainer II
- AT 22300 - Human Factors For Flight Crews

- AT 24300 - Commercial Flight I
  or
- AT 24302 - Commercial Flight I Under Federal Aviation Regulations Part 141

- AT 24800 - Commercial Flight II
  or
- AT 24802 - Commercial Flight II Under Federal Aviation Regulations Part 141

- AT 24900 - Instrument Flight Lectures

- AT 25300 - Instrument Flight
  or
- AT 25302 - Instrument Flight Under Federal Aviation Regulations Part 141

- AT 25400 - Commercial Flight Lectures
- AT 32501 - Advanced Aviation Meteorology
- AT 32700 - Advanced Transport Flight Operations
- AT 35300 - Multi-Engine Flight
- AT 35400 - Turbine Flight Operations Lecture
- AT 38800 - Large Aircraft Systems
- AT 39500 - Turbine Aircraft Simulation Laboratory
- AT 39600 - Turbine Aircraft Flight Laboratory

- AT 41600 - Airline Indoctrination
- AT 47500 - Aviation Law
- AT 48700 - Transport Aircraft Simulation Laboratory
- AT 49800 - Aviation Technology Capstone
- Globalization - Credit Hours: 0.00
- Internship - Credit Hours:  0.00

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

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)

- ENGL 10600 - First-Year Composition
  or
- ENGL 10800 - Accelerated First-Year Composition (satisfies Written Communication for core)

- PHYS 21800 - General Physics (satisfies Science Selective for core)
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning Selective for core)

- MA 16010 - Applied Calculus I
  or
- MA 22100 - Calculus For Technology I (satisfies Quantitative Reasoning Selective for core)

- STAT 30100 - Elementary Statistical Methods
- Humanities Foundational Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Technical Communications Selective - Credit Hours: 3.00
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective for core)
- Science Foundational Selective (satisfies Science Selective for core) - Credit Hours: 3.00
- Any University-approved minor or departmentally-approved thematic area of study - Credit Hours: 12.00
- Globalization - Credit Hours: 0.00
- Internship - Credit Hours: 0.00

## Electives (8 credits)

- Free Electives - Credit Hours: 8.00

## University Core Requirements

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

- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Select here for additional lists.

## Program Requirements

### Fall 1st Year

- AT 10000 - Introduction To Aviation Technology
- AT 10200 - Aviation Business
- AT 14400 - Private Pilot Lectures

- AT 14500 - Private Pilot Flight
  or
- AT 14502 - Private Pilot Flight Under Federal Aviation Regulations Part 141

- MA 15800 - Precalculus- Functions And Trigonometry
- English Composition Selective - Credit Hours: 3.00

### 16 Credits

### Spring 1st Year

- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems

- AT 24300 - Commercial Flight I
  or
- AT 24302 - Commercial Flight I Under Federal Aviation Regulations Part 141

- COM 11400 - Fundamentals Of Speech Communication
- TECH 12000 - Design Thinking In Technology
- Calculus Selective - Credit Hours: 3.00

14 Credits

## Fall 2nd Year

- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 20300 - Aviation Operations Management
- AT 21000 - Ground Trainer I
- AT 22300 - Human Factors For Flight Crews

- AT 24800 - Commercial Flight II
  or
- AT 24802 - Commercial Flight II Under Federal Aviation Regulations Part 141

- AT 24900 - Instrument Flight Lectures

15 Credits

## Spring 2nd Year

- AT 21100 - Ground Trainer II

- AT 25300 - Instrument Flight
  or
- AT 25302 - Instrument Flight Under Federal Aviation Regulations Part 141

- Behavioral / Social Science Selective - Credit Hours: 3.00
- AT 25400 - Commercial Flight Lectures
- Thematic Area Selective - Credit Hours: 3.00
- Humanities Foundational Selective - Credit Hours: 3.00

15 Credits

## Fall 3rd Year

- AT 35300 - Multi-Engine Flight
- AT 35400 - Turbine Flight Operations Lecture
- PHYS 21800 - General Physics
- Thematic Area Selective - Credit Hours: 3.00
- Science Foundational Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 1.00

14 Credits

## Spring 3rd Year

- AT 32700 - Advanced Transport Flight Operations
- AT 38800 - Large Aircraft Systems
- AT 39500 - Turbine Aircraft Simulation Laboratory
- AT 32501 - Advanced Aviation Meteorology
- STAT 30100 - Elementary Statistical Methods
- AT 47500 - Aviation Law

16 Credits

## Fall 4th Year

- AT 39600 - Turbine Aircraft Flight Laboratory
- Thematic Area Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Technical Communication Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

16 Credits

## Spring 4th Year

- AT 41600 - Airline Indoctrination
- AT 48700 - Transport Aircraft Simulation Laboratory
- AT 49501 - Applied Capstone Research Project
- Thematic Area Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 4.00
- Globalization - Credit Hours: 0.00
- Internship - Credit Hours:  0.00

14 Credits

## Note

2.0 Graduation GPA required for Bachelor of Science degree.

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Unmanned Aerial Systems, BS

# About the Program

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

Unmanned Aerial Systems Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (108 credits)

### Required Major Courses (59 credits)

- AT 10000 - Introduction To Aviation Technology
- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- AT 10900 - Unmanned Aerial Systems Design And Construction
- AT 11900 - Unmanned Aerial Systems Inspection And Repair
- AT 14400 - Private Pilot Lectures
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 20300 - Aviation Operations Management
- AT 20900 - Civilian Unmanned Aerial Systems
- AT 21900 - Unmanned Aerial Systems Design, Build, Test

- AT 28600 - National Airspace Systems Operations
- AT 30900 - Unmanned Autonomous Aerial Systems
- AT 31900 - Unmanned Aerial Systems Applications, Data And Documentation
- AT 40900 - Unmanned Aerial Systems Capstone I
- AT 41901 - Unmanned Aerial Systems Capstone II
- UAS Related Selectives - Credit Hours: 15.00
- Globalization - Credit Hours: 0.00
- Internship - Credit Hours: 0.00

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

- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective for core)
- PHYS 21800 - General Physics (satisfies Science Selective for core)

- ENGL 10600 - First-Year Composition
  or
- ENGL 10800 - Accelerated First-Year Composition (satisfies Written Communication for core)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning Selective for core)

- MA 16010 - Applied Calculus I
  or
- MA 22100 - Calculus For Technology I (satisfies Quantitative Reasoning Selective for core)

- STAT 30100 - Elementary Statistical Methods
- Humanities Foundational Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- Science Foundational Selective (satisfies Science Selective for core) - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Technical Communications Selective - Credit Hours: 3.00
- Any University-approved minor or departmentally-approved thematic area of study - Credit Hours: 12.00

## Electives (9 credits)

## University Core Requirements

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

- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

# Additional Requirements

Select Unmanned Aerial Systems BS AUAS Selectives List.pdf and Unmanned Aerial Systems BS AT Curriculum Details.pdf for additional lists.

# Program Requirements

## Fall 1st Year

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

### 14 Credits

## Spring 1st Year

- AT 10200 - Aviation Business
- AT 11900 - Unmanned Aerial Systems Inspection And Repair
- COM 11400 - Fundamentals Of Speech Communication
- PHYS 21800 - General Physics
- Calculus Selective - Credit Hours: 3.00

### 16 Credits

## Fall 2nd Year

- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- AT 20300 - Aviation Operations Management
- AT 20900 - Civilian Unmanned Aerial Systems

- AT 28600 - National Airspace Systems Operations
- UAS Related Selective - 3.00

15 Credits

## Spring 2nd Year

- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 21900 - Unmanned Aerial Systems Design, Build, Test
- Humanities Foundational Selective - Credit Hours: 3.00
- Science Foundational Selective - Credit Hours: 3.00
- English Composition Selective - Credit Hours: 3.00

15 Credits

## Fall 3rd Year

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

15 Credits

## Spring 3rd Year

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

15 Credits

## Fall 4th Year

- AT 40900 - Unmanned Aerial Systems Capstone I

- UAS Related Selective - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Advanced English Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

15 Credits

## Spring 4th Year

- AT 41901 - Unmanned Aerial Systems Capstone II
- Thematic Area Selective - Credit Hours: 3.00
- UAS Related Selective - Credit Hours: 3.00
- Technical Communication Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Globalization - Credit Hours: 0.00
- Internship - Credit Hours: 0.00

15 Credits

## Notes

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

2.0 Graduation GPA required for Bachelor of Science degree.

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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## Minor

# Aerospace Studies Minor

# 14 Credits Required

## Requirements for the Minor

### Required Courses: 14 credits

- AFT 23000 - The Evolution Of USAF Air And Space Power I
- AFT 24000 - The Evolution Of USAF Air And Space Power II
- AFT 35100 - Air Force Leadership Studies I
- AFT 36100 - Air Force Leadership Studies II
- AFT 47100 - National Security Affairs I
- AFT 48100 - National Security Affairs II

## Notes

AFT 30000 level courses may be taken in the same semester as AFT 40000 level courses, but requires a waiver from HQ AFROTC.

All courses must have a grade of a "C" or higher.

## Disclaimer

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# Airframe & Powerplant Maintenance Minor

# 12 Credits Required

## Requirements for the Minor

### Core Courses (12 credits)

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

## Disclaimer

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

# Unmanned Aerial Systems Minor

# 15 Credits Required

## Requirements for the Minor:

## Required Courses:

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

## Disclaimer

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

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

# School of Construction Management Technology

# Overview

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

# Faculty

https://polytechnic.purdue.edu/departments/building-construction-management/directory

# Contact Information

**Building Construction Management Department**

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

# Graduate Information

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

## Baccalaureate

## Construction Management, BS

# About the Program

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

Construction Management Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (60 credits)

- CM 10000 - Introduction To Construction Management
- CM 11000 - Construction OSHA Ten-Hour Certification
- CM 15000 - Construction Management Fundamentals
- CM 20000 - Intermediate Pre-Construction Management
- CM 25000 - Intermediate Construction Management
- CM 30000 - Advanced Pre-Construction Management

- CM 35000 - Advanced Construction Management
- CM 39000 - Construction Work Experience I
- CM 40000 - Construction Capstone I
- CM 45000 - Construction Capstone II
- CM 49000 - Construction Work Experience II

## Other Departmental/Program Course Requirements (48 credits)

- CGT 16400 - Graphics For Civil Engineering And Construction
- MA 15800 - Precalculus- Functions And Trigonometry (can satisfy Quantitative Reasoning Selective for core)
- English First Year Composition Selective: See list of approved selectives) (satisfies Written Communication for core) - Credit Hours: 3.00
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective as well as the Science, Technology and Society Selective for core)
- MA 16010 - Applied Calculus I (can satisfy Quantitative Reasoning Selective for core)
- Communication Foundation Selective (satisfies Oral Communication for core) - Credit Hours: 3.0
- MGMT 20010 - Business Accounting
- PHYS 21800 - General Physics (satisfies one Science Selective for core)
- Science Lab Selective - See Approved CM List (satisfies second Science Selective for core) - Credit Hours: 3.00
- Human Foundations Selective (satisfies Human Culture - Humanities for core) see approved list at http://www.purdue.edu/provost/initiatives/curriculum/course.html - Credit Hours: 3.00
- Management Selective - See Approved CM List - Credit Hours: 3.0
- MGMT 45500 - Legal Background For Business I

- ECON 21000 - Principles Of Economics (can satisfy Human Cultures Behavioral/Social Science selective for core) or
- AGEC 21700 - Economics (can satisfy Human Cultures Behavioral/Social Science selective for core)

- Advanced Communication or English Selective - See Approved CM List - Credit Hours: 3.0
- Business Selective - See Approved CM List - Credit Hours: 3.0
- Global Selective - See Approved CM List - Credit Hours: 3.0
- Intercultural Requirement - Credit Hours: 0.0

## Electives (12 credits)

- Free - Credit Hours: 12.00 (Pass/No Pass Option)

## University Core Requirements

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

- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

Click here for additional course lists.

## Program Requirements

Accredited by the American Council for Construction Education (ACCE)

### Fall 1st Year

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

### 14 Credits

### Spring 1st Year

- CM 11000 - Construction OSHA Ten-Hour Certification
- CM 15000 - Construction Management Fundamentals
- MA 16010 - Applied Calculus I ♦ *
- COM 11400 - Fundamentals Of Speech Communication *
- Free Elective - Credits Hours: 3.00

### 16 Credits

## Fall 2nd Year

- CM 20000 - Intermediate Pre-Construction Management
- MGMT 20010 - Business Accounting
- PHYS 21800 - General Physics

16 Credits

## Spring 2nd Year

- CM 25000 - Intermediate Construction Management
- Lab Science Selective* - Credit Hours: 3.0
- Free Elective - Credit Hours: 3.0

15 Credits

## Fall 3rd Year

- CM 30000 - Advanced Pre-Construction Management
- Human Foundations Elective* - Credit Hours: 3.0
- Management Selective - Credit Hours: 3.0

15 Credits

## Spring 3rd Year

- CM 35000 - Advanced Construction Management
- CM 39000 - Construction Work Experience I
- MGMT 45500 - Legal Background For Business I
- Free Elective - Credit Hours: 3.0

16 Credits

## Fall 4th Year

- CM 40000 - Construction Capstone I ♦
- ECON 21000 - Principles Of Economics *
  or
- AGEC 21700 - Economics *
- Advanced Comm or English Selective - Credit Hours: 3.0
- Business Selective - Credit Hours: 3.0

15 Credits

## Spring 4th Year

- CM 45000 - Construction Capstone II
- CM 49000 - Construction Work Experience II
- Free Elective - Credit Hours: 3.0
- Global Selective - Credit Hours: 3.0
- Intercultural Requirement - Credit Hours: 0.0

13 Credits

## Notes

*Satisfies a University Core Requirement

"C-" or better is required in all major courses and all courses that are a prerequisite to a CM course.

2.0 Graduation GPA required for Bachelor of Science degree.

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

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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# Demolition & Restoration Management in the Built Environment, BS

# About the Program

Not all construction work is new construction. As buildings age, as new products and techniques are adopted, and as disasters occur, a specific set of skills is needed for safely taking down structures or building them back up. When you major in demolition and restoration management in the built environment at Purdue University you will examine the common lifecycles of structures and learn new skills that will be critical after natural or man-made disasters.

Demolition and Restoration Management in the Built Environment Website

## Degree Requirements

# 120 Credits Required

## Required Major Courses (69 credits)

- CM 10000 - Introduction To Construction Management
- CM 11000 - Construction OSHA Ten-Hour Certification
- CM 15000 - Construction Management Fundamentals
- CM 20000 - Intermediate Pre-Construction Management
- CM 25000 - Intermediate Construction Management
- CM 30000 - Advanced Pre-Construction Management
- CM 35000 - Advanced Construction Management
- CM 39000 - Construction Work Experience I
- CM 40000 - Construction Capstone I
- CM 45000 - Construction Capstone II
- CM 49000 - Construction Work Experience II
- BCM 32000 - Introduction To Disaster Restoration And Reconstruction Management
- BCM 33000 - Introduction To Demolition And Reconstruction Management
- BCM 33100 - Demolition And Restoration Project Management

## Other Departmental/Program Course Requirements (48 credits)

- CGT 16400 - Graphics For Civil Engineering And Construction
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning)
- MA 16010 - Applied Calculus I
- English First Year Composition Selective (satisfies Written Communication for core) - *See list of approved selectives* - Credit Hours: 3.00
- Communication Foundation Selective - *See list of approved selectives* - Credit Hours: 3.00
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy and Science, Tech & Society)

- ECON 21000 - Principles Of Economics
  or
- AGEC 21700 - Economics

- PHYS 21800 - General Physics
  (satisifes Science)
- MGMT 20010 - Business Accounting
- MGMT 45500 - Legal Background For Business I
- Human Foundations Elective *(satisfies Human Culture - Humanities for core)* see approved list at http://www.purdue.edu/provost/initiatives/curriculum/course.html - Credit Hours: 3.00
- Science Lab Selective - See Approved CM List (satisfies second Science Selective for core) - Credit Hours: 3.00
- Advanced Communication or English selective - *See Approved CM List* - Credit Hours: 3.00
- Business Selective - *See Approved CM List* - Credit Hours: 3.00
- Management Selective - *See Approved CM List* - Credit Hours: 3.00
- Global Selective - TECH 33000 - Technology And The Global Society Study Abroad or global courses listed) - Credit Hours: 3.00
- Intercultural Requirement - Credit Hours: 0.00

## Electives (3 credits)

- Free - Credit Hours: 3.00 (Pass/No Pass Option)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Click here for supplemental information.

## Program Requirements

### Fall 1st Year

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

14 Credits

### Spring 1st Year

- CM 15000 - Construction Management Fundamentals
- CM 11000 - Construction OSHA Ten-Hour Certification ♦
- MA 16010 - Applied Calculus I ♦ *
- COM 11400 - Fundamentals Of Speech Communication * Free elective - Credit Hourse: 3.00

16 Credits

### Fall 2nd Year

- CM 20000 - Intermediate Pre-Construction Management ♦
- MGMT 20010 - Business Accounting
- PHYS 21800 - General Physics

16 Credits

### Spring 2nd Year

- CM 25000 - Intermediate Construction Management ♦
- BCM 32000 - Introduction To Disaster Restoration And Reconstruction Management ♦
- Lab Science Selective - Credit Hours: 4.00 *

15 Credits

## Fall 3rd Year

- CM 30000 - Advanced Pre-Construction Management ♦
- Humanities Foundation Selective - Credit Hours: 3.00 *
- Management Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- CM 35000 - Advanced Construction Management ♦
- CM 39000 - Construction Work Experience I ♦
- BCM 33000 - Introduction To Demolition And Reconstruction Management ♦
- MGMT 45500 - Legal Background For Business I

16 Credits

## Fall 4th Year

- CM 40000 - Construction Capstone I ♦

- ECON 21000 - Principles Of Economics *
  or
- AGEC 21700 - Economics *

- Advanced Communication or English Selective - Credit Hours: 3.00
- Business Selective - Credit Hours: 3.00

15 Credits

## Spring 4th Year

- CM 45000 - Construction Capstone II ♦

- CM 49000 - Construction Work Experience II
- BCM 33100 - Demolition And Restoration Project Management
- Global Selective - Credit Hours: 3.00
- Intercultural Requirement - Credit Hours: 0.00

13 Credits

## Notes

*Satisfies a University Core Requirement

Students must earn a "C-" or better in all CM/BCM courses and all prerequisites for CM/BCM courses.

2.0 Graduation GPA required for Bachelor of Science degree.

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

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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# Design and Construction Integration-Interior Design Concentration, BS

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (46 credits)

- CM 10000 - Introduction To Construction Management
- CM 11000 - Construction OSHA Ten-Hour Certification
- CM 15000 - Construction Management Fundamentals
- CM 20000 - Intermediate Pre-Construction Management

- CM 23300 - Mechanical, Electrical, And Piping Materials And Methods
- CM 30000 - Advanced Pre-Construction Management
- CM 39000 - Construction Work Experience I
- CM 40000 - Construction Capstone I
- CM 43300 - Risk Management And Legal Issues In Design And Construction Integration
- CM 45000 - Construction Capstone II
- CM 49000 - Construction Work Experience II

## Design Courses - Interior Design Concentration (24 credits)

- AD 12500 - Introduction To Interior Design
- LA 25000 - Architectural Design
- AD 23000 - Interior Design I
- AD 25000 - Interior Design II
- AD 28500 - Interior Components And Materials
- AD 32000 - Interior Lighting Design
- AD 39700 - Sustainability In The Built Environment
- Design Elective - Credit Hours: 3.00

## Other Departmental/Program Course Requirements (48 credits)

- CGT 16400 - Graphics For Civil Engineering And Construction
- MA 15800 - Precalculus- Functions And Trigonometry *(satisfies Quantitative Reasonings for University Core)*

**English First Year Composition Selectives** - *(satisfies Written Communication for Universtiy Core):*

- 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

- TECH 12000 - Design Thinking In Technology *(satisfies Information Literacy and Science, Technology, and Society for Universtiy Core):*
- MA 16010 - Applied Calculus I *(satisfies Quantitative Reasoning for Universtiy Core):*

**Communication Foundation Selective** - *(satisfies Oral Communication for Universtiy Core):*

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

- MGMT 20010 - Business Accounting
- PHYS 21800 - General Physics *(satisfies first Science for Universtiy Core):*
- Lab Science Selective - see Approved CM List *(satisfies second Science for University Core)* - Credit Hours: 3.00

- AD 11300 - Basic Drawing *(satisfies Human Culture: Humanities for University Core)*
- AD 13000 - Interior Design Communication
- Management Selective - see Approved CM List - Credit Hours: 3.00
- MGMT 45500 - Legal Background For Business I
- Business Selective - see Approved CM List - Credit Hours: 3.00
- Foreign Language Selective - See Approve CM List - Credit Hours: 3.00
- Intercultural Requirement - Credit Hours: 0.00

- ECON 21000 - Principles Of Economics
  or
- AGEC 21700 - Economics *(satisfies Human Culture: Behavioral/Social Science for University Core)*

## Free Electives (2 credits)

Pass/No Pass Option

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

### Prerequisite Information:

For current pre-requisites for courses, click here.

## Supplemental CM Information

**Note:** An assumption is made that some students are already proficient in Microsoft Office - Excel, PowerPoint, Word and Access. If not, the student may want to consider taking CS 11000 or CS 23500

***Note:** Students may have to take MA 15300 (Algebra & Trigonometry I - 3 credits) first, depending on their math readiness. The pre-requisite for MA 15800 is an ALEKS score of at least 60 or a grade of C- or better in MA 15300 or a Math SAT score of at least 550 or ACT Math 24 or higher.

### English Composition First Year Selective

**Any course from the following:**

- 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
- ENGL 10100 - English Composition I
- ENGL 10200 - English Composition II
- ENGL 10300 - Comprehensive First Year Composition
- ENGL 10500 - English Composition II
- Non-Purdue West Lafayette Courses:
    - ENGL 10400
    - ENG W1310
    - ENG W1400
    - ENG W2330

## Foreign Language Selective

Any foreign language course level 20000 or higher

## Lab Science Selective

3 credits in this area are needed for graduation. The course(s) must have a lab component. You must meet all course pre-requisites.

Choose from the following:

- CHM 11100 - General Chemistry
- CHM 11200 - General Chemistry
- CHM 11500 - General Chemistry
- CHM 11600 - General Chemistry
- CHM 12500 - Introduction To Chemistry I
- CHM 12600 - Introduction To Chemistry II
- CHM 13600 - General Chemistry Honors
- CHM 20000 - Fundamentals Of Chemistry
- EAPS 11100 - Physical Geology
- EAPS 11200 - Earth Through Time
- PHYS 21900 - General Physics II
- PHYS 22100 - General Physics
- PHYS 27200 - Electric And Magnetic Interactions

## Management Selective

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

- TLI 25400 - Leading Change In Technology Organizations

## Business Selective

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

## Construction Work Experience

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

- CM 39000 - Construction Work Experience I
- CM 49000 - Construction Work Experience II

## Intercultural Requirement

**Students are required at minimum to complete the following:**

- Complete the Pre- and Post- Intercultural Development Inventory Assessments (1st and 4th year)
- Complete the Pre- and Post- BEVI (1st and 4th years)
- Complete one (1) of the following Intercultural Knowledge and Effectiveness (IKE's) components below:
    - Crosswalk Commons (Residential Living Experience for a minimum of one semester)
    - Serve as a BGRI Program leader
    - PUPIL (Purdue University Passport to Intercultural Learning) (Obtain at least 2-badges)
    - Participate in two (2) Boiler Out Program Activities
    - Participate in Host-a-Boiler
- Complete one (1) of the following:
    - An international capstone, collaborative project, or
    - An international internship, or
    - A Faculty-led Study Abroad program, or
    - **Complete 3 credit hours of courses from the Polytechnic list of recommended Global/Cultural Courses. ***Must be in a category other than Increasing Self-Awareness and outside of your home department**

## Progression Policy

Students must meet the following requirements to progress in the CM major. Failure to meet these standards will require the student to CODO out of the School of Construction Management. DCI majors must earn a grade of "C-" or better in all CM

courses and all courses that are a prerequisite to a CM course. The "C-" grade must be earned before enrolling in subsequent courses. CM courses can be repeated only once.

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

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

# Program Requirements

## Fall 1st Year

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

### 14 Credits

## Spring 1st Year

- CM 15000 - Construction Management Fundamentals ♦
- CM 11000 - Construction OSHA Ten-Hour Certification ♦
- MA 16010 - Applied Calculus I ♦ *
- Communication Foundation Selective * - Credit Hours: 3.00
- Foreign Language Selective - Credit Hours: 3.00

### 16 Credits

## Fall 2nd Year

- CM 20000 - Intermediate Pre-Construction Management ♦
- AD 11300 - Basic Drawing
- AD 12500 - Introduction To Interior Design *

15 Credits

## Spring 2nd Year

- CM 23300 - Mechanical, Electrical, And Piping Materials And Methods ♦
- LA 25000 - Architectural Design
- AD 13000 - Interior Design Communication
- MGMT 20010 - Business Accounting ♦
- PHYS 21800 - General Physics ♦ *

15 Credits

## Fall 3rd Year

- CM 30000 - Advanced Pre-Construction Management ♦
- CM 39000 - Construction Work Experience I ♦
- AD 23000 - Interior Design I
- AD 32000 - Interior Lighting Design

16 Credits

## Spring 3rd Year

- AD 28500 - Interior Components And Materials
- AD 25000 - Interior Design II
- Design Elective - Credit Hours: 3.00
- MGMT 45500 - Legal Background For Business I
- Business Selective - Credit Hours: 3.00

15 Credits

## Fall 4th Year

- CM 40000 - Construction Capstone I ♦
- AD 39700 - Sustainability In The Built Environment
- Management Selective - Credit Hours: 3.00

- ECON 21000 - Principles Of Economics *
  or
- AGEC 21700 - Economics *

### 15 Credits

## Spring 4th Year

- CM 45000 - Construction Capstone II ♦
- CM 49000 - Construction Work Experience II ♦
- CM 43300 - Risk Management And Legal Issues In Design And Construction Integration ♦
- Lab Science Selective* - Credit Hours: 3.00
- Free Elective - Credit Hours: 2.00
- Intercultural Requirement - Credit Hours: 0.00

### 14 Credits

# Notes

* Satisfies a University Core Requirement

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

2.0 Graduation GPA required for Bachelor of Science degree.

"C-" or better required in all major courses and all courses that are a prerequisite to a CM course.

Accredited by the American Council for Construction Eduction (ACCE)

# Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Healthcare Construction Management, BS

# About the Program

From nursing homes to specialized cancer clinics, and from large hospitals to urgent care centers, construction of healthcare-related facilities requires special knowledge. When you major in healthcare construction management at Purdue University, you will study the unique features of this sector of the construction industry. With the growth of technology in the healthcare construction industry and the specialization of the work, it is important for you to understand the regulations and risks associated with these healthcare-related projects.

Healthcare Construcation Management Website

**Degree Requirements**

# 120 Credits Required

## Healthcare Construction Management Major Courses (69 credits)

- CM 10000 - Introduction To Construction Management
- CM 11000 - Construction OSHA Ten-Hour Certification
- CM 15000 - Construction Management Fundamentals
- CM 20000 - Intermediate Pre-Construction Management
- CM 25000 - Intermediate Construction Management
- CM 30000 - Advanced Pre-Construction Management
- CM 35000 - Advanced Construction Management
- CM 39000 - Construction Work Experience I
- CM 40000 - Construction Capstone I
- CM 45000 - Construction Capstone II
- CM 49000 - Construction Work Experience II
- BCM 34000 - Introduction To Healthcare Construction Management
- BCM 34100 - Advanced Topics In Healthcare Construction Management
- Healthcare Selective - See Approved HCCM List - Credit Hours: 3.00

## Other Departmental/Program Course Requirements (48 credits)

- CGT 16400 - Graphics For Civil Engineering And Construction

    - ECON 21000 - Principles Of Economics
      or
    - AGEC 21700 - Economics (satisifes Behavioral Social Science)
    - MA 15800 - Precalculus- Functions And Trigonometry (satisifes Quantitative Reasoning)
    - MA 16010 - Applied Calculus I
    - MGMT 20010 - Business Accounting
    - MGMT 45500 - Legal Background For Business I
    - PHYS 21800 - General Physics
    - TECH 12000 - Design Thinking In Technology (satisfies Information Literacy and Science, Tech & Society)
- Science Lab Selective - See Approved HCCM List - Credit Hours: 3.00
- English First Year Composition Selective (satisfies Written Communication) - See list of approved selectives - Credit Hours: 3.00
- Communication Foundation Selective - See list of approved selectives - Credit Hours: 3.00
- Human Foundations Selective - see approved list at http://www.purdue.edu/provost/students/s-initiatives/curriculum/courses.html - credit hours: 3.00
- Advanced English or Communication Selective - See approved list - Credit Hours: 3.00
- Business Selective - See approved list - Credit Hours: 3.00
- Management Selective - See approved list - Credit Hours: 3.00
- Global Selective - Study Abroad or other global course on approved list - Credit Hours: 3.00
- Intercultural Requirement - Credit Hours: 0.00

## Electives (3 credits)

- Free - Credit Hours: 3.00 (Pass/No Pass Option)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Select here for additional lists.

# Program Requirements

## Fall 1st Year

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

### 14 Credits

## Spring 1st Year

- CM 15000 - Construction Management Fundamentals ♦
- CM 11000 - Construction OSHA Ten-Hour Certification ♦
- MA 16010 - Applied Calculus I * ♦ Communication Foundation Selective - See approved list - Credit Hours: 3.00 * Free elective - Credit Hours: 3.00

### 16 Credits

## Fall 2nd Year

- CM 20000 - Intermediate Pre-Construction Management ♦
- MGMT 20010 - Business Accounting
- PHYS 21800 - General Physics *

### 16 Credits

## Spring 2nd Year

- CM 25000 - Intermediate Construction Management ♦
- BCM 34000 - Introduction To Healthcare Construction Management ♦
- Lab Science Selective - Credit Hours: 4.00 *

### 15 Credits

## Fall 3rd Year

- CM 30000 - Advanced Pre-Construction Management ♦
- Humanities Foundation Selective - Credit Hours: 3.00 *
- Management Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- CM 35000 - Advanced Construction Management ♦
- CM 39000 - Construction Work Experience I ♦
- BCM 34100 - Advanced Topics In Healthcare Construction Management
- MGMT 45500 - Legal Background For Business I

16 Credits

## Fall 4th Year

- CM 40000 - Construction Capstone I ♦

- ECON 21000 - Principles Of Economics *
  or
- AGEC 21700 - Economics *
- Advanced English Selective - Credit Hours: 3.00
- Business Selective - Credit Hours: 3.00

15 Credits

## Spring 4th Year

- CM 45000 - Construction Capstone II
- CM 49000 - Construction Work Experience II
- Global Selective - Credit Hours: 3.00
- Healthcare Selective - Credit Hours: 3.00
- Intercultural Requirement - Credit Hours: 0.00

13 Credits

## Notes

*Satisfies a University Core Requirement

Students must earn a "C-" or better in all BCM courses and all prerequisites for BCM courses.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

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

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Mechanical & Electrical Construction Management, BS

# About the Program

What you can't see behind a building's walls is what makes it hum. From power to pipes, and from ventilation to lighting, if these systems don't work, the building doesn't either. When you major in electrical and mechanical construction management at Purdue, you will be part of a program where you can start a construction career focused on healthcare, power, refineries or pharmaceuticals. If you need to bring liquids, gases or electricity into or out of a building, you'll need to know the ins and outs of electrical and mechanical construction management.

Mechanical and Electrical Construction Management Website

## Degree Requirements

# 120 Credits Required

## Mechanical and Electrical Construction Management Major Courses (69 credits)

- CM 10000 - Introduction To Construction Management

- CM 11000 - Construction OSHA Ten-Hour Certification
- CM 15000 - Construction Management Fundamentals
- CM 20000 - Intermediate Pre-Construction Management
- CM 25000 - Intermediate Construction Management
- CM 30000 - Advanced Pre-Construction Management
- CM 35000 - Advanced Construction Management
- CM 39000 - Construction Work Experience I
- CM 40000 - Construction Capstone I
- CM 45000 - Construction Capstone II
- CM 49000 - Construction Work Experience II
- BCM 31500 - Mechanical Construction Estimating
  or
- BCM 31600 - Electrical Construction Estimating
- BCM 41700 - Design/Build For Mep Contractors
- MEP Selective (BCM 31700, BCM 51000, or BCM 58100 - Industrial Construction, or CGT 36000, CGT 46000) - Credit Hours: 3.00

## Other Departmental/Program Course Requirements (48 credits)

- ECON 21000 - Principles Of Economics
  or
- AGEC 21700 - Economics

- Human Foundations Elective from this list: http://www.purdue.edu/provost/students/s-initiatives/curriculum/courses.html - Credit Hours: 3.00
- TECH 12000 - Design Thinking In Technology
- PHYS 21800 - General Physics
- Science Lab Selective - *See Approved List* - Credit Hours: 3.00
- English First Year Composition Selective - *See Approved List* - Credit Hours: 3.00
- Communication Foundation Selective - *See Approved List* - Credit Hours: 3.00
- MA 15800 - Precalculus- Functions And Trigonometry
- CGT 16400 - Graphics For Civil Engineering And Construction
- MA 16010 - Applied Calculus I
- MGMT 20010 - Business Accounting
- MGMT 45500 - Legal Background For Business I
- Advanced Communication or English selective - *See Approved List* - Credit Hours: 3.00
- Business Selective - *See Approved List* - Credit Hours: 3.00
- Management Selective - *See Approved List* - Credit Hours: 3.00
- Global Selective - Study Abroad or other global course from list - Credit Hours: 3.00
- Intercultural Requirement - Credit Hours: 0.00

## University Core Requirements

- Human Cultures Humanities

- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

# Additional Requirements

Select here for additional lists.

# Program Requirements

## Fall 1st Year

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

### 14 Credits

## Spring 1st Year

- CM 15000 - Construction Management Fundamentals ♦
- CM 11000 - Construction OSHA Ten-Hour Certification ♦
- MA 16010 - Applied Calculus I * ♦ Communication Foundation Selective - Credit Hours: 3.00* Free Elective - Credit Hours: 3.00

### 16 Credits

## Fall 2nd Year

- CM 20000 - Intermediate Pre-Construction Management ♦
- MGMT 20010 - Business Accounting
- PHYS 21800 - General Physics

16 Credits

## Spring 2nd Year

- CM 25000 - Intermediate Construction Management ♦
- Lab Science Selective - Credit Hours: 4.00 *
- BCM 31500 - Mechanical Construction Estimating
  or
- BCM 31600 - Electrical Construction Estimating

15 Credits

## Fall 3rd Year

- CM 30000 - Advanced Pre-Construction Management ♦
- Humanities Foundation Selective - Credit Hours: 3.00 *
- Management Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- CM 35000 - Advanced Construction Management ♦
- CM 39000 - Construction Work Experience I ♦
- BCM 41700 - Design/Build For Mep Contractors
- MGMT 45500 - Legal Background For Business I

16 Credits

## Fall 4th Year

- CM 40000 - Construction Capstone I ♦

- ECON 21000 - Principles Of Economics *
  or

- AGEC 21700 - Economics *
- Advanced Communication or English Selective - Credit Hours: 3.00
- Business Selective - Credit Hours: 3.00

15 Credits

## Spring 4th Year

- CM 49000 - Construction Work Experience II
- CM 45000 - Construction Capstone II
- Global Selective - Credit Hours: 3.00
- MEP Selective - Credit Hours: 3.00
- Intercultural Requirement - Credit Hours: 0.00

13 Credits

## Notes

*Satisfies a University Core Requirement

Students must earn a "C-" or better in all BCM courses and all prerequisites for BCM courses.

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

2.0 Graduation GPA required for Bachelor of Science degree.

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

## Electives (3 credits)

- Free - Credit Hours: 3.00 (Pass/No Pass Option)

# Residential Construction Management, BS

# About the Program

Construction managers in the residential construction field focus on more than building a home. They manage schedules, market their services, and negotiate with home buyers and with contractors. People skills are an important trait for these professionals in addition to understanding the building process. From estimating to scheduling and from contractor coordination to material selection, you will build a strong foundation of knowledge to be successful in the industry.

Residential Construction Management Website

**Degree Requirements**

# 120 Credits Required

## Required Major Courses (66 credits)

- CM 10000 - Introduction To Construction Management
- CM 11000 - Construction OSHA Ten-Hour Certification
- CM 15000 - Construction Management Fundamentals
- CM 20000 - Intermediate Pre-Construction Management
- CM 25000 - Intermediate Construction Management
- CM 30000 - Advanced Pre-Construction Management
- CM 35000 - Advanced Construction Management
- CM 39000 - Construction Work Experience I
- CM 40000 - Construction Capstone I
- CM 45000 - Construction Capstone II
- CM 49000 - Construction Work Experience II
- BCM 36000 - Residential Construction
- BCM 46200 - Residential Design Build
- Residential Selective - See Approved List - Credit Hours: 3.00

## Other Departmental/Program Course Requirements (48 credits)

- CGT 16400 - Graphics For Civil Engineering And Construction
- ECON 21000 - Principles Of Economics
  or
- AGEC 21700 - Economics (satisifes Behavioral Social Science)

- MA 15800 - Precalculus- Functions And Trigonometry (satisifes Quantitative Reasoning)
- MA 16010 - Applied Calculus I
- MGMT 20010 - Business Accounting
- MGMT 45500 - Legal Background For Business I
- PHYS 21800 - General Physics (satisfies Science )
- TECH 12000 - Design Thinking In Technology (satisifes Informaion Literacy and Science, Tech & Society)

- Human Foundations Elective  see approved list here: http://www.purdue.edu/provost/students/s-initiatives/curriculum/courses.html - Credit Hours: 3.00
- Science Lab Selective - See Approved List - Credit Hours: 3.00
- English First Year Composition Selective: See list of approved selectives  - Credit Hours: 3.00
- Communication Foundation Selective - See Approved List - Credit Hours: 3.00
- Advanced Communication and English selective - See Approved List - Credit Hours: 3.00
- Business Selective - See Approved List - Credit Hours: 3.00
- Management Selective - See Approved List - Credit Hours: 3.00
- Global Selective - Study Abroad or global course listed
- Intercultural Requirement: Credit Hours: 0.00

## Electives (6 credit)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

### Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Select here for additional lists.

## Program Requirements

Accredited by the American Council for Construction Education (ACCE)

### Fall 1st Year

- CM 10000 - Introduction To Construction Management * ♦
- CGT 16400 - Graphics For Civil Engineering And Construction ♦
- MA 15800 - Precalculus- Functions And Trigonometry * ♦
- TECH 12000 - Design Thinking In Technology *

- English First Year Composition Selective - Credit Hours: 3.00 *

14 Credits

## Spring 1st Year

- CM 15000 - Construction Management Fundamentals ♦
- CM 11000 - Construction OSHA Ten-Hour Certification ♦
- MA 16010 - Applied Calculus I * ♦
- Communication Foundation Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

16 Credits

## Fall 2nd Year

- CM 20000 - Intermediate Pre-Construction Management ♦
- MGMT 20010 - Business Accounting
- PHYS 21800 - General Physics

16 Credits

## Spring 2nd Year

- CM 25000 - Intermediate Construction Management ♦
- BCM 36000 - Residential Construction ♦
- Lab Science Selective - Credit Hours: 3.00 *

15 Credits

## Fall 3rd Year

- CM 30000 - Advanced Pre-Construction Management ♦
- Humanities Foundation Selective - Credit Hours: 3.00 *
- Management Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- CM 35000 - Advanced Construction Management ♦
- CM 39000 - Construction Work Experience I ♦
- BCM 46200 - Residential Design Build
- MGMT 45500 - Legal Background For Business I

15 Credits

## Fall 4th Year

- CM 40000 - Construction Capstone I ♦

- ECON 21000 - Principles Of Economics
  * or
- AGEC 21700 - Economics *

- Advanced Communication or English Selective - Credit Hours: 3.00
- Business Selective - Credit Hours: 3.00

15 Credits

## Spring 4th Year

- CM 45000 - Construction Capstone II ♦
- CM 49000 - Construction Work Experience II
- Global Selective - Credit Hours: 3.00
- Residential Selective - Credit Hours: 1.00
- Free Elective  - Credit Hours: 3.00
- Intercultural Requirement - Credit Hours: 0.00

14 Credits

## Notes

*Satisfies a University Core Requirement

Students must earn a "C-" or better in all BCM courses and all prerequisites for BCM courses.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

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

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

## Minor

# Construction Management Minor

# 16 Credits Required

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

## Requirements for the Minor

### Required Courses

- CM 11000 - Construction OSHA Ten-Hour Certification
- CM 15000 - Construction Management Fundamentals
- CM 20000 - Intermediate Pre-Construction Management

## Notes

All CM courses require a C- or higher.

Course registration will be controlled by the School of Construction Management.

Some CM minor courses may require an override from a CM advisor.

Most CM core courses are only open to CM majors.

All Non-CM majors can enroll in CM 10000, although this course is not required for the minor.

All CM minor courses must be taken for a grade on the Purdue University, West Lafayette Campus.

Students are not allowed to take more than 21 credits of CM coursework while enrolled in the CM minor.

Space in CM courses is not guaranteed.

Space in some CM courses might not be available until open enrollment.

Successful completion of the CM Minor **does not guarantee** admissions into the PICM-BS program.

Students are subject to dismissal from this minor if they receive a failing grade in any CM course.

## Disclaimer

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

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

# Department of Computer and Information Technology

# Overview

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

# Faculty

https://polytechnic.purdue.edu/departments/computer-and-information-technology/directory

# Contact Information

**Computer Information Technology Department**

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

Contact an advisor

# Graduate Information

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

## Baccalaureate

## Computer and Information Technology, BS

# About the Program

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

Computer and Information Technology Website

### Degree Requirements

# 120 Credits Required

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

### Computer and Information Technology Required Major Courses (51 credits)

- CNIT 15501 - Introduction To Software Development Concepts
- CNIT 17600 - Information Technology Architectures
- CNIT 18000 - Introduction To Systems Development (Gateway to CIT)
- CNIT 24200 - System Administration
- CNIT 25501 - Object-Oriented Programming Introduction
- CNIT 27000 - Cybersecurity Fundamentals
- CNIT 27200 - Database Fundamentals
- CNIT 28000 - Systems Analysis And Design Methods
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology

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

- CNIT 48000 - Managing Information Technology Projects

## Programming Selective (3 credits)

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

## Information Technology Selectives (15 credits)

- Any other CNIT 30000 level or higher courses, or
- CGT 30000 level or higher courses, or
- EPCS (3 credits) approved by CIT faculty
  **At least nine credits must be CNIT courses.**

# Other Departmental /Program Course Requirements (66 credits)

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core)
  or
- ENGL 10800 - Accelerated First-Year Composition (satisfies Written Communication for core)
  or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity (satisfies Written Communication for core)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
  or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World (satisfies Oral Communication for core)

- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy & Science, Technology, and Society Selectives for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
- MA 16020 - Applied Calculus II (satisfies Quantitative Reasoning Selective for core)
- TLI 11200 - Foundations Of Organizational Leadership
- Communications Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Science Selective - Credit Hours: 3.00
- Lab Science Selective - Credit Hours: 3.00
- Accounting Selective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Professional Speaking Selective - Credit Hours: 3.00
- Professional Writing Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 15.00
- General Business Selective - Credit Hours: 3.00
- Humanities Selective (satisfies Human Cultures: Humanities for core) - Credit Hours: 3.00
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- IT Professional Experience Requirement - Credit Hours: 0.00

- Globalization Requirement - Credit Hours: 0.00

## Free Elective (3 credits)

Any non-remedial course - Credit Hours: 3.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

## Globalization Requirement

**[18]Globalization Requirement (Complete one of the following options)**

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

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

- Earn credit in Level I and II courses (6 credit hours) in any one foreign language
- Earn six credit hours in foreign culture study courses:
- AGEC 34000 - International Economic Development
- AGR 20100 - Communicating Across Culture
- ANTH 20500 - Human Cultural Diversity
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 37900 - Native American Cultures

- ARAB 28000 - Arabic Culture
- CLCS 18100 - Classical World Civilizations
- COM 30400 - Quantitative Methods For Communication Research
- HIST 24300 - South Asian History And Civilizations
- HIST 24500 - Introduction To The Middle East History And Culture
- HIST 25000 - United States Relations With The Middle East And North Africa
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33400 - Science And Society In Western Civilization II
- HIST 34000 - Modern China
- HIST 34400 - History Of Modern Japan
- HTM 37200 - Global Tourism Geography
- POL 23100 - Introduction To United States Foreign Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 23700 - Modern Weapons And International Relations
- POL 32700 - Global Green Politics
- POL 34500 - West European Democracies In The Post-Industrial Era
- SOC 33800 - Global Social Movements
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- WGSS 38000 - Gender And Multiculturalism

## Professional IT Experience Requirement

**[17]Professional IT Experience requirement (Complete one of the following options)**

- Professional IT internship (six week minimum duration)
- 240 hours of IT employment
- 240 hours of documented volunteer IT work
- Service Learning Course (EPCS, CNIT 39000, or Equivalent) with responsibility for an IT component (3 credit hours minimum)
  *A three page reflection paper on what you learned from your experience is required for all options - submit to CIT-Prof-IT@purdue.edu

# Program Requirements

## Fall 1st Year

- CNIT 18000 - Introduction To Systems Development ♦
- TLI 11200 - Foundations Of Organizational Leadership
- Composition Selective[1] - Credit Hours: 3.00
- 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 ♦ *
- Oral Communications Selective[2] - Credit Hours: 3.00
- Business Selective[9] - Credit Hours: 3.00
- MA 16020 - Applied Calculus II *

15 Credits

## Fall 2nd Year

- CNIT 27200 - Database Fundamentals ♦
- CNIT 28000 - Systems Analysis And Design Methods ♦
- Communications Selective[5] - Credit Hours: 3.00
- Economics Selective[4] - Credit Hours: 3.00
- Science Selective[13] - Credit Hours: 3.00 *

15 Credits

## Spring 2nd Year

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

15 Credits

## Fall 3rd Year

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

  Information Technology Selective [12] - Credit Hours: 3.00
  Accounting Selective[3] - Credit Hours: 3.00

Professional Speaking Selective [6] - Credit Hours: 3.00
Interdisciplinary Selective [15] - 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 [12] - Credit Hours: 3.00
  Professional Writing Selective [8] - Credit Hours: 3.00
  Interdisciplinary Selective [15] - Credit Hours: 3.00

15 Credits

## Fall 4th Year

- CNIT 48000 - Managing Information Technology Projects
  Interdisciplinary Selective [15] - Credit Hours: 3.00
  Information Technology Selective [12] - Credit Hours: 3.00
  Information Technology Selective [12] - Credit Hours: 3.00
  Humanities Foundational Selective [10] - Credit Hours: 3.00 *

15 Credits

## Spring 4th Year

- Free Elective[16] - Credit Hours: 3.00
- Information Technology Selective [12] - Credit Hours: 3.00
- Interdisciplinary Selective[15] - Credit Hours: 3.00
- Interdisciplinary Selective[15] - Credit Hours: 3.00
- Behavioral/Social Sciences Foundational Selective[11] - Credit Hours: 3.00

15 Credits

## Notes

*Fulfills University Core

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

2.0 Graduation GPA required for Bachelor of Science degree

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

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

Co-Curricular Requirements include the following:

- Professional IT Experience
- Globalization requirement

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Cybersecurity, BS

# About the Program

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

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

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

Cybersecurity Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (66 credits)

### Computer and Information Technology Required Major Courses (66 credits)

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

## Cybersecurity Selectives (6 credits)

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

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

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core)
  or

- ENGL 10800 - Accelerated First-Year Composition (satisfies Written Communication for core)
  or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity (satisfies Written Communication for core)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
  or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World (satisfies Oral Communication for core)

- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy & Science, Technology, and Society Selectives for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
- MA 16020 - Applied Calculus II (satisfies Quantitative Reasoning Selective for core)
- TLI 11200 - Foundations Of Organizational Leadership
- Communications Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Science Selective - Credit Hours: 3.00
- Lab Science Selective - Credit Hours: 3.00
- Accounting Selective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Professional Speaking Selective - Credit Hours: 3.00
- Professional Writing Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 6.00
- Humanities Selective (satisfies Human Cultures: Humanities for core)- Credit Hours: 3.00
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- IT Professional Experience Requirement - Credit Hours: 0.00
- Globalization Requirement - Credit Hours: 0.00

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

# Program Requirements

## Fall 1st Year

- CNIT 18000 - Introduction To Systems Development ♦
- TLI 11200 - Foundations Of Organizational Leadership
- MA 16010 - Applied Calculus I *
- TECH 12000 - Design Thinking In Technology *
- Composition Selective[1] - Credit Hours: 3.00

15 Credits

## Spring 1st Year

- CNIT 15501 - Introduction To Software Development Concepts ♦
- CNIT 17600 - Information Technology Architectures ♦
- MA 16020 - Applied Calculus II
- Oral Communications Selective[2] - Credit Hours: 3.00
- Accounting Selective[3] - Credit Hours: 3.00

15 Credits

## Fall 2nd Year

- CNIT 24200 - System Administration ♦
- CNIT 27000 - Cybersecurity Fundamentals ♦
- CNIT 25501 - Object-Oriented Programming Introduction
- Economics Selective[4] - Credit Hours: 3.00
- Science Selective*[13] - Credit Hours: 3.00

15 Credits

## Spring 2nd Year

- CNIT 27200 - Database Fundamentals
- CNIT 28000 - Systems Analysis And Design Methods
- Humanities Foundational Selective*[10] - Credit Hours: 3.00
- Statistics Selective[7] - Credit Hours: 3.00
- Lab Science Selective*[14] - Credit Hours: 3.00

15 Credits

## Fall 3rd Year

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

16 Credits

## Spring 3rd Year

- CNIT 31500 - Systems Programming
- CNIT 34220 - Network Administration ♦
- CNIT 34400 - Network Engineering Fundamentals ♦
- Professional Writing Selective[8] - Credit Hours: 3.00
- Interdisciplinary Selective[15] - Credit Hours: 3.00

14 Credits

## Fall 4th Year

- CNIT 45500 - Network Security ♦
- CNIT 47000 - Incident Response Management ♦
- Cybersecurity Selective[16] - Credit Hours: 3.00
- Cybersecurity Selective[16] - Credit Hours: 3.00
- Communications Selective[5] - Credit Hours: 3.00

15 Credits

## Spring 4th Year

- CNIT 42000 - Basic Cyber Forensics
- CNIT 42200 - Cyber Criminology
- CNIT 47100 - Vulnerability Analysis And Testing

- CNIT 48000 - Managing Information Technology Projects ♦
- Behavioral/Social Sciences Foundational Selective*[11] - Credit Hours: 3.00

15 Credits

# Notes

*Fulfills University Core

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

2.0 Graduation GPA required for Bachelor of Science degree

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

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

Courses with the ♦ are essential for the CIT degree critical path to graduation

Co-Curricular Requirements include the following:

- Professional IT Experience
- Globalization requirement

# CIT Supplemental Information

All prerequisites must be met

## Composition Selective

**[1] 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

## Oral Communication Selective

**[2]Oral Communications Selective**

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

## Accounting Selective

**[3]Accounting Selective**

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

## Economics Selective

**[4]Economics Selective**

- AGEC 21700 - Economics
  or
- ECON 21000 - Principles Of Economics
  (Credit cannot be given for more than one of AGEC 21700 or ECON 21000)

- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics

## Communications Selective

**[5]Communications Selective**

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

## Professional Speaking Selective

**[6]Professional Speaking Selective**

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

## Statistics Selective

**[7]Statistics Selective**

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

- STAT 50100 - Experimental Statistics I
- STAT 51100 - Statistical Methods

## Professional Writing Selective

**[8]Professional Writing Selectives**

- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing
- ENGL 42000-E Business Writing (for Entrpreneurship Certificate Students only)

## Interdisciplinary Selectives (6 credits)

**[15]Interdisciplinary Selectives ( 6 credits)** *Any University recognized non-computing minor with at least 6 credits or a department approved set of related courses in which Information Technology can be applied.*
*Suggested Minors include: Forensics Science, Law & Society, Psychology*

- ECET 35901 - Computer Based Data Acquisition Applications
- ENTM 22810 - Forensic Investigation
- ENTM 22820 - Forensic Analysis
- ENTM 22830 - Forensic Testimony And Ethics
- MGMT 25400 - Legal Foundations Of Business I
- MGMT 45500 - Legal Background For Business I
- PHYS 27200 - Electric And Magnetic Interactions
- PSY 31000 - Sensory And Perceptual Processes
- PSY 34200 - Introduction To Psychology Of Personality
- PSY 35000 - Abnormal Psychology
- SOC 32400 - Criminology
- SOC 32700 - Crime, Deviance And Mass Media
- SOC 32800 - Criminal Justice
- SOC 33800 - Global Social Movements
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics

## Globalization Requirement

**[18]Globalization Requirement (Complete one of the following options)**

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

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

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

- AGEC 34000 - International Economic Development
- AGR 20100 - Communicating Across Culture
- ANTH 20500 - Human Cultural Diversity
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 34000 - Global Perspectives On Health
- ANTH 37900 - Native American Cultures
- ARAB 28000 - Arabic Culture
- CLCS 18100 - Classical World Civilizations
- COM 30400 - Quantitative Methods For Communication Research
- HIST 24300 - South Asian History And Civilizations
- HIST 24500 - Introduction To The Middle East History And Culture
- HIST 25000 - United States Relations With The Middle East And North Africa
- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 33400 - Science And Society In Western Civilization II
- HIST 34000 - Modern China
- HIST 34400 - History Of Modern Japan
- HTM 37200 - Global Tourism Geography
- POL 23100 - Introduction To United States Foreign Policy
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 23700 - Modern Weapons And International Relations
- POL 32700 - Global Green Politics
- POL 34500 - West European Democracies In The Post-Industrial Era
- SOC 33800 - Global Social Movements
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- WGSS 38000 - Gender And Multiculturalism

## Professional IT Experience Requirement

**[17]Professional IT Experience requirement (Complete one of the following options)**

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

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

# Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

# Disclaimer

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

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

## Network Engineering Technology, BS

# About the Program

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

Network Engineering Technology Website

### Degree Requirements

# 120 Credits Required

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

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

- CNIT 15501 - Introduction To Software Development Concepts
- CNIT 17600 - Information Technology Architectures
- CNIT 18000 - Introduction To Systems Development (Gateway to CIT)
- CNIT 24000 - Data Communications And Networking
- CNIT 24200 - System Administration
- CNIT 25501 - Object-Oriented Programming Introduction
- CNIT 27000 - Cybersecurity Fundamentals
- CNIT 27200 - Database Fundamentals
- CNIT 28000 - Systems Analysis And Design Methods
- CNIT 31500 - Systems Programming
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology
- CNIT 34000 - UNIX Administration
- CNIT 34210 - Storage Area Networking
- CNIT 34220 - Network Administration
- CNIT 34500 - Internetwork Design And Implementation
- CNIT 34600 - Wireless Networks
- CNIT 45500 - Network Security
- CNIT 48000 - Managing Information Technology Projects

## Information Technology Selectives (6 credits)

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

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

# Other Departmental /Program Course Requirements (60 credits)

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core)
  or
- ENGL 10800 - Accelerated First-Year Composition (satisfies Written Communication for core)
  or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity (satisfies Written Communication for core)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
  or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World (satisfies Oral Communication for core)

- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy & Science, Technology, and Society Selectives for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
- MA 16020 - Applied Calculus II (satisfies Quantitative Reasoning Selective for core)
- TLI 11200 - Foundations Of Organizational Leadership
- Communications Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Physics Selective (satisfies Science for core) - Credit Hours: 4.00
- Physics Selective (satisfies Science for core) - Credit Hours: 4.00
- Accounting Selective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Professional Speaking Selective - Credit Hours: 3.00
- Professional Writing Selective - Credit Hours: 3.00
- Interdisciplinary Selective - Credit Hours: 7.00
- General Business Selective - Credit Hours: 3.00
- Humanities Selective (satisfies Human Cultures: Humanities for core) - Credit Hours: 3.00
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- IT Professional Experience Requirement - Credit Hours: 0.00
- Globalization Requirement - Credit Hours: 0.00

# University Core Requirements

- Human Cultures Humanities

- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

# Program Requirements

## Fall 1st Year

- CNIT 18000 - Introduction To Systems Development ♦
- TLI 11200 - Foundations Of Organizational Leadership
- Composition Selective[1]
- 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 ♦ *
- Oral Communications Selective[2]
    - COM 11400 Fundamentals of Speech Communication
    - SCLA 10200 Transformative Texts, Critical Thinking & Communication II
- MA 16020 - Applied Calculus II *
- Business Selective[9] - Credit Hours: 3.00

### 15 Credits

## Fall 2nd Year

- CNIT 24000 - Data Communications And Networking ♦

- CNIT 27200 - Database Fundamentals
- CNIT 28000 - Systems Analysis And Design Methods
- Accounting Selective[3] - Credit Hours: 3.00

- PHYS 21900 - General Physics II *
  or
- PHYS 22100 - General Physics *

16 Credits

## Spring 2nd Year

Fourth Semester

- CNIT 24200 - System Administration ♦
- CNIT 25501 - Object-Oriented Programming Introduction ♦
- CNIT 27000 - Cybersecurity Fundamentals
  **Statistics Selective[7] - Credit Hours: 3.00**
  **Physics Selective (**PHYS 21900 **or** 22100**) - Credit Hours: 4.00 ***

16 Credits

## Fall 3rd Year

- CNIT 34000 - UNIX Administration ♦
- CNIT 34500 - Internetwork Design And Implementation ♦
- Interdisciplinary Selective [15] - Credit Hours: 3.00
- Professional Speaking Selective[6] - Credit Hours: 3.00
- Economics Selective[4] - Credit Hours: 3.00

16 Credits

## Spring 3rd Year

Sixth Semester

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

14 Credits

## Fall 4th Year

Seventh Semester

- CNIT 45500 - Network Security ♦
- CNIT 48000 - Managing Information Technology Projects
  **Interdisciplinary Selective[15] - Credit Hours: 2.00**
  **Communications Selective [5] - Credit Hours: 3.0**
  **Humanities Foundational Selective [10] - Credit Hours: 3.00 ***

14 Credits

## Spring 4th Year

Eighth Semester

- CNIT 31500 - Systems Programming
  **Information Technology Selective [12] - Credit Hours: 3.00**
  **Information Technology Selective [12] - Credit Hours: 3.00**
  **Interdisciplinary Selective [15] - Credit Hours: 2.00**
  **Behavioral/Social Sciences Foundational Selective [11] - Credit Hours: 3.00 ***

14 Credits

## Notes

*Fulfills University Core

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

2) 2.0 Graduation GPA required for Bachelor of Science degree

3) 2.0 Graduation GPA in all CNIT courses required for Bachelor of Science degree

4) ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, WN, I, and IF)

5) Courses with the ♦ are essential for the CIT degree critical path to graduation

6) Co-Curricular Requirements include the following:

- Professional IT Experience
- Globalization requirement

# Degree Requirements

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

myPurduePlan is knowledge source for specific requirements and completion.

# CIT Supplemental Information

All prerequisites Must Be Met

# Composition Selective

**[1]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

# Oral Communications Selective

**[2]Oral Communications Selective**

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

# Accounting Selective

**[3]Accounting Selective**

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

# Economics Selective

**[4]Economics Selective**

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

- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics

## Communications Selective

**[5]Communications Selective**

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

## Professional Speaking Selective

**[6]Professional Speaking Selective**

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

## Statistics Selective

**[7]Statistics Selective**

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

## Professional Writing Selective

**[8]Professional Writing Selective**

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

## Business Selective

**[9]Business Selective**

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

## Information Technology Selective (6 credits)

**[12]Information Technology Selective**

Any non-required 30000 level or higher CNIT course or EPCS: participation in EPICS requires CIT faculty approval; CGT courses 30000 level or higher. At least three credit hours must be CNIT courses.

## Interdisciplinary Selectives (7 credits)

**[15]Interdisciplinary Selectives**

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

## Globalization Requirement

**[18]Globalization Requirement (Complete one of the following options)**

- Complete any university-sponsored study abroad program lasting at least 7 days*
- Complete an internship or approved international research project that involves at least 7 days of international travel*
- Provide documentation of having lived/traveled outside home country for at least 15 days after a student's 12th birthday*
  * The above options require a three page reflection paper on what you learned from your experience - submit to CIT-Global@purdue.edu

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

AGEC 34000 International Economic Development

AGR 20100 Communication Across Cultures

ANTH 20500 Human Cultural Diversity

ANTH 21200 Culture, Food and Health

ANTH 23000 Gender Across Cultures

ANTH 34000 Global Perspectives on Health

ANTH 37900 Native American Culture

ARAB 28000 Arabic Culture

CLCS 18100 Classical World Civilizations

COM 30400 Intercultural Communications

HIST 24300 South Asian History and Civilizations

HIST 24500: Introduction to the Middle East History and Culture

HIST 250 US Relations with the Middle East & N. Africa

HIST 30000 Eve of Destruction: Global Crises and World Organization in the 20th Century

HIST 33400 Sci & Tech in West Civilization II

HIST 34000: Modern China

HIST 34400: History of Modern Japan

HTM 37200: Global Tourism Geography

POL 23100 Intro to US Foreign Policy

POL 23500 Rich and Poor Nations

POL 23700 Modern Weapons & International Relations

POL 32700 Green Global Politics

POL 34500 West European Democracies in the Post-Industrial Era

SOC 33800 Global Social Movements

SOC 33900 Introduction to the Sociology of Developing Nations

TECH 33000 Technology and the Global Society

WGSS 38000: Gender and Multiculturalism

## Professional IT Experience Requirement

**[17]Professional IT Experience Requirement**

- Professional IT internship (six week minimum duration)
- 240 hours of IT employment
- 240 hours of documented volunteer IT work
- Service Learning Courses (EPCS, CNIT 39000 or equivalent) with responsibility for an IT component (3 credit hours minimum)
- * A three page reflection paper on what you learned from your experience is required for all options - submit to CIT-Prof-IT@purdue.edu

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

## Systems Analysis and Design, BS

# About the Program

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

Systems Analysis and Design Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (51 credits)

### CIT Required Major Courses (39 credits)

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

### Programming Selective (3 credits)

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

### Information Technology Selective (3 credits)

- any other CNIT 30000 level or higher courses

## SAAD Selectives (6 credits)

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

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

- ENGL 10600 - First-Year Composition (satifies Written Communication for core)
  or
- ENGL 10800 - Accelerated First-Year Composition (satifies Written Communication for core)
  or
- ENGL 10100 - English Composition I (satifies Written Communication for core)
  or
- SCLA 10100 - Transformative Texts, Critical Thinking And Communication I: Antiquity To Modernity (satifies Written Communication for core)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
  or
- SCLA 10200 - Transformative Texts, Critical Thinking And Communication II: Modern World (satisfies Oral Communication for core)

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

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Program Requirements

### Fall 1st Year

- CNIT 18000 - Introduction To Systems Development ♦
- TLI 11200 - Foundations Of Organizational Leadership
- Composition Selective[1]
- 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 ♦ *
- Oral Communications Selective[2]
- MA 16020 - Applied Calculus II
- Business Selective [9]

15 Credits

## Fall 2nd Year

- CNIT 24200 - System Administration
- CNIT 25501 - Object-Oriented Programming Introduction ♦
- CNIT 27000 - Cybersecurity Fundamentals
- PHIL 15000 - Principles Of Logic
- Science Selective [13] - Credit Hours: 3.00 *

## 15 Credits

## Spring 2nd Year

- CNIT 27200 - Database Fundamentals ♦
- CNIT 28000 - Systems Analysis And Design Methods ♦
- Statistics Selective [7] - Credit Hours: 3.00
- Communications Selective [5] - Credit Hours: 3.00
- Lab Science Selective [14] - Credit Hours: 3.00

## 15 Credits

## Fall 3rd Year

- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology

- CNIT 31500 - Systems Programming
  or
- CNIT 38000 - Advanced Analysis and Design ♦
- Professional Speaking Selective [6] - Credit Hours: 3.00
- Accounting Selective [3] - Credit Hours: 3.00

- CNIT 32500 - Object-Oriented Application Development

## 15 Credits

## Spring 3rd Year

- CNIT 39200 - Enterprise Data Management
- Professional Writing Selective [8] - Credit Hours: 3.00
- Interdisciplinary Selective [15] - Credit Hours: 3.00
- SAAD Selective [16] - Credit Hours: 3.00

- CGT 25600 - Principles Of User Experience Design

15 Credits

## Fall 4th Year

- Interdisciplinary Selective [15] - Credit Hours: 3.00
- Interdisciplinary Selective [15] - Credit Hours: 3.00
- SAAD Selective [16] - Credit Hours: 3.00
- Economics Selective [4] - Credit Hours: 3.00
- Humanities Foundational Selective [10]- Credit Hours: 3.00 *

15 Credits

## Spring 4th Year

- CNIT 48000 - Managing Information Technology Projects
- Information Technology Selective [12] - Credit Hours: 3.00
- Interdisciplinary Selective [15] - Credit Hours: 3.00
- Interdisciplinary Selective [15] - Credit Hours: 2.00
- Behavioral/Social Sciences Foundational Selective [11] - Credit Hours: 3.00 *

15 Credits

## Notes

*Fulfills University Core

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

2.0 Graduation GPA required for Bachelor of Science degree

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

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

Courses with the ♦ are essential for the CIT degree critical path to graduation

Co-Curricular Requirements include the following:

1. Professional IT Experience
2. Globalization requirement

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

## Minor

# Computer and Information Technology Minor

# 15 Credits Required

## Requirements for the Minor

### Required Courses (15 credits)

- CNIT 18000 - Introduction To Systems Development
- CNIT Selective - Credit Hours: 3.00
- CNIT Selective - Credit Hours: 3.00
- CNIT Selective - Credit Hours: 3.00
- CNIT Selective - Credit Hours: 3.00

## Notes

A 2.0 GPA in all minor courses

No course may be taken pass/fail

Transfer credit, course substitutions, and credit by exam limited to three (3) credit hours

The following courses will fulfill the CNIT 15501 requirement:
a. CNIT 10500, or CNIT 17500 (does not count as substitution)
b. CS 17700, CS 18000, CGT 21500 or any 3 credit programming course at Purdue (counts as a substitution)

CNIT 13600 cannot be used to fulfill the minor requirements

Course requisites (pre-requisites, concurrent pre-requisites, and restrictions) must be met

30000 level courses require permission from CIT Advisor

Minors will be accommodated during open registration periods.

The CIT minor can be attached to any Purdue University major that will accommodate or allow it.

## Disclaimer

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

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

# Department of Computer Graphics Technology

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

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

# Faculty

https://polytechnic.purdue.edu/departments/computer-graphics-technology/directory

# Contact Information

**Computer Graphics Technology Department**

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

# Graduate Information

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

## Baccalaureate

# Animation, BS

# About the Program

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

Animation Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (41 credits)

### Required Major Courses (29 credits)

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

### Major Selectives* - Select 4 (12 credits)

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

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

- CGT 44200 - Production for Computer Animation
  or
- CGT 44600 - Post-Production And Special Effects For Computer Animation

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

- COM 11400 - Fundamentals Of Speech Communication *(satisfies Oral Communication for core)*
- ECON 21000 - Principles Of Economics *(satisfies Human Culture Behavior/Social Science for core)*

- ENGL 10600 - First-Year Composition *(satisfies Written Communication for core)*
  or
- ENGL 10800 - Accelerated First-Year Composition *(satisfies Written Communication 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 21800 - General Physics *(satisfies Science Selective for core)*
- PSY 12000 - Elementary Psychology *(satisfies Human Culture Behavioral/Social Science for core)*
- TECH 12000 - Design Thinking In Technology *(satisfies Information Literacy AND Science, Technology & Society Selective for core)*
- Human Cultures (satisfies Humanities for Core)- Credit Hours: 3.00
- Humanities Elective - Credit Hours: 6.00
- Science Selective (satisfies Science Selective for Core) - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00
- CGT Global Selective - Credit Hours: 3.00
- Technical Electives - Credit Hours: 9.00

## Electives (15 Credits)

## Intercultural Requirement

- Complete Intercultural Development Inventory (IDI) Pre and Post Tests
- Complete Beliefs, Events, and Values Inventory (BEVI) Pre and Post Tests
- Complete Intercultural Knowledge and Effectiveness (IKE)
- Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

## Humanities Requirement

Complete 1 of the following:

- Participation in Computational Arts Circle
- Complete courses within major that have Humanities Integrated into their assignments
- Complete course within major that have partnered with Humanities Professor
- Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

## Professional Requirement

Complete 1 of the following:

- Complete Internship
- Complete Co-op
- Employment during the academic year related to Major Field of Study
- Complete an in-class internship-like experience created by Major Field of Study
- Student Proposed Alternative:  must be commensurate with the expectations of Professional Requirement related to Major Field of Study

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

### Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

For selective information click here.

## Program Requirements

### Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology

- TECH 12000 - Design Thinking In Technology *
- English Selective* - Credit Hours: 3.00
- MA 15800 - Precalculus- Functions And Trigonometry *

14 Credits

## Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 14100 - Internet Foundations Technologies And Development
- COM 11400 - Fundamentals Of Speech Communication *
- PHYS 21800 - General Physics *
- MA 16010 - Applied Calculus I *

16 Credits

## Fall 2nd Year

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

15 Credits

## Spring 2nd Year

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

16 Credits

## Fall 3rd Year

- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT Selective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

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

15 Credits

## Fall 4th Year

- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT Selective (40000 Level) (CGT44200 or CGT44600) - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- MGMT 45500 - Legal Background For Business I
- Technical Elective - Credit Hours: 3.00

17 Credits

## Spring 4th Year

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

12 Credits

## Notes

*Satisfies a University Core Requirement

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

2.0 Graduation GPA required for Bachelor of Science degree.

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

32 credit hours of 30000 or 40000 level Purdue courses for graduation

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Building Information Modeling, BS

# About the Program

Combining graphics expertise with broad construction knowledge, building information modeling (BIM) is helping to revolutionize the architecture, engineering and construction (AEC) industry through its transformative and collaborative approach. When you major in building information modeling at Purdue University, you'll gain skills that will help a construction team create detailed designs and documentation. The 3D computer model is at the heart of BIM. Once you have created a model, you can view the structure from inside specific rooms, from any angles, and even with different materials such as brick or siding. You will learn about a wide range of topics necessary in the field, such as carpentry, steel, and plumbing and electrical trades.

Building Information Modeling Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (41 credits)

## Required Major Courses (32 credits)

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 14100 - Internet Foundations Technologies And Development
- CGT 21500 - Computer Graphics Programming I
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 26200 - Introduction To Construction Graphics
- CGT 36000 - Applications Of Construction Documentation I
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- CGT 46000 - Building Information Modeling For Commercial Construction
- CGT 46200 - Applications Of Construction Documentation II
- Intercultural Requirment - Credit Hours: 0.0
- Humanities Requirement - Credit Hours: 0.0
- Professional Requirement - Credit Hours: 0.0

## Major Selectives* - Choose 3 courses (9 credits)

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

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

- COM 11400 - Fundamentals Of Speech Communication *(satisfies Oral Communication for core)*
- ECON 21000 - Principles Of Economics *(satisfies Human Culture Behavior/Social Science for core)*

- ENGL 10600 - First-Year Composition *(satisfies Written Communication for core)*
  or
- ENGL 10800 - Accelerated First-Year Composition *(satisfies Written Communication 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 21800 - General Physics *(satisfies Science Selective for core)*
- PSY 12000 - Elementary Psychology *(satisfies Human Culture Behavioral/Social Science for core)*
- TECH 12000 - Design Thinking In Technology *(satisfies Information Literacy AND Science, Technology & Society Selective for core)*
- Human Cultures (satisfies Humanities for Core) - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 6.00
- Science Selective (satisfies Science Selective for Core) - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00

- Statistics Selective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00
- CGT Global Selective - Credit Hours: 3.00
- Technical Electives - Credit Hours: 9.00

## Electives (15 credits)

## Intercultural Requirement

- Complete Intercultural Development Inventory (IDI) Pre and Post Tests
- Complete Beliefs, Events, and Values Inventory (BEVI) Pre and Post Tests
- Complete Intercultural Knowledge and Effectiveness (IKE)
- Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

## Humanities Requirement

Complete 1 of the following:

- Participation in Computational Arts Circle
- Complete courses within major that have Humanities integrated into their assignments
- Complete course within major that have partnered with Humanities Professor
- Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

## Professional Requirement

Complete 1 of the following

- Complete Internship
- Complete Co-op
- Employment during the academic year related to Major Field of Study
- Complete an in-class internship-like experience created by Major Field of Study
- Student Proposed Alternative:  must be commensurate with the expectations of Professional Requirement related to Major Field of Study

## University Core Requirements

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

- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

For additional information click here.

## Program Requirements

### Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology *
- TECH 12000 - Design Thinking In Technology *
- MA 15800 - Precalculus- Functions And Trigonometry *
- English Selective - Credit Hours: 3.00 *

#### 14 Credits

### Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 14100 - Internet Foundations Technologies And Development
- COM 11400 - Fundamentals Of Speech Communication *
- MA 16010 - Applied Calculus I *
- PHYS 21800 - General Physics *

#### 16 Credits

### Fall 2nd Year

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

15 Credits

## Spring 2nd Year

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

16 Credits

## Fall 3rd Year

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

15 Credits

## Spring 3rd Year

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

15 Credits

## Fall 4th Year

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

- Humanities Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

17 Credits

## Spring 4th Year

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

12 Credits

## Notes

*Satisfies a University Core Requirement

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

2.0 Graduation GPA required for Bachelor of Science degree.

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

32 Credit Hours of 30000 or 40000 level Purdue courses for graduation.

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Data Visualization, BS

# About the Program

Data visualization specialists present complex information in an easy-to-understand format. Their efforts can help identify trends, provide important insights and illustrate impact. They can help highlight tumors in MRI images to track disease progression or visualize air flow over a car to assist designers in making more fuel efficient vehicles. The data visualization major at Purdue University focuses on the computer and graphics tools necessary to create accurate and meaningful visualizations for researchers, leaders, decision-makers and the general public.

To help you understand how to use data, you will learn about visualization techniques and work on design, programming, and user research skills. You will also experience firsthand the design and development process of a complex data visualization system. Data management and basic analysis skills are also important in this field. When you graduate from the program, you will be able to design effective visual representations of data based on the data's characteristics, business needs, and the requirements of prospective users.

The coursework for this major will lead you through the spectrum of visualization topics. From learning about the basic types of data and their popular visualization forms to applying design techniques to scientific data, you will gain experience and problem solving skills that will be the foundation for your data visualization career. You will be able to combine all of your new skills in the Visualization Studio course as create a comprehensive, interactive visualization system for data analysis.

**Special Features**

- Prepare for a career in a field with an ongoing need for professionals who know how to present raw data in a way that does not overwhelm.
- Work with professors who are leading researchers in the area of data and scientific visualization
- Learn in small, close-knit classes that feature individualized attention
- Work with industry-standard software to gain the best hands-on experience
- Experience projects that highlight the visualization of data-rich information (InfoVis), scientific data (SciVis), biological data (BioVis), and more.
- Utilize the Polytechnic learning environment to become a career-ready graduate
- DTVS Website: https://polytechnic.purdue.edu/degrees/data-visualization

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (41 credits)

### Required Major Courses (35 credits)

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 14100 - Internet Foundations Technologies And Development
- CGT 21500 - Computer Graphics Programming I
- CGT 25001 - Computer Graphics Professional Practices I

- CGT 25600 - Principles Of User Experience Design
- CGT 27000 - Introduction To Data Visualization
- CGT 37000 - Interactive Data Visualization
- CGT 37700 - Scientific Visualization
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- CGT 47000 - Data Visualization Studio
- Intercultural Requirement - Credit Hours: 3.00
- Humanities Requirement - Credit Hours: 3.00
- Professional Requirement - Credit Hours: 3.00

## Major Selectives* -Choose two courses (6 credits)

- CGT Selective - Credit Hours: 3.00
- CGT Selective (300- or 400- Level Course) - Credit Hours: 3.00

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

- AD 10500 - Design I
- COM 11400 - Fundamentals Of Speech Communication *(satisfies Oral Communication for core)*
- ECON 21000 - Principles Of Economics *(satisfies Human Culture Behavior/Social Science for core)*

- ENGL 10600 - First-Year Composition
  or
- ENGL 10800 - Accelerated First-Year Composition *(satisfies Written Communication 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 21800 - General Physics *(satisfies Science Selective for core)*
- PSY 12000 - Elementary Psychology
- STAT 30100 - Elementary Statistical Methods *(satisfies Human Culture Behavioral/Social Science for core)*
- TECH 12000 - Design Thinking In Technology *(satisfies Information Literacy AND Science, Technology & Society for core)*
- Human Cultures: Humanities* - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Science Selective* - Credit Hours: 3.00
- CGT Global Selective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00
- Management Elective - Credit Hours: 3.00
- Technical Electives - Credit Hours: 9.00

## Electives (15 credits)

## Intercultural Requirement

- Complete Intercultural Development Inventory (IDI) Pre and Post Tests
- Complete Beliefs, Events, and Values Inventory (BEVI) Pre and Post Tests
- Complete Intercultural Knowledge and Effectiveness (IKE)
- Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

## Humanities Requirement

Complete 1 of the following:

- Participation in Computational Arts Circle
- Complete courses within major that have Humanities Integrated into their assignments
- Complete course within major that have partnered with Humanities Professor
- Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

## Professional Requirement

Complete 1 of the following

- Complete Internship
- Complete Co-op
- Employment during the academic year related to Major Field of Study
- Complete an in-class internship-like experience created by Major Field of Study
- Student Proposed Alternative:  must be commensurate with the expectations of Professional Requirement related to Major Field of Study

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

For additional course lists click here.

## Program Requirements

### Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- TECH 12000 - Design Thinking In Technology *
- English Selective* - Credit Hours: 3.00
- MA 15800 - Precalculus- Functions And Trigonometry *

14 Credits

### Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 14100 - Internet Foundations Technologies And Development
- COM 11400 - Fundamentals Of Speech Communication *
- PSY 12000 - Elementary Psychology *
- MA 16010 - Applied Calculus I *

15 Credits

### Fall 2nd Year

- CGT 21500 - Computer Graphics Programming I
- Human Cultures: Humanities Core* - Credit Hours: 3.00
- PHYS 21800 - General Physics
- AD 10500 - Design I
- Technical Elective - Credit Hours: 3.00

16 Credits

### Spring 2nd Year

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

16 Credits

## Fall 3rd Year

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

15 Credits

## Spring 3rd Year

- CGT 37000 - Interactive Data Visualization
- CGT Selective: 30000 or 40000 Level - Credit Hours: 3.00
- CGT Globalization Selective - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

15 Credits

## Fall 4th Year

- CGT 47000 - Data Visualization Studio
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- MGMT 45500 - Legal Background For Business I
- Humanities Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

14 Credits

## Spring 4th Year

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

## 15 Credits

## Notes

* Satisfies University Core

Students must earn C- or better in CGT Courses

2.00 Graduation GPA required for Bachelor of Science degree

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

32 hours of 30000 or 40000 level Purdue courses for graduation

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Effects Technical Direction, BS

# About the Program

In the animation and visual effects (VFX) industries, an effects technical director is responsible for creating simulations for a variety of natural phenomena. Whenever a movie needs digital simulations of large-scale destructions, fluids, dust, or even steam coming off of a cup of coffee, the effects technical director is responsible for making it happen.

An effects technical director is a combination of programmer and artist. You will take classes focused on fire, destruction, smoke, particles, and fluids, as well as the math and physics courses that provide the underlying fundamentals. You will work with industry-standard tools and techniques for creating a variety of effects.

Effects Technical Direction Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (47 credits)

### Required Major Courses (44 credits)

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 14700 - Visual Effects Introduction
- CGT 24100 - Introduction to Computer Animation
- CGT 24600 - Compositing I
- CGT 24700 - Visual Effects - Particles And Procedural Effects
- CGT 24800 - Visual Effects - Pyrotechnics And Destruction Effects
- CGT 24900 - Visual Effects - Programming
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34600 - Digital Video And Audio
- CGT 34800 - Photorealistic Shaders
- CGT 34900 - Visual Effects Technical Directing
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 44800 - Visual Effects - Capstone I
- CGT 45001 - Computer Graphics Professional Practices II
- Intercultural Requirement - Credit Hours: 3.00
- Humanities Requirement - Credit Hours: 3.00
- Professional Requirement - Credit Hours: 3.00

### Major Selectives* (3 credits)

- CGT VFX/Animation Selective - Credit Hours: 3.00

## Other Departmental /Program Course Requirements (70 credits)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- COM 31400 - Advanced Presentational Speaking

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core)
  or
- ENGL 10800 - Accelerated First-Year Composition (satisfies Written Communication for core)

- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing
- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- ENTR 31000 - Marketing And Management For New Ventures
- ENTR 48000 - Entrepreneurship Capstone
- MA 16100 - Plane Analytic Geometry And Calculus I
- MA 16200 - Plane Analytic Geometry And Calculus II
- MA 26100 - Multivariate Calculus
- MA 26500 - Linear Algebra (satisfies Quantitative Reasoning Selective for core)
- PHIL 11400 - Global Moral Issues (satisfies Human Behavior Humanities for core)
- PHYS 21800 - General Physics (satisfies Science Selective for core)
- PSY 12000 - Elementary Psychology
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy AND Science, Technology & Society Selective for core)
- Humanities Elective - Credit Hours: 3.00
- Computer Science Selective - Credit Hours: 4.00
- CGT Global Selective - Credit Hours: 3.00
- Science Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

## Electives (3 credits)

## Intercultural Requirement

- Complete Intercultural Development Inventory (IDI) Pre and Post Tests
- Complete Beliefs, Events, and Values Inventory (BEVI) Pre and Post Tests
- Complete Intercultural Knowledge and Effectiveness (IKE)
- Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

## Humanities Requirement

Complete 1 of the following:

- Participation in Computational Arts Circle
- Complete courses within major that have Humanities Integrated into their assignments
- Complete course within major that have partnered with Humanities Professor
- Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

## Professional Requirement

Complete 1 of the following

- Complete Internship
- Complete Co-op
- Employment during the academic year related to Major Field of Study
- Complete an in-class internship-like experience created by Major Field of Study
- Student Proposed Alternative:  must be commensurate with the expectations of Professional Requirement related to Major Field of Study

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

For additional course listings click here.

## Program Requirements

### Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- MA 16100 - Plane Analytic Geometry And Calculus I *
- CS Selective - Credit Hours: 4.00
- English Selective - Credit Hours: 3.00 *

### 17 Credits

### Spring 1st Year

- TECH 12000 - Design Thinking In Technology
- CGT 14700 - Visual Effects Introduction
- COM 11400 - Fundamentals Of Speech Communication *
- MA 16200 - Plane Analytic Geometry And Calculus II

14 Credits

## Fall 2nd Year

- CGT 24100 - Introduction to Computer Animation
- CGT 24600 - Compositing I
- CGT 24700 - Visual Effects - Particles And Procedural Effects
- MA 26500 - Linear Algebra
- PHYS 21800 - General Physics *

16 Credits

## Spring 2nd Year

- CGT 24800 - Visual Effects - Pyrotechnics And Destruction Effects
- CGT 24900 - Visual Effects - Programming
- CGT 25001 - Computer Graphics Professional Practices I
- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- MA 26100 - Multivariate Calculus

14 Credits

## Fall 3rd Year

- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34600 - Digital Video And Audio
- CGT 34800 - Photorealistic Shaders
- PHIL 11400 - Global Moral Issues
- PSY 12000 - Elementary Psychology

15 Credits

## Spring 3rd Year

- CGT 34900 - Visual Effects Technical Directing
- COM 31400 - Advanced Presentational Speaking
- ENGL 42000 - Business Writing
- ENTR 31000 - Marketing And Management For New Ventures
- Science Foundational Selective Core - Credit Hours: 3.00 *

15 Credits

## Fall 4th Year

- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 44800 - Visual Effects - Capstone I
- ENTR 48000 - Entrepreneurship Capstone
- ENGL 42100 - Technical Writing
- CGT VFX/Anim. Selective - Credit Hours: 3.00
- CGT Globalization Selective - Credit Hours: 3.00

17 Credits

## Spring 4th Year

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

12 Credits

## Notes

*Satisfies a University Core Requirement

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

2.0 Graduation GPA required for Bachelor of Science degree.

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

32 credit hours of 30000 or 40000 level Purdue courses for graduation.

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Game Development and Design, BS

# About the Program

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

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

Game Studies Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (41 credits)

### Required Major Courses (35 credits)

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 14100 - Internet Foundations Technologies And Development
- CGT 21500 - Computer Graphics Programming I
- CGT 24100 - Introduction to Computer Animation
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 25600 - Principles Of User Experience Design

- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34500 - Game Development I: Core Skills And Technologies
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 44500 - Game Development II: Design And Psychology
- CGT 45001 - Computer Graphics Professional Practices II
- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

## Major Selectives* (6 credits)

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

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

- COM 11400 - Fundamentals Of Speech Communication *(satisfies Oral Communication for core)*
- ECON 21000 - Principles Of Economics *(satisfies Human Culture Behavior/Social Science for core)*

- ENGL 10600 - First-Year Composition *(satisfies Written Communication for core)*
  or
- ENGL 10800 - Accelerated First-Year Composition *(satisfies Written Communication 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 21800 - General Physics *(satisfies Science Selective for core)*
- PSY 12000 - Elementary Psychology *(satisfies Human Culture Behavioral/Social Science for core)*
- TECH 12000 - Design Thinking In Technology *(satisfies Information Literacy AND Science, Technology & Society Selective for core)*
- Human Cultures (satisfies Humanities for Core)- Credit Hours: 3.00
- Humanities Elective - Credit Hours: 6.00
- Science Selective (satisfies Science Selective for Core) - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00
- CGT Global Selective - Credit Hours: 3.00
- Technical Electives - Credit Hours: 9.00

## Electives (15 credits)

- Free Electives - Credit Hours: 15.00

## Intercultural Requirement

- Complete Intercultural Development Inventory (IDI) Pre and Post Tests
- Complete Beliefs, Events, and Values Inventory (BEVI) Pre and Post Tests
- Complete Intercultural Knowledge and Effectiveness (IKE)
- Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

## Humanities Requirement

Complete 1 of the following:

- Participation in Computational Arts Circle
- Complete courses within major that have Humanities Integrated into their assignments
- Complete course within major that have partnered with Humanities Professor
- Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

## Professional Requirement

Complete 1 of the following

- Complete Internship
- Complete Co-op
- Employment during the academic year related to Major Field of Study
- Complete an in-class internship-like experience created by Major Field of Study
- Student Proposed Alternative:  must be commensurate with the expectations of Professional Requirement related to Major Field of Study

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Select here for additional lists.

# Program Requirements

## Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- TECH 12000 - Design Thinking In Technology *
- MA 15800 - Precalculus- Functions And Trigonometry *
- English Selective - Credit Hours: 3.00 *

### 14 Credits

## Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 14100 - Internet Foundations Technologies And Development
- COM 11400 - Fundamentals Of Speech Communication *
- PSY 12000 - Elementary Psychology *
- MA 16010 - Applied Calculus I *

### 15 Credits

## Fall 2nd Year

- CGT 21500 - Computer Graphics Programming I
- PHYS 21800 - General Physics
- Human Culture: Humanities Core - Credit Hours: 3.00 *
- Free Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

### 16 Credits

## Spring 2nd Year

- CGT 24100 - Introduction to Computer Animation
- CGT 25600 - Principles Of User Experience Design
- CGT 25001 - Computer Graphics Professional Practices I

- ECON 21000 - Principles Of Economics
- Science Foundational Selective Core - Credit Hours: 3.00 *
- Free Elective - Credit Hours: 3.00

16 Credits

## Fall 3rd Year

- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34500 - Game Development I: Core Skills And Technologies
- Humanities Elective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- CGT 44500 - Game Development II: Design And Psychology
- CGT Selective - Credit Hours: 3.00
- CGT Globalization Selective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00

15 Credits

## Fall 4th Year

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

17 Credits

## Spring 4th Year

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

12 Credits

## Notes

*Satisfies a University Core Requirement

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

2.0 Graduation GPA required for Bachelor of Science degree.

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

32 credit hours of 30000 or 40000 level Purdue courses for graduation

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# UX Design, BS

# About the Program

Human-centered design is an approach to creating products, systems, and services that are effective and enjoyable to use. By placing the user at the center of the design process, we ensure that we create great user experiences (UX). A human-centered approach to design and development helps lead to positive user experiences, by ensuring that our artifacts are easy to learn and use, are fun and enjoyable, and help users to achieve their goals.

Human Centered Design and Development Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (41 credits)

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 17207 - User Experience Design Experience Studio I
- CGT 17208 - User Experience Design Studio I: Fundamentals
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 27108 - Human-Centered Design And Development Studio II
- CGT 27207 - User Experience Design Experience Studio II
- CGT 27208 - User Experience Design Studio III: Cross-Channel
- CGT 37108 - User Experience Design Studio IV: Strategy
- CGT 37207 - User Experience Design Experience Studio III
- CGT 37208 - User Experience Design Studio V: Specialization
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

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

- Science Selectives (satisfies Science for core) - Credit Hours: 6.00
- CGT Global Selectives - Credit Hours: 9.00
- CGT Leadership - Credit Hours: 9.00
- Psychology Selectives - Credit Hours: 9.00
- Humanities Electives - Credit Hours: 3.00
- Written/Oral Communication Selectives - Credit Hours: 9.00
- Math Selective - Credit Hours: 3.00
- Technical Electives - Credit Hours: 9.00
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- PSY 12000 - Elementary Psychology (satisfies Human Culture Behavioral/Social Science for core)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy AND Science, Technology & Society Selective for core)

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core)
  or
- ENGL 10800 - Accelerated First-Year Composition (satisfies Written Communication for core)

## Electives (10 credits)

- Free Elective - Credit Hours: 10.00

## Intercultural Requirement

- Complete Intercultural Development Inventory (IDI) Pre and Post Tests
- Complete Beliefs, Events, and Values Inventory (BEVI) Pre and Post Tests
- Complete Intercultural Knowledge and Effectiveness (IKE)
- Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

## Humanities Requirement

Complete 1 of the following:

- Participation in Computational Arts Circle
- Complete courses within major that have Humanities Integrated into their assignments
- Complete course within major that have partnered with Humanities Professor
- Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

## Professional Requirement

Complete 1 of the following

- Complete Internship
- Complete Co-op
- Employment during the academic year related to Major Field of Study
- Complete an in-class internship-like experience created by Major Field of Study
- Student Proposed Alternative:  must be commensurate with the expectations of Professional Requirement related to Major Field of Study

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Select here for additional lists.

## Program Requirements

### Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- TECH 12000 - Design Thinking In Technology *
- English Selective - Credit Hours: 3.00 *
- Math Selective - Credit Hours: 3.00 *

14 Credits

### Spring 1st Year

- CGT 17207 - User Experience Design Experience Studio I
- CGT 17208 - User Experience Design Studio I: Fundamentals
- COM 11400 - Fundamentals Of Speech Communication *
- PSY 12000 - Elementary Psychology
- Technical Elective - Credit Hours: 3.00

15 Credits

### Fall 2nd Year

- CGT 27207 - User Experience Design Experience Studio II
- CGT 27108 - Human-Centered Design And Development Studio II
- CGT Globalization Selective - Credit Hours: 3.00
- Written or Oral Communication - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

### Spring 2nd Year

- CGT 27207 - User Experience Design Experience Studio II
- CGT 27208 - User Experience Design Studio III: Cross-Channel
- CGT 25001 - Computer Graphics Professional Practices I
- Science Foundational Selective Core - Credit Hours: 3.00 *
- Human Cultures: Humanities Core - Credit Hours: 3.00 *
- Psychology Selective - Credit Hours: 3.00

16 Credits

## Fall 3rd Year

- CGT 37108 - User Experience Design Studio IV: Strategy
- CGT 37207 - User Experience Design Experience Studio III
- CGT Leadership Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Psychology Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- CGT 37207 - User Experience Design Experience Studio III
- CGT 37208 - User Experience Design Studio V: Specialization
- CGT Leadership Selective - Credit Hours: 3.00
- Psychology Selective - Credit Hours: 3.00
- Written or Oral Communication - Credit Hours: 3.00

15 Credits

## Fall 4th Year

- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- Written or Oral Communication - Credit Hours: 3.00
- CGT Globalization Selective - Credit Hours: 3.00
- Science Foundational Selective Core - Credit Hours: 3.00*
- Free Elective - Credit Hours: 4.00

15 Credits

### Spring 4th Year

- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- CGT Globalization Selective - Credit Hours: 3.00
- CGT Leadership Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

### 15 Credits

## Notes

*Satisfies a University Core Requirement

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

2.0 Graduation GPA required for Bachelor of Science degree.

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

32 credit Hours of 30000 or 40000 level Purdue courses for graduation

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Virtual Product Integration, BS

# About the Program

Modern product manufacturing is increasingly supported by data-driven design, production and support throughout a product's lifecycle. With a major in virtual product integration (VPI), you will use the latest tools to effectively communicate and support each step in the product's lifecycle. In your classes, you will define, build, and visualize 3D models to demonstrate how products

are built, how they are made, and how they are serviced and supported. Your work will be done primarily with product lifecycle management (PLM) software tools for simulation, computer-aided design (CAD), and product data management (PDM).

Virtual Product Integration Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (53 credits)

## Required Major Courses (53 credits)

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

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

- COM 11400 - Fundamentals Of Speech Communication *(satisfies Oral Communication for core)*
- ECON 21000 - Principles Of Economics *(satisfies Human Cultures Behavior/Social Science for core)*

- ENGL 10600 - First-Year Composition *(satisfies Written Communication for core)*
  or
- ENGL 10800 - Accelerated First-Year Composition *(satisfies Written Communication 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)*
- PHYS 21800 - General Physics *(satisfies Science Selective for core)*
- PSY 12000 - Elementary Psychology *(satisfies Human Culture Behavioral/Social Science for core)*
- TECH 12000 - Design Thinking In Technology *(satisfies Information Literacy AND Science, Technology & Society Selective for core)*
- Human Cultures: Humanities - Credit Hours: 3.00*
- Science Selective for Core - Credit Hours: 3.00*
- Humanities Elective - Credit Hours: 6.00
- Technical Elective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Management Elective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00
- CGT Global Selective - Credit Hours: 3.00

## Electives (12 credits)

- Free Electives - Credit Hours: 12.00

## Intercultural Requirement

- Complete Intercultural Development Inventory (IDI) Pre and Post Tests
- Complete Beliefs, Events, and Values Inventory (BEVI) Pre and Post Tests
- Complete Intercultural Knowledge and Effectiveness (IKE)
- Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

## Humanities Requirement

Complete 1 of the following:

- Participation in Computational Arts Circle
- Complete courses within major that have Humanities Integrated into their assignments
- Complete course within major that have partnered with Humanities Professor
- Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

## Professional Requirement

Complete 1 of the following

- Complete Internship
- Complete Co-op
- Employment during the academic year related to Major Field of Study
- Complete an in-class internship-like experience created by Major Field of Study
- Student Proposed Alternative: must be commensurate with the expectations of Professional Requirement related to Major Field of Study

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Select here for additional lists.

## Program Requirements

### Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- TECH 12000 - Design Thinking In Technology *
- MA 15800 - Precalculus- Functions And Trigonometry *
- English Selective - Credit Hours: 3.00 *

### 14 Credits

### Spring 1st Year

- CGT 10301 - Geometric Modeling Applications
- CGT 14100 - Internet Foundations Technologies And Development
- COM 11400 - Fundamentals Of Speech Communication *
- PHYS 21800 - General Physics *
- MA 16010 - Applied Calculus I *

### 16 Credits

## Fall 2nd Year

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

15 Credits

## Spring 2nd Year

- CGT 20301 - Model-Based Definition
- CGT 25001 - Computer Graphics Professional Practices I
- ECON 21000 - Principles Of Economics
- Science Foundational Selective Core - Credit Hours: 3.00 *
- Free Elective - Credit Hours: 3.00

16 Credits

## Fall 3rd Year

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

15 Credits

## Spring 3rd Year

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

15 Credits

## Fall 4th Year

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

### 17 Credits

## Spring 4th Year

- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- CGT Globalization Selective - Credit Hour:  3.00
- Communication Selective - Credit Hour:  3.00
- Free Elective - Credit Hour:  3.00

### 12 Credits

# Notes

*Satisfies a University Core Requirement

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

2.0 Graduation GPA required for Bachelor of Science degree.

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

32 credit hours of 30000 or 40000 level Purdue courses for graduation

# Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

# Disclaimer

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

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

# Visual Effects Compositing, BS

**About the Program**

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

Visual Effects Compositing Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (35 credits)

### Required Major Courses (29 credits)

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 24100 - Introduction to Computer Animation
- CGT 24600 - Compositing I
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34600 - Digital Video And Audio
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 44600 - Post-Production And Special Effects For Computer Animation
- CGT 44800 - Visual Effects - Capstone I
- CGT 45001 - Computer Graphics Professional Practices II
- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

### Major Selectives* -Choose two courses (6 credits)

- CGT/ VFX Selective - Credit Hours: 3.00
- CGT/ VFX Selective - Credit Hours: 3.00

## Other Departmental /Program Course Requirements (67 credits)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- COM 31400 - Advanced Presentational Speaking

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core)
  or
- ENGL 10800 - Accelerated First-Year Composition (satisfies Written Communication for core)

- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing
- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- ENTR 31000 - Marketing And Management For New Ventures
- ENTR 48000 - Entrepreneurship Capstone
- MA 15800 - Precalculus- Functions And Trigonometry
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
- PHIL 11400 - Global Moral Issues
- PHYS 21800 - General Physics (satisfies Science Selective for core)
- PSY 12000 - Elementary Psychology (satisfies Human Culture Behavioral/Social Science for core)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy AND Science, Technology & Society Selective for core)
- Human Cultures (satisfies Humanities for core) - Credit Hours: 3.00
- Science Selective (satisfies Science for core) - Credit Hours: 3.00
- Foreign Language Electives - Credit Hours: 6.00
- Psychology Selective - Credit Horus: 3.00
- Technical Electives - Credit Hours: 6.00
- CGT Global Selective - Credit Hours: 3.00

## Electives (18 credits)

- Free Elective - Credit Hours: 18.00

## Intercultural Requirement

- Complete Intercultural Development Inventory (IDI) Pre and Post Tests
- Complete Beliefs, Events, and Values Inventory (BEVI) Pre and Post Tests
- Complete Intercultural Knowledge and Effectiveness (IKE)
- Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

## Humanities Requirement

Complete 1 of the following:

- Participation in Computational Arts Circle
- Complete courses within major that have Humanities Integrated into their assignments
- Complete course within major that have partnered with Humanities Professor
- Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

## Professional Requirement

Complete 1 of the following

- Complete Internship
- Complete Co-op
- Employment during the academic year related to Major Field of Study
- Complete an in-class internship-like experience created by Major Field of Study
- Student Proposed Alternative:  must be commensurate with the expectations of Professional Requirement related to Major Field of Study

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Select here for additional lists.

## Program Requirements

## Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- MA 15800 - Precalculus- Functions And Trigonometry
- Foreign Language Selective - Credit Hours: 3.00
- English Selective - Credit Hours: 3.00 *
- Free Elective - Credit Hours:  3.00

## 17 Credits

## Spring 1st Year

- CGT 24100 - Introduction to Computer Animation
- TECH 12000 - Design Thinking In Technology *
- COM 11400 - Fundamentals Of Speech Communication *
- MA 16010 - Applied Calculus I *
- Foreign Language Selective - Credit Hours: 3.00

15 Credits

## Fall 2nd Year

- CGT 24600 - Compositing I
- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- PHYS 21800 - General Physics *
- PSY 12000 - Elementary Psychology
- CGT VFX Selective - Credit Hours: 3.00

16 Credits

## Spring 2nd Year

- CGT 25001 - Computer Graphics Professional Practices I
- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- Human Cultures: Humanities Core - Credit Hours: 3.00
- Science Foundational Selective Core - Credit Hours: 3.00 *
- Technical Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

16 Credits

## Fall 3rd Year

- CGT 34600 - Digital Video And Audio
- PHIL 11400 - Global Moral Issues
- ENGL 42000 - Business Writing
- CGT VFX Selective - Credit Hours: 3.00
- Psychology Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- CGT 44600 - Post-Production And Special Effects For Computer Animation
- ENTR 31000 - Marketing And Management For New Ventures
- COM 31400 - Advanced Presentational Speaking
- Free Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

15 Credits

## Fall 4th Year

- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 44800 - Visual Effects - Capstone I
- ENTR 48000 - Entrepreneurship Capstone
- ENGL 42100 - Technical Writing
- 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
- CGT Globalization Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

12 Credits

## Notes

*Satisfies a University Core Requirement

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

2.0 Graduation GPA required for Bachelor of Science degree.

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

32 credit hours of 30000 or 40000 level Purdue courses for graduation

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Web Programming & Design, BS

# About the Program

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

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

From PHP and open source MySQL to the Microsoft and ASP environments, you will gain a broad spectrum of programming capabilities and concepts that will allow you to prosper and adapt in this constantly changing industry.

Web Programming and Design Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (41 credits)

### Required Major Courses (32 credits)

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11600 - Geometric Modeling For Visualization And Communication

- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 14100 - Internet Foundations Technologies And Development
- CGT 21500 - Computer Graphics Programming I
- CGT 25001 - Computer Graphics Professional Practices I
- CGT 25600 - Principles Of User Experience Design
- CGT 35300 - Principles Of Interactive And Dynamic Media
- CGT 35600 - Web Programming, Development And Data Integration
- CGT 41101 - Contemporary Problems In Applied Computer Graphics I
- CGT 41201 - Contemporary Problems In Applied Computer Graphics II
- CGT 45001 - Computer Graphics Professional Practices II
- CGT 45600 - Advanced Web Programming, Development And Data Integration
- Intercultural Requirement - Credit Hours: 0.00
- Humanities Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

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

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

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

- COM 11400 - Fundamentals Of Speech Communication *(satisfies Oral Communication for core)*
- ECON 21000 - Principles Of Economics *(satisfies Human Culture Behavior/Social Science for core)*

- ENGL 10600 - First-Year Composition *(satisfies Written Communication for core)*
  or
- ENGL 10800 - Accelerated First-Year Composition *(satisfies Written Communication 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 21800 - General Physics *(satisfies Science Selective for core)*
- PSY 12000 - Elementary Psychology *(satisfies Human Culture Behavioral/Social Science for core)*
- TECH 12000 - Design Thinking In Technology *(satisfies Information Literacy AND Science, Technology & Society Selective for core)*
- Human Cultures (satisfies Humanities for Core)- Credit Hours: 3.00
- Humanities Elective - Credit Hours: 6.00
- Science Selective (satisfies Science Selective for Core) - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00
- Management Selective - Credit Hours: 3.00
- CGT Global Selective - Credit Hours: 3.00
- Technical Electives - Credit Hours: 9.00

## Electives (15 credits)

- Free Electives - Credit Hours: 15.00

## Intercultural Requirement

- Complete Intercultural Development Inventory (IDI) Pre and Post Tests
- Complete Beliefs, Events, and Values Inventory (BEVI) Pre and Post Tests
- Complete Intercultural Knowledge and Effectiveness (IKE)
- Complete CGT Global Course, Faculty Lead Study Abroad, International Internship, or International Capstone/Collaborative Project

## Humanities Requirement

Complete 1 of the following:

- Participation in Computational Arts Circle
- Complete courses within major that have Humanities Integrated into their assignments
- Complete course within major that have partnered with Humanities Professor
- Complete 2 additional Humanities Courses which would complete the Cornerstone Requirement

## Professional Requirement

Complete 1 of the following

- Complete Internship
- Complete Co-op
- Employment during the academic year related to Major Field of Study
- Complete an in-class internship-like experience created by Major Field of Study
- Student Proposed Alternative:  must be commensurate with the expectations of Professional Requirement related to Major Field of Study

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Select here for additional lists.

## Program Requirements

### Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- TECH 12000 - Design Thinking In Technology *
- English Selective* - Credit Hours: 3.00
- MA 15800 - Precalculus- Functions And Trigonometry *

14 Credits

### Spring 1st Year

- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 14100 - Internet Foundations Technologies And Development
- COM 11400 - Fundamentals Of Speech Communication *
- PHYS 21800 - General Physics *
- MA 16010 - Applied Calculus I *

16 Credits

### Fall 2nd Year

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

15 Credits

## Spring 2nd Year

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

16 Credits

## Fall 3rd Year

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

15 Credits

## Spring 3rd Year

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

15 Credits

## Fall 4th Year

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

17 Credits

## Spring 4th Year

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

12 Credits

## Notes

*Satisfies a University Core Requirement

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

2.0 Graduation GPA required for Bachelor of Science degree.

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

32 Credit Hours of 30000 or 40000 level Purdue courses for graduation.

**For Supplemental CGT Information click here.**

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

## Minor

# Construction Graphics Minor

# 12 Credits Required

With access to the latest technology, the minor in construction graphics - building information modeling (BIM) will expose students to BIM in the architecture, engineering and construction (AEC) industry. Students who complete the minor will gain knowledge in current and emerging graphics theories and computer graphics technologies associated with design, documentation, modeling in construction.

## Requirements for the Minor

### Required Courses (12 credits)

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

## Notes

All courses in the minor must be taken for a grade. P/NP is not an option.

A grade of "C-" or better must be obtained in all BIM minor classes.

Only students pursuing four-year degrees are eligible for the BIM minor.

Other independent courses may be offered upon student request to the major professor in charge of BIM.

## Disclaimer

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

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

# Product Lifecycle Management Minor

# 11-12 Credits Required

A minor in product lifecycle management (PLM) will expose any Purdue major to manufacturing graphics expertise. Students who complete the minor will gain applied knowledge in current and emerging graphics theories and computer technologies associated with the design, documentation, and manufacture and support of products and related services.

## Requirements for the Minor

## Prerequisite Courses (2-3 credits)

One of the following prerequisite courses is required before enrolling in CGT 22600:

- CGT 11000 - Technical Graphics Communications
- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 16300 - Graphical Communication And Spatial Analysis
- CGT 16400 - Graphics For Civil Engineering And Construction
- An approved substitution

## Required Courses (6 credits)

CGT22600 is the pre-req for all upper-level courses.

- CGT 22600 - Introduction To Constraint-Based Modeling
- CGT 32600 - Graphics Standards For Product Definition

## Choose one (3 credits)

CGT22600 is the pre-req for all upper-level courses.

- CGT 42300 - Product Data Management
  or
- CGT 42600 - Industry Applications Of Simulation And Visualization

## Notes

- The PLM minor is open only to any Purdue University West Lafayette campus major.
- All courses in the minor must be taken for a grade. A grade of "C-" or better is required in all classes. (P/NP is not an option)
- Only students pursuing four-year degrees are eligible for the PLM minor.
- Other courses outside of the PLM minor offered by the CGT will not be available for enrollment for non-CGT majors who are accepted in the CGT/PLM minor.

## Disclaimer

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

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

# School of Engineering Technology

# Overview

In Purdue's engineering technology degree programs, students learn about -- and more important, practice -- designing, building, testing and refining in several engineering technology fields. From electrical to mechanical to manufacturing, class projects help you discover how to use the right materials and the right processes to help your project work efficiently and be attractive to consumers.

# Faculty

https://polytechnic.purdue.edu/schools/engineering-technology/directory

# Contact Information

**School of Engineering Technology**
Knoy Hall, Room 145
401 N. Grant St.
West Lafayette, IN 47907
**Phone**: 765.494.9099
**Email:** soet@purdue.edu

Contact an advisor

# Graduate Information

For Graduate Information please see Engineering Technology Graduate Program Information.

## Baccalaureate

## Audio Engineering Technology, BS

# About the Program

When you major in audio engineering technology at Purdue University, you'll learn to create sound by building a guitar or a pick-up. You will focus on designing, building, and testing a variety of technologies, such as microphone amplifiers, mixers and other signal processors, Bluetooth and other radio frequency channels, power amplifiers, and loud speakers. Then you will combine these audio elements to properly record, play, and reinforce sound in a public performance space.

Audio Engineering Technology Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (55 credits)

### Required Major Courses (55 credits)

- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications
- ECET 17700 - Data Acquisition And Systems Control
- ECET 17900 - Introduction To Digital Systems
- ECET 22700 - DC And Pulse Electronics ♦
- ECET 22900 - Concurrent Digital Systems
- ECET 27000 - Electronics Prototype Development And Construction
- ECET 27400 - Wireless Communications
- ECET 27700 - AC And Power Electronics
- ECET 27900 - Embedded Digital Systems ♦
- ECET 33700 - Continuous Systems Analysis And Design
- ECET 33900 - Digital Signal Processing
- ECET 37600 - Electrical Energy Systems
- ECET 38001 - Global Professional Issues In Engineering Technology
- ECET 38800 - Analog IC Applications
- ECET 42800 - Audio Electronics-Selected Topics
- ECET Selective (choose from list) - Credit Hours: 3.00
- Senior Capstone Selective I (choose from list) - Credit Hours: 3.00
- Senior Capstone Selective II (choose from list) - Credit Hours: 3.00

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

- CNIT 10500 - Introduction To C Programming
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- MET 49000 - Special Topics In MET
- PHYS 21800 - General Physics (satisfies Science for core)
- PHYS 21900 - General Physics II (satisfies Science for core)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy and Science, Technology & Society for core)
- THTR 16300 - Introduction To Sound Design And Technology ♦
- THTR 20100 - Theatre Appreciation (satisfies Human Cultures: Humanities for core)

- THTR 25300 - Survey Of Audio Production
  or
- THTR 26300 - Introduction To Sound Studios

- THTR 35300 - Theater Audio Techniques I

- THTR 36800 - Theatre Production II (2 for Theater Production Minor)
  or
- DANC 36800 - Dance Sound Design (2 for Theater Production Minor)

- TLI 33400 - Economic Analysis For Technology Systems
- Business Selective and General Education Selective (choose from list, with the requirement that the Human Cultures: Behavioral/Social Sciences category for core must be met by either the Business Selective or a General Education Selective) - Credit Hours: 6.00
- Communication Selectives (choose from list) - Credit Hours: 6.00
- Global/Intercultural Requirement - Credit Hours: 0.00
- Professional Requirement/Internship - Credit Hours: 0.00

## English Composition Selective (3 credits)

(satisfies Written Communication for core)

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

## Statistics Selective (3 credits)

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

## Advanced Theatre Sound Selective (3 credits)

- ECET 34900 - Advanced Digital Systems
  or
- THTR 36300 - Sound Design
  or
- THTR 56300 - Advanced Sound Design
  or
- THTR 56900 - Special Problems In Audio Production
  or
- THTR 59700 - Production And Design Seminar

## Free Elective (3 credits)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Degree Requirements

For supplemental information click here.

## Program Requirements

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

## Fall 1st Year

- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications

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

- CNIT 10500 - Introduction To C Programming
- MA 16010 - Applied Calculus I *
- TECH 12000 - Design Thinking In Technology *

### 16 Credits

## Spring 1st Year

- ECET 17700 - Data Acquisition And Systems Control

- ECET 17900 - Introduction To Digital Systems
- COM 11400 - Fundamentals Of Speech Communication *
- MA 16020 - Applied Calculus II *
- PHYS 21800 - General Physics *

16 Credits

## Fall 2nd Year

- ECET 22700 - DC And Pulse Electronics ♦
- ECET 22900 - Concurrent Digital Systems
- PHYS 21900 - General Physics II *
- THTR 16300 - Introduction To Sound Design And Technology ♦
- Communication Selective - Credit Hours: 3.00

15 Credits

## Spring 2nd Year

- ECET 27000 - Electronics Prototype Development And Construction
- ECET 27400 - Wireless Communications
- ECET 27700 - AC And Power Electronics
- THTR 20100 - Theatre Appreciation *
- Communication Selective - Credit Hours: 3.00

15 Credits

## Fall 3rd Year

- ECET 33700 - Continuous Systems Analysis And Design
- ECET 37600 - Electrical Energy Systems
- ECET 38001 - Global Professional Issues In Engineering Technology

- THTR 25300 - Survey Of Audio Production
  or
- THTR 26300 - Introduction To Sound Studios

- Business Selective - Credit Hours: 3.00 *

15 Credits

## Spring 3rd Year

- ECET 27900 - Embedded Digital Systems ♦
- ECET 38800 - Analog IC Applications
- MET 49000 - Special Topics In MET

- TLI 33400 - Economic Analysis For Technology Systems

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

- THTR 36800 - Theatre Production II
  or
- DANC 36800 - Dance Sound Design

16 Credits

## Fall 4th Year

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

15 Credits

## Spring 4th Year

- ECET 42800 - Audio Electronics-Selected Topics
- Senior Capstone Selective II - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Advanced Theater Sound Selective - Credit Hours: 3.00
- Global/Intercultural Requirement - Credit Hours: 0.00
- Professional Requirement/Internship - Credit Hours: 0.00

12 Credits

## Notes

*Fulfills University Core Curriculum requirement.

**Human Cultures Behavioral/Social Science for University Core may be selected to satisfy either the Business Selective or a General Education Selective requirement.

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

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

Senior Capstone Selective I/II and 12 hours of ECET Selectives must be taken at the Purdue University location conferring the degree.

32 credit hours of 300-level or higher courses must be completed at Purdue University.

Global / Intercultural Requirement (ungraded) must be completed.

Professional Requirement (ungraded) must be completed.

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Automation and Systems Integration Engineering Technology, BS

# About the Program

This is one of three majors offered for students who seek to contribute at the interface between manufacturing, electrical, mechanical, and computing areas in primarily industrial environments.

When you major in automation and systems integration engineering technology, you will address what is needed to move product concepts into efficient, automated production. The curriculum focuses on the entire design and manufacturing process; you'll understand how each team member benefits the system.

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

## Degree Requirements

# 120 Credits Required

# Departmental/Program Major Courses (120 credits)

## Required Major Courses (59 credits)

- ENGT 18000 - Engineering Technology Foundations ♦
- ENGT 18100 - Engineering Technology Applications
- MET 10200 - Production Design And Specifications
- MET 11100 - Applied Statics
- MET 11300 - Mechanics Applications
- MET 23000 - Fluid Power
- MET 24500 - Manufacturing Systems
- MET 28400 - Introduction To Industrial Controls
- MFET 24800 - Introduction To Robotics
- MFET 34400 - Automated Manufacturing Processes
- MFET 37400 - Manufacturing Integration I
- Materials and Processes Selective
- Continuous Control Selective - Credit Hours: 3.00

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

- ECET 33700 - Continuous Systems Analysis And Design
- Manufacturing Selective - Credit Hours: 3.00
- Manufacturing/Controls/Graphic Selective - Credit Hours: 3.00
- CNIT or CS Selective (MET 16400, CNIT 17500, CS 15800, or CS 15900)
- Materials and Processes Selective
- CNIT 10500 - Introduction To C Programming
- Senior Capstone Selective I - Credit Hours: 3.00
- Senior Capstone Selective II - Credit Hours: 3.00

# Other Departmental/Program Course Requirements (57 credits)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- COM 32000 - Small Group Communication
- ENGL 42100 - Technical Writing
- TLI 33400 - Economic Analysis For Technology Systems
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- ECET 22400 - Electronic Systems ♦
- ECET 38001 - Global Professional Issues In Engineering Technology
- CHM 11100 - General Chemistry
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy and Science, Technology & Society for core)
- Physics Selective (choose from PHYS 21800, PHYS 22000, PHYS 17200) (satisfies Science for core)
- Science Selective (satisfies Science for core) - Credit Hours: 3.00

- Freshman Composition Selective (satisfies Written Communication for core) - Credit Hours: 3.00
- Human Cultures: Humanities Foundation Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Human Cultures: Behavior/Social Sciences Foundation Selective (satisfies Human Cultures: Behavioral Sciences for core) - Credit Hours: 3.00
- Humanities/Social Science Elective - Credit Hours: 3.00
- CGT Selective (choose from CGT 11000, CGT 16300, or IT 10500) - Credit Hours: 2.00
- Statistics/Quality Selective (choose between STAT 30100 or TLI 31600) - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Intercultural Requirement - Credit Hours: 0.00
- Professional Requirement - Credit Hours: 0.00

## Free Electives (4 credits)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

### Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirement Lists

### Materials and Processes Selectives

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

### Freshman Composition Selective

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

## Computer Graphics Selective

- CGT 11000 - Technical Graphics Communications
- CGT 16300 - Graphical Communication And Spatial Analysis
- IT 10500 - Industrial Technology Introduction To Design

## CNIT or CS Selective

- CNIT 15500 - Introduction to Object-Oriented Programming
- CNIT 17500 - Visual Programming
- CS 15800 - C Programming
- CS 15900 - Programming Applications For Engineers
- MET 16400 - Computing In Engineering Technology

## Physics Selective

- PHYS 17200 - Modern Mechanics
- PHYS 21800 - General Physics
- PHYS 22000 - General Physics

## Science Selective

- BIOL 11000 - Fundamentals Of Biology I
- BIOL 20300 - Human Anatomy And Physiology
- CHM 11200 - General Chemistry
- CHM 11600 - General Chemistry
- PHYS 21900 - General Physics II
- PHYS 22100 - General Physics
- PHYS 24100 - Electricity And Optics

## Statistics or Quality Selective

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

## Technical Elective

All Polytechnic Institute courses at the 3xxxx level or above that are not required for the major, plus FNR 30110, OLS 28400, and MGMT 45500.

## Graphics Selective

- CGT 22600 - Introduction To Constraint-Based Modeling
- MET 30200 - CAD In The Enterprise

## 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
- IT 38500 - Industrial Ergonomics
- IT 43400 - Global Transportation And Logistics Management
- IT 44200 - Production Planning
- IT 44600 - Six Sigma Quality
- IT 48300 - Facility Design For Lean Manufacturing
- MET 30200 - CAD In The Enterprise
- MET 45100 - Manufacturing Quality Control
- MFET 29200 - Projects In Automation, Robotics And Mechatronics
- MFET 34800 - Advanced Industrial Robotics
- MFET 39200 - Advanced Projects In Automation, Robotics, And Mechatronics
- MFET 44600 - Advanced Manufacturing Operations
- TLI 33620 - Total Productive Maintenance
- TLI 44275 - Global Transportation And Logistics Management

## Controls Selective

- ECET 32700 - Instrumentation And Data Acquisition Design
- 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

## Continuous Control 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

## Senior Capstone Selective I

- ECET 43000 - Electrical And Electronic Product And Program Management
- ECET 43100 - International Capstone Project Planning And Design
- MET 40100 - Capstone Projects I
- MFET 48000 - Project Planning For Integration
- ENGT 40500 - Entrepreneurial Capstone I

## Senior Capstone Selective II

- ECET 46000 - Project Design And Development
- ECET 46100 - International Capstone Project Execution
- MET 40200 - Capstone Projects II
- MFET 48100 - Integration Of Manufacturing Systems
- ENGT 40600 - Entrepreneurial Capstone II

## 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 | Industry-sponsored senior capstone |
| Automatic | EPICS courses, minimum of two |
| Automatic | Lab Assistant (satisfactory completion of a minimum of one lab division for one term; e.g., ECET 29900 or MET 39200) |
| Advisor | Any approved internship (assuming student and/or employer provide documentation) |
| Advisor | Military service (ROTC, reservist, active duty, veteran) |
| Faculty | Other undergraduate research experiences (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 |

## Intercultural Requirement

All students must complete the School of Engineering Technology (Polytechnic) Growth Plan for Global Awareness and Intercultural Competency at the Developmental Level (see below). Students who are interested in further developing their Global Awareness and Intercultural Competency are encouraged to complete the requirement at the Emerging Level or the Proficient Level (see advisor for more information).

Polytechnic Growth Plans for Global Awareness & Intercultural Competency

| Intercultural Growth Plan #1 | Developmental Level Competency |
|---|---|
| Assessment | __ Complete the Pre- and Post-Intercultural Development Inventory Assessments (1st year and 4th year)<br><br>__ Complete the pre- and post- BEVI (1st and 4th years) |
| | __ Complete one of the following Intercultural Knowledge and Effectiveness components below: (This list will be reviewed and updated each year)<br><br>· Crosswalk Commons (residential living Experience for a minimum of one semester)<br><br>· Serve as a BGRI Program leader<br><br>· PUPIL (Purdue University Passport to Intercultural Learning) (Obtain at least two badges)<br><br>· Participate in two (2) Boiler Out Program Activities<br><br>· Participate in Host-a-Boiler |
| | Complete one of the following:<br><br>· An international project or collaborative project, or<br><br>· An international internship, or<br><br>· A Faculty-led Study Abroad program, or<br><br>· Three credit hours of courses** from the Polytechnic list of approved of recommended Global/Intercultural courses. ***Must be in a category other than Increasing Self-awareness* |

## Degree Requirements

## Fall 1st Year

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

16 Credits

## Spring 1st Year

- MA 16020 - Applied Calculus II
- MET 11100 - Applied Statics
- Humanities Foundation Selective - Credit Hours: 3.00 *
- Materials and Processes Selective - Credit Hours: 3.00
- TECH 12000 - Design Thinking In Technology *

15 Credits

## Fall 2nd Year

- COM 11400 - Fundamentals Of Speech Communication *
- MET 11300 - Mechanics Applications
- ECET 22400 - Electronic Systems ♦
- CHM 11100 - General Chemistry *
- Behavioral/Social Science Foundation Selective - Credit Hours: 3.00 *
- Computer Graphics Selective - Credit Hours: 2.00

15 Credits

## Spring 2nd Year

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

14 Credits

## Fall 3rd Year

- MET 23000 - Fluid Power
- MFET 34400 - Automated Manufacturing Processes
- ENGL 42100 - Technical Writing
- ECET 33700 - Continuous Systems Analysis And Design
- Science Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- MFET 37400 - Manufacturing Integration I
- MFET 24800 - Introduction To Robotics
- CNIT or CS Selective - Credit Hours: 3.00
- Manufacturing Selective - Credit Hours: 3.00
- Statistics or Quality Selective - Credit Hours: 3.00

15 Credits

## Fall 4th Year

- TLI 33400 - Economic Analysis For Technology Systems
- Manufacturing/Controls/Graphics Selective - Credit Hours: 3.00
- Continuous Controls Selective - Credit Hours: 3.00
- Senior Capstone Selective I - Credit Hours: 3.00
- ECET 38001 - Global Professional Issues In Engineering Technology

15 Credits

## Spring 4th Year

- COM 32000 - Small Group Communication
- Humanities/Social Science Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

- Senior Capstone Selective II - Credit Hours: 3.00

15 Credits

## Notes

*Fulfills University core.

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.

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Electrical Engineering Technology, BS

# About the Program

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

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

Electrical Engineering Technology Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (55 credits)

### Required Major Courses (55 credits)

- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications
- ECET 17700 - Data Acquisition And Systems Control
- ECET 17900 - Introduction To Digital Systems
- ECET 22700 - DC And Pulse Electronics ♦
- ECET 22900 - Concurrent Digital Systems
- ECET 27000 - Electronics Prototype Development And Construction
- ECET 27400 - Wireless Communications
- ECET 27700 - AC And Power Electronics
- ECET 27900 - Embedded Digital Systems ♦
- ECET 37600 - Electrical Energy Systems
- ECET 38001 - Global Professional Issues In Engineering Technology
- ECET Advanced Analysis Selective (choose from ECET 33700 or ECET 33900) - Credit Hours: 3.00
- ECET Selectives (choose from list) - Credit Hours: 12.00
- Senior Capstone Selective I (choose from list) - Credit Hours: 3.00
- Senior Capstone Selective II (choose from list) - Credit Hours: 3.00

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

- CNIT 10500 - Introduction To C Programming
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- PHYS 21800 - General Physics (satisfies Science for core)
- PHYS 21900 - General Physics II (satisfies Science for core)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy and Science, Technology & Society for core)
- TLI 33400 - Economic Analysis For Technology Systems
- Business Selective and General Education Selective (choose from list, with the requirement that the Human Cultures: Behavioral/Social Sciences category for core must be met by either the Business Selective or a General Education Selective) - Credit Hours: 6.00
- General Education Human Cultures: Humanities Selective (choose from list) - Credit Hours: 3.00
- General Education Selectives (choose from list) - Credit Hours: 6.00
- Communication Selectives (choose from list) - Credit Hours: 6.00

- Technical Selectives (choose from list: 9 additional credit hours of *technical courses*, including additional ECET courses) - Credit Hours 9.00
- Global/Intercultural Requirement - 0.0 Credit Hours
- Professional Requirement/Internship - 0.0 Credit Hours

## English Composition Selective (3 credits)

(satisfies Written Communication for core)

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

## Statistics Selective (3 credits)

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

## Free Electives (3 credits)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Program Requirements

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

## Fall 1st Year

- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications

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

- CNIT 10500 - Introduction To C Programming
- MA 16010 - Applied Calculus I *
- TECH 12000 - Design Thinking In Technology *

16 Credits

## Spring 1st Year

- ECET 17700 - Data Acquisition And Systems Control
- ECET 17900 - Introduction To Digital Systems
- COM 11400 - Fundamentals Of Speech Communication
- MA 16020 - Applied Calculus II *
- PHYS 21800 - General Physics *

16 Credits

## Fall 2nd Year

- ECET 22700 - DC And Pulse Electronics ♦
- ECET 22900 - Concurrent Digital Systems
- PHYS 21900 - General Physics II *
- General Education Selective - Credit Hours: 3.00 *
- Communication Selective - Credit Hours: 3.00

16 Credits

## Spring 2nd Year

- ECET 27000 - Electronics Prototype Development And Construction
- ECET 27400 - Wireless Communications

- ECET 27700 - AC And Power Electronics
  or
- ECET 27900 - Embedded Digital Systems

- General Education Selective - Credit Hours: 3.00 **
- Communication Selective - Credit Hours: 3.00

15 Credits

## Fall 3rd Year

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

- ECET 37600 - Electrical Energy Systems
- ECET 38001 - Global Professional Issues In Engineering Technology

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

- ECET Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- ECET 27700 - AC And Power Electronics
  or
- ECET 27900 - Embedded Digital Systems ♦

- TLI 33400 - Economic Analysis For Technology Systems
- ECET Selective - Credit Hours: 3.00
- Business Selective - Credit Hours: 3.00 **
- Technical Selective - Credit Hours: 3.00

15 Credits

## Fall 4th Year

- Senior Capstone Selective I - 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 Selective II - Credit Hours: 3.00
- ECET Selective - Credit Hours: 3.00
- General Education Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Global/Intercultural Requirement - Credit Hours: 0.00
- Professional Requirement/Internship - Credit Hours: 0.00

12 Credits

## Notes

* Fulfills University Core Curriculum requirement.

** 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 Free Electives (up to 15 hrs).

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

Senior Capstone Selective I/II and 12 hours of ECET Selectives must be taken at the Purdue University location conferring the degree.

32 credit hours of 300-level or higher courses must be completed at Purdue University.

Global / Intercultural Requirement (ungraded) must be completed.

Professional Requirement (ungraded) must be completed.

Choose from list: Refer to the Supplemental Information For Electrical Engineering Technology (EETC) Fall 2017 Plan of Study sheet for a complete list of selectives and requirements (including ungraded requirements)

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Mechanical Engineering Technology, BS

# About the Program

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

Mechanical Engineering Technology Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (120 credits)

## Required Major Courses (59 credits)

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

- MET 34600 - Advanced Materials In Manufacturing

## MET Selectives (15 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)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- COM 32000 - Small Group Communication
- ENGL 42100 - Technical Writing
- TLI 33400 - Economic Analysis For Technology Systems
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- ECET 22400 - Electronic Systems
- CHM 11100 - General Chemistry
- 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)
- Freshman Composition Selective (satisfies Written Communication for core) - Credit Hours: 3.00
- Computer Graphics Technology Selective - Credit Hours: 2.00
- Economics/Finance Selective - Credit Hours 3.00
- Programming Selective - Credit Hours 3.00
- 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
- Professional Requirement - Credit Hours: 0.00
- Intercultural Requirement - Credit Hours: 0.00

## University Core Requirements

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

- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Select here for additional lists.

## Program Requirements

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

## Fall 1st Year

- MA 16010 - Applied Calculus I *
- COM 11400 - Fundamentals Of Speech Communication *
- MET 14400 - Materials And Processes II
- ENGT 18000 - Engineering Technology Foundations
- ENGT 18100 - Engineering Technology Applications
- Computer Graphics Technology Selective - Credit Hours: 2.00

### 15 Credits

## Spring 1st Year

- TECH 12000 - Design Thinking In Technology *
- MET 11100 - Applied Statics
- MET 14300 - Materials And Processes I
- MA 16020 - Applied Calculus II
- Freshman Composition Selective - Credit Hours: 3.00 *

### 15 Credits

## Fall 2nd Year

- ECET 22400 - Electronic Systems

- Programming Selective - Credit Hours: 3.00
- MET 21100 - Applied Strength Of Materials
- PHYS 22000 - General Physics *

14 Credits

## Spring 2nd Year

- MET 21300 - Dynamics
- Humanities Selective - Credit Hours: 3.00 *
- MET 10200 - Production Design And Specifications
- MET 28400 - Introduction To Industrial Controls
- PHYS 22100 - General Physics *

16 Credits

## Fall 3rd Year

- CHM 11100 - General Chemistry
- MET 23000 - Fluid Power
- MET 22000 - Heat And Power
- MET 24500 - Manufacturing Systems
- STAT 30100 - Elementary Statistical Methods

15 Credits

## Spring 3rd Year

- MET 32000 - Applied Thermodynamics
- Economics/Finance Selective - Credit Hours: 3.00
- MET 34600 - Advanced Materials In Manufacturing
- Global/Professional Selective - Credit Hours: 3.00
- Mechanics Selective - Credit Hours: 3.00

15 Credits

## Fall 4th Year

- TLI 33400 - Economic Analysis For Technology Systems
- MET Capstone Selective I - Credit Hours: 3.00
- MET 31300 - Applied Fluid Mechanics
- Technical/Management (TECH/MGMT) Selective - Credit Hours: 3.00
- ENGL 42100 - Technical Writing

15 Credits

## Spring 4th Year

- MET Capstone Selective II - Credit Hours: 3.00
- MET Elective or approved Focus Area elective - Credit Hours: 3.00
- Technical Selective or approved Focus Area elective - Credit Hours: 3.00
- Behavioral Social Science Selective - Credit Hours: 3.00
- COM 32000 - Small Group Communication
- Professional Requirement - Credit Hours: 0.00
- Intercultural Requirement - Credit Hours: 0.00

15 Credits

## Notes

1. A 2.0 Graduation GPA are required for the Bachelor 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.

4. 32 credit hours of 300-level or higher courses must be completed at Purdue University.

5. Complete a Professional Requirement.

6. Complete an Intercultural Requirement.

## Degree Requirements

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

Degree Works is the knowledge source for specific requirements and completion.

## 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 | Industry-sponsored senior capstone |
| Automatic | EPICS courses, minimum of two |
| Automatic | Lab Assistant (satisfactory completion of a minimum of one lab division for one term; e.g., ECET 29900 or MET 39200) |
| Advisor | Any approved internship (assuming student and/or employer provide documentation) |
| Advisor | Military service (ROTC, reservist, active duty, veteran) |
| Faculty | Other undergraduate research experiences (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 |

# Intercultural Requirement

All students must complete the School of Engineering Technology (Polytechnic) Growth Plan for Global Awareness and Intercultural Competency at the Developmental Level (see below). Students who are interested in further developing their Global Awareness and Intercultural Competency are encouraged to complete the requirement at the Emerging Level or the Proficient Level (see advisor for more information).

Polytechnic Growth Plans for Global Awareness & Intercultural Competency

| Intercultural Growth Plan #1 | Developmental Level Competency |
|---|---|
| Assessment | __ Complete the Pre- and Post-Intercultural Development Inventory Assessments (1st year and 4th year)<br><br>__ Complete the pre- and post- BEVI (1st and 4th years) |
| | __ Complete one of the following Intercultural Knowledge and Effectiveness components below: (This list will be reviewed and updated each year) |

| | |
|---|---|
| | · Crosswalk Commons (residential living Experience for a minimum of one semester)<br>· Serve as a BGRI Program leader<br>· PUPIL (Purdue University Passport to Intercultural Learning) (Obtain at least two badges)<br>· Participate in two (2) Boiler Out Program Activities<br>· Participate in Host-a-Boiler |
| | Complete one of the following:<br>· An international project or collaborative project, or<br>· An international internship, or<br>· A Faculty-led Study Abroad program, or<br>· Three credit hours of courses** from the Polytechnic list of approved of recommended Global/Intercultural courses. ***Must be in a category other than Increasing Self-awareness* |

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Mechatronics Engineering Technology, BS

# About the Program

This is one of three majors offered for students who seek to contribute at the interface between manufacturing, electrical, mechanical, and computing areas in primarily industrial environments. When you major in mechatronics engineering technology,

you will focus on the development of the electromechanical products that are ubiquitous in modern life, dealing with interconnections that allow electronic control of mechanical, pneumatic, and hydraulic systems.

Mechatronics Engineering Technology Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (120 credits)

### Required Major Courses (59 credits)

- ENGT 18000 - Engineering Technology Foundations ♦
- ENGT 18100 - Engineering Technology Applications
- MET 10200 - Production Design And Specifications
- MET 11100 - Applied Statics
- MET 11300 - Mechanics Applications
- MET 23000 - Fluid Power
- MET 24500 - Manufacturing Systems
- MET 28400 - Introduction To Industrial Controls
- MET 38200 - Controls And Instrumentation For Automation
- MFET 34400 - Automated Manufacturing Processes
- MFET 37400 - Manufacturing Integration I
- 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
- ECET 43000 - Electrical And Electronic Product And Program Management
- ECET 46000 - Project Design And Development
- CNIT 10500 - Introduction To C Programming ♦
- Manufacturing Selective - Credit Hours: 3.00
- Mechatronics Selective - Credit Hours: 3.00
- Controls Selective - Credit Hours: 3.00
- Materials and Processes Selective - Credit Hours: 3.00

### Other Departmental/Program Course Requirements (57 credits)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- COM 32000 - Small Group Communication
- ENGL 42100 - Technical Writing

- TLI 33400 - Economic Analysis For Technology Systems
  or
- IET 45100 - Monetary Analysis For Industrial Decisions

- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- ECET 22400 - Electronic Systems ♦
- ECET 38001 - Global Professional Issues In Engineering Technology
- CHM 11100 - General Chemistry
  (satisfies Science for core)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy and Science, Technology & Society for core)
- Science Selective - Credit Hours: 3.00
- Freshmen Composition Selective (satisfies Written Communication for core) - Credit Hours: 3.00
- Human Cultures: Humanities Foundation Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Human Cultures: Behavior/Social Sciences Foundation Selective (satisfies Human Cultures: Behavioral Sciences for core) - Credit Hours: 3.00
- Humanities/Social Science Elective - Credit Hours: 3.00
- Physics Selective (satisfies Science for core) - Credit Hours: 4.00
- Computer Graphics Selective - Credit Hours: 2.00
- Statistics/Quality Selective - Credit Hours: 3.00
- Professional Requirement - Credit Hours: 0.00
- Intercultural Requirement - Credit Hours: 0.00

## Free Electives (4 credits)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

### Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Select here for additional lists.

## Program Requirements

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

### Fall 1st Year

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

#### 16 Credits

### Spring 1st Year

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

#### 15 Credits

### Fall 2nd Year

- ECET 17900 - Introduction To Digital Systems
- CHM 11100 - General Chemistry *
- COM 11400 - Fundamentals Of Speech Communication *
- MET 28400 - Introduction To Industrial Controls
- Computer Graphics Selective - Credit Hours: 2.00
- MET 11300 - Mechanics Applications

#### 15 Credits

### Spring 2nd Year

- MET 10200 - Production Design And Specifications

- MET 24500 - Manufacturing Systems
- ECET 27900 - Embedded Digital Systems
- Physics Selective - Credit Hours: 4.00 *
- Behavioral/Social Science Foundation Selective - Credit Hours: 3.00 *

16 Credits

## Fall 3rd Year

- MET 23000 - Fluid Power
- MFET 34400 - Automated Manufacturing Processes
- ENGL 42100 - Technical Writing
- ECET 33700 - Continuous Systems Analysis And Design
- Science Selective - Credit Hours: 3.00 *

15 Credits

## Spring 3rd Year

- MFET 37400 - Manufacturing Integration I
- ECET 38001 - Global Professional Issues In Engineering Technology
- Statistics or Quality Selective - Credit Hours: 3.00
- Manufacturing Selective - Credit Hours: 3.00
- ECET 32700 - Instrumentation And Data Acquisition Design

15 Credits

## Fall 4th Year

- ECET 43000 - Electrical And Electronic Product And Program Management
- COM 32000 - Small Group Communication
- Mechatronics Selective - Credit Hours: 3.00
- Controls Selective - Credit Hours: 3.00
- TLI 33400 - Economic Analysis For Technology Systems

15 Credits

## Spring 4th Year

- ECET 46000 - Project Design And Development
- Humanities/Social Science Elective - Credit Hours: 3.00
- MET 38200 - Controls And Instrumentation For Automation
- Free Elective - Credit Hours: 4.00

13 Credits

## Notes

*Fulfills University core.

A 2.0 Graduation GPA are required for the Bachelor of Science degree.

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

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

32 credit hours of 300-level or higher courses must be completed at Purdue University.

Complete a Professional Requirement.

Complete an Intercultural Requirement.

"D-" or better required in all major courses

## 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. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Robotics Engineering Technology, BS

# About the Program

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

Robotics Engineering Technology Website

## Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (59 credits)

### Required Major Courses (59 credits)

- ENGT 18000 - Engineering Technology Foundations ♦
- ENGT 18100 - Engineering Technology Applications
- Manufacturing Selective - Credit Hours: 3.00
- MET 10200 - Production Design And Specifications
- MET 11100 - Applied Statics
- MET 11300 - Mechanics Applications
- Materials and Processes Selective - Credit Hours: 3.00
- MET 23000 - Fluid Power
- MET 24500 - Manufacturing Systems
- MET 28400 - Introduction To Industrial Controls
- MFET 24800 - Introduction To Robotics
- MFET 34400 - Automated Manufacturing Processes
- MFET 37400 - Manufacturing Integration I
- CNIT 10500 - Introduction To C Programming ♦

ROET Courses (21 credits)

- ECET 32700 - Instrumentation And Data Acquisition Design
- ECET 33700 - Continuous Systems Analysis And Design
- ECET 43000 - Electrical And Electronic Product And Program Management
- ECET 46000 - Project Design And Development
- MFET 34800 - Advanced Industrial Robotics
- Mechatronics/Controls Selective - Credit Hours: 3.00
- Manufacturing/Controls Selective - Credit Hours: 3.00

## Other Departmental/Program Course Requirements (57 credits)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- COM 32000 - Small Group Communication
- ENGL 42100 - Technical Writing
- TLI 33400 - Economic Analysis For Technology Systems
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- ECET 22400 - Electronic Systems ♦
- ECET 38001 - Global Professional Issues In Engineering Technology
- CHM 11100 - General Chemistry (satisfies Science for Core)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy and Science, Technology & Society for core)
- Science Selective - Credit Hours: 3.00
- Freshman Composition Selective (satisfies Written Communication for core) - Credit Hours: 3.00
- Human Cultures: Humanities Foundation Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Human Cultures: Behavior/Social Sciences Foundation Selective (satisfies Human Cultures: Behavioral Sciences for core) - Credit Hours: 3.00
- Humanities/Social Science Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Computer Graphics Selective - Credit Hours: 2.00
- Physics Selective (satisfies Science for Core) - Credit Hours: 4.00
- Statistics/Quality Selective - Credit Hours: 3.00
- Professional Selective - Credit Hours: 0.00
- Intercultural Requirement - Credit Hours: 0.00

## Free Electives (4 credits)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Select here for additional lists.

## Program Requirements

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

### Fall 1st Year

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

#### 16 Credits

### Spring 1st Year

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

#### 15 Credits

### Fall 2nd Year

- COM 11400 - Fundamentals Of Speech Communication *
- ECET 33700 - Continuous Systems Analysis And Design
- MET 11300 - Mechanics Applications
- MET 28400 - Introduction To Industrial Controls Behavioral/Social Science Foundation Selective - Credit Hours: 3.00 *
- Computer Graphics Selective - Credit Hours: 2.00

#### 15 Credits

## Spring 2nd Year

- MET 10200 - Production Design And Specifications
- MET 24500 - Manufacturing Systems
- MFET 24800 - Introduction To Robotics
- Physics Selective - Credit Hours: 4.00 *
- Free Elective - Credit Hours: 3.00

16 Credits

## Fall 3rd Year

- MET 23000 - Fluid Power
- MFET 34400 - Automated Manufacturing Processes
- MFET 34800 - Advanced Industrial Robotics
- CHM 11100 - General Chemistry
- Statistics or Quality Selective - Credit Hours: 3.00

15 Credits

## Spring 3rd Year

- ECET 32700 - Instrumentation And Data Acquisition Design
- ECET 38001 - Global Professional Issues In Engineering Technology
- Manufacturing Selective - Credit Hours: 3.00
- MFET 37400 - Manufacturing Integration I
- Science Selective - Credit Hours: 3.00 *

15 Credits

## Fall 4th Year

- COM 32000 - Small Group Communication
- ECET 43000 - Electrical And Electronic Product And Program Management
- ENGL 42100 - Technical Writing
- TLI 33400 - Economic Analysis For Technology Systems
- Mechatronics/Controls Selective - Credit Hours: 3.00

15 Credits

## Spring 4th Year

- ECET 46000 - Project Design And Development
- Technical Elective - Credit Hours: 3.00
- Manufacturing/Controls Selective - Credit Hours: 3.00
- Humanities/Social Science Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 1.00
- Professional Selective - Credit Hours: 0.00
- Intercultural Requirement - Credit Hours: 0.00

13 Credits

## Notes

*Fulfills University core.

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

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

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

32 credit hours of 300-level or higher courses must be completed at Purdue University.

Complete a Professional Requirement.

Complete an Intercultural Requirement.

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

## **Minor**

# Electrical Engineering Technology Minor

# 15 Credits Required

The EET minor can be attached to any Purdue University major that will accommodate or allow it. It is not available for students earning degrees in Electrical Engineering Technology and Audio Engineering Technology.

## Requirements for the Minor

## Required Courses (15 credits)

- ECET 17700 - Data Acquisition And Systems Control
  or
- ECET 22400 - Electronic Systems
  or
- ECE 20100 - Linear Circuit Analysis I
  and
- ECET 20700 - AC Electronics Circuit Analysis

- ECET 17900 - Introduction To Digital Systems
- ECET 22700 - DC And Pulse Electronics

- ECET 27700 - AC And Power Electronics
  or
- ECET 27900 - Embedded Digital Systems

  **One additional lab-based ECET course at the 200-level or higher.**
  (Approved substitution for additional ECET course: MET 28400. ECET 22400 cannot be applied to this requirement.)

## Prerequisite Information

A C programming course is a pre-requisite to ECET 17900. C programming courses at Purdue include:

- CNIT 10500 - Introduction To C Programming
- CNIT 15501 - Introduction To Software Development Concepts
- CS 15800 - C Programming
- CS 15900 - Programming Applications For Engineers
- CS 24000 - Programming In C

## Note

EET minors must earn an overall GPA of 2.0 or better in courses on the minor.

No course may be taken pass/fail.

Transfer credit, course substitutions and credit by exam limited to three (3) credit hours.

At least 12 credit hours of lab-based ECET courses must be taken at Purdue University.

Course requisites must be met.

## Disclaimer

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

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

# Division of Military Science and Technology

The Division of Military Science and Technology in the Purdue Polytechnic Institute was approved by the Purdue University Board of Trustees July 18, 2014.

The division is the academic and administrative home to the three ROTC programs on campus.

ROTC program web sites:
Army ROTC
Air Force ROTC
Naval ROTC

## Minor

## Military Science and Leadership Minor

# 15 Credits Required

## Requirements for the Minor

### Required Courses (15 credits)

- MSL 30100 - Leadership And Problem Solving
- MSL 30200 - Leadership And Ethics
- MSL 40100 - Leadership And Management
- MSL 40200 - Officership
- Military History/Policy Selective - Credit Hours: 3.0

### Military History/Policy Selective

- HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
- HIST 35100 - The Second World War
- HIST 35500 - History Of American Military Affairs
- HIST 43900 - Communist China
- MSL 35000 - American Military History And Leadership
- PHIL 23100 - Religions Of The West
- POL 23100 - Introduction To United States Foreign Policy
- POL 23700 - Modern Weapons And International Relations
- POL 43900 - United States Foreign Policy Making

## Notes

All courses must have a grade of a "C" or higher.

- MSL 49000 Directed Studies in Military Science may substitute for any required MSL course with department head approval.
- An alternative course may be used for the Military History/Policy Selective with department head approval.

## Disclaimer

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

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

# Naval Science Minor

# 13 Credits Required

## Requirements for the Minor

### Required Courses (13 credits)

- NS 11000 - Introduction To Naval Science
- NS 21300 - Sea Power And Maritime Affairs
- NS 21400 - Fundamentals Of Leadership
- NS 41300 - Naval Leadership, Management, And Ethics
- Naval Science Selective - Credit Hours: 3.0

## Naval Science Selectives

- NS 21200 - Naval Weapons Systems
- NS 31000 - Navigation
- NS 31100 - Naval Operations
- NS 33000 - Evolution Of Warfare
- NS 35000 - Naval Ship Systems
- NS 44000 - Amphibious Warfare And Leadership

## Note

All courses must have a grade of a "C" or higher.

## Disclaimer

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

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

# Department of Technology Leadership and Innovation

# Overview

The Department of Technology Leadership & Innovation prepares students to lead the development and successful introduction of high-tech solutions in business, industry, and the classroom. Faculty members are experts in helping organizations improve, and their research reflects the latest in helpful solutions. From teaching tomorrow's teachers to understanding the nuances in each technological challenge, the department focuses on improving and shaping the future of technology and its uses.

# Faculty

https://polytechnic.purdue.edu/departments/technology-leadership-innovation/directory

# Contact Information

**Technology Leadership & Innovation Department**
Young Hall
155 S. Grant St.
West Lafayette, IN 47907
**Phone:** 765.494.5599
**Email:** tliinfo@purdue.edu

# Graduate Information

For Graduate Information please see Technology Leadership and Innovation Graduate Program Information.

## Baccalaureate

## Engineering/Technology Teacher Education, BS

# About the Program

Every day, people with specialized knowledge share that knowledge with others, as teachers, trainers, consultants and more. With a national push to increase interest in science, technology, engineering, and math (STEM), you can help spread your knowledge too. By reaching students in middle school and high school, you will become a important part of the STEM education pipeline, providing inspiration to future STEM professionals as they are developing.

Engineering/Technology Teacher Education Website

### Degree Requirements

# 120 Credits Required

### Major Required Courses (45 credits)

2.5 ETTE Core GPA required for Bachelor of Science degree, courses listed below.

- TLI 16100 - Prototyping In Engineering/Technology Education
  or
- IT 11100 - Prototyping In Engineering/Technology Education

- TLI 26200 - Foundations Of Integrated STEM Education •
  or
- IT 27200 - Gateway To Engineering/Technology Teacher Education •

- TLI 26500 - Teaching The TE Of STEM •
  or
- IT 27500 - Teaching The T & E Of STEM •

- TLI 36100 - Engineering And Technology Education Instructional Planning And Evaluation •
  or
- IT 37100 - Instructional Planning And Evaluation •

- TLI 36700 - Teaching Design And Innovation I •
  or
- IT 37700 - Teaching Design And Innovation I •

- TLI 46000 - Teaching Design And Innovation II •
  or
- IT 47000 - Teaching Design And Innovation II •

- TLI 46100 - Engineering/Technology Teacher Lab Planning •
  or
- IT 47100 - Managing The Technology Education Laboratory •

- TLI 46200 - Methods Of Teaching Engineering/Technology Education •
  or
- IT 47200 - Methods Of Teaching Technology Education •

- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy and Science Technology & Society Selective for core)
- CGT 11000 - Technical Graphics Communications
- ECET 22400 - Electronic Systems

## Technical Electives (12 credits)

- Technical Electives[6] (See Supplemental Information) - Credit Hours: 3.00
- Technical Electives[6] (See Supplemental Information) - Credit Hours: 3.00
- Technical Electives[6] (See Supplemental Information) - Credit Hours: 3.00
- Technical Electives[6] (See Supplemental Information) - Credit Hours: 3.00

## Professional Education Requirements (37 credits)

3.0 Prof Ed GPA required for Bachelor of Science degree, with each class at least a C- or higher, courses listed below plus the above TLI courses indicated with this symbol •

- EDCI 27000 - Introduction To Educational Technology And Computing
- EDPS 32700 - Assessment Literacy
- EDST 20010 - Educational Policies And Laws

## Foundational

- EDCI 20500 - Exploring Teaching As A Career
- EDCI 28500 - Multiculturalism And Education (satisfies Human Culture Behavioral/Social Science for core)
- EDPS 23500 - Learning And Motivation
- EDPS 26500 - The Inclusive Classroom

## Methods

- EDCI 30900 - Reading In Middle And Secondary Schools: Methods And Problems

## Capstone (16 credits)

- EDCI 49800 - Supervised Teaching

## Other Department Requirements (34 credits)

- MA 15300 - College Algebra (satisfies Quantitative Reasoning for core)
- MA 15555 - Quantitative Reasoning
- PHYS 21800 - General Physics (satisfies Science for core)
- Humanities Selective [4] (satisfies Human Cultures Humanities for core) (See Supplemental Information)
- Lab Science Foundation Selective[1] (satisfies Science for core) (See Supplemental Information)
- Science Selective[2] (See Supplemental Information)
- PSY 12000 - Elementary Psychology
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- Written Communication Foundation Selective [3] (satisfies Written Communication for core) (See Supplemental Information) - Credit Hours: 3.00
- Advanced Communication Selective [5] (See Supplemental Information) - Credit Hours: 3.00
- Advanced Communication Selective [5] (See Supplemental Information) - Credit Hours: 3.00

## Free Electives (4 credits)

(See Supplmental Information)

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Program Requirements

## Fall 1st Year

- TLI 26200 - Foundations Of Integrated STEM Education ♦ •
- TECH 12000 - Design Thinking In Technology * ♦
- EDCI 27000 - Introduction To Educational Technology And Computing •
- MA 15300 - College Algebra *
- Written Communication Foundation Selective [3] - Credit Hours: 3.00/4.00 *

15/16 Credits

## Spring 1st Year

- TLI 16100 - Prototyping In Engineering/Technology Education ♦
- CGT 11000 - Technical Graphics Communications ♦
- MA 15555 - Quantitative Reasoning
- COM 11400 - Fundamentals Of Speech Communication *
- Humanities [4] - Credit Hours: 3.00 *

15 Credits

## Fall 2nd Year

- EDCI 20500 - Exploring Teaching As A Career •
- EDCI 28500 - Multiculturalism And Education • *
- EDST 20010 - Educational Policies And Laws •
- Lab Science Foundation Selective [1] - Credit Hours: 3.00 *
- Technical Elective [6] ♦ - Credit Hours: 3.00
- Free Elective[7] - Credit Hours: 1.00

14 Credits

## Spring 2nd Year

- TLI 26500 - Teaching The TE Of STEM ♦ •
- ECET 22400 - Electronic Systems ♦
- PHYS 21800 - General Physics *
- EDPS 23500 - Learning And Motivation •
- EDPS 26500 - The Inclusive Classroom •

16 Credits

## Fall 3rd Year

- EDPS 32700 - Assessment Literacy •
- PSY 12000 - Elementary Psychology
- Technical Elective [6] - Credit Hours: 3.00 ♦
- Science Foundation Selective [2] - Credit Hours: 3.00
- Free Elective [7] - Credit Hours: 3.00

14 Credits

## Spring 3rd Year

- TLI 36100 - Engineering And Technology Education Instructional Planning And Evaluation ♦•
- TLI 36700 - Teaching Design And Innovation I ♦•
- EDCI 30900 - Reading In Middle And Secondary Schools: Methods And Problems •
- Advanced Communication Selective [5] - Credit Hours: 3.00
- Technical Elective [6] - Credit Hours: 3.00 ♦

15 Credits

## Fall 4th Year

- TLI 46000 - Teaching Design And Innovation II ♦•
- TLI 46100 - Engineering/Technology Teacher Lab Planning ♦•
- TLI 46200 - Methods Of Teaching Engineering/Technology Education ♦•
- Advanced Communication Selective [5] - Credit Hours: 3.00
- Technical Elective [6] - Credit Hours: 3.00 ♦

15 Credits

## Spring 4th Year

- EDCI 49800 - Supervised Teaching •

16 Credits

## Notes

*Fulfills University Core

● 3.0 Professional Education GPA required for Bachelor of Science degree, with at least a C- or higher.

♦ 2.5 Core GPA required for Bachelor of Science degree.

2.5 Graduation GPA required for Bachelor of Science degree.

Students must fulfill all Teacher Education Requirements [8]. (See Supplemental Information)

32 credits of upper division courses (30000 level or higher) must be taken at Purdue University, West Lafayette.

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

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Human Resource Development, BS

# About the Program

A new major in Human Resource Development (HRD) offers you unparalleled resources, learning experiences and development opportunities.

When you graduate from this innovative program, you will be prepared to train and develop employees, improve employee engagement and performance, diagnose organizational needs, and assess system effectiveness. In essence, you will help organizations develop all job-related aspects for their employees.

Your personal and professional skill set will grow to include essential behavioral skills such as business acumen, communication, consultation, organization evaluation, ethical practice, global and cultural effectiveness, leadership and navigation, and employee management.

You will be able to recognize how employee behavior, knowledge, and skills enhance organizational effectiveness. When management identifies new opportunities, they will look to your expertise and guidance in developing organizational talent and addressing workplace challenges.

For more information on Human Resource Development click here.

Degree Requirements

# 120 Credits Required

## Departmental/Program Major Courses (credits: 75)

- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 21300 - Project Management
- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- TLI 31400 - Leading Innovation In Organizations

- TLI 31500 - New Product Development
  or
- TLI 31600 - Statistical Quality Control

- TLI 41400 - Financial Analysis For Technology Systems
- TLI 25500 - Foundations Of Human Resource Development
- TLI 35510 - Training And Development
- TLI 35520 - Organization Development
- TLI 35530 - Strategic Planning
- TLI 35540 - Staffing Organizations
- TLI 35560 - Legal Aspects And Issues In Organizations
- TLI 45570 - Cross-Cultural Issues In Organizations
- TLI 45580 - Human Resource Information Systems

- TLI 33400 - Economic Analysis For Technology Systems
  or
- TLI 36700 - Teaching Design And Innovation I

- MGMT 20010 - Business Accounting
- TLI 48800 - Technology Leadership And Innovation Capstone
  (Capstone Selective)
- Organizational Experience Selective - Credit Hours: 3.00
- Gloablization Experience - Credit Hours: 0.00 [1]

## Human Resource Management Minor (credits: 15)

### Core Topics (credits: 6)

(Note: 44301 is typically taken by non-Krannert students, but 44428 and 44301 are substitutable); only one will count toward this requirement.

- OBHR 33000 - Introduction To Organizational Behavior

- MGMT 44428 - Human Resources Management
  or
- MGMT 44301 - Management Of Human Resources

## Advanced Topics (credits: 9)

An additional 9 credit hours must be taken from the following list of courses.

- MGMT 44362 - Leadership & Organizational Change
- MGMT 44429 - Talent Management
- MGMT 44430 - Staffing: Talent Acquisition
- MGMT 44431 - Compensation: Total Rewards
- MGMT 44690 - Negotiation And Decision Making

## Human Resource Development Selectives

### Capstone Selective

- TLI 48800 - Technology Leadership And Innovation Capstone
- TLI 48590 - Organizational Leadership Capstone I
- TLI 48595 - Organizational Leadership Capstone II

### Organizational Experience Selective

- TLI 45810 - Internship Program
- TLI 45820 - Internship Program Seminar
- TLI 45830 - Service Learning
- TLI 49800 - Undergraduate Research In Technology Leadership And Innovation

# Other Departmental/Program Course Requirements (credits: 36)

- COM 11400 - Fundamentals Of Speech Communication

- MA 15555 - Quantitative Reasoning
  or
- MA 15800 - Precalculus- Functions And Trigonometry

- PSY 12000 - Elementary Psychology

or

- SOC 10000 - Introductory Sociology

- TECH 12000 - Design Thinking In Technology
- Humanities Foundation Selective - Credit Hours: 3.00
- Lab Science Foundation Selective - Credit Hours: 3.00
- Science Foundation Selective - Credit Hours: 3.00
- Written Communication Selective - Credit Hours: 3.00
- ECON 21000 - Principles Of Economics

- ENGL 42000 - Business Writing
  or
- ENGL 42100 - Technical Writing
- History of Science & Technology Selective - Credit Hours: 3.00
- Mathematics/Statistics Selective - Credit Hours: 3.00

## Mathematics/Statistics Selective

- MA 16010 - Applied Calculus I
- MA 16100 - Plane Analytic Geometry And Calculus I
- MA 16200 - Plane Analytic Geometry And Calculus II
- MA 16500 - Analytic Geometry And Calculus I
- MA 16600 - Analytic Geometry And Calculus II
- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods

## History of Science & Technology Selective

- HIST 30305 - Kitchens, Cooking And Food In Modern America
- HIST 31405 - Science, Technology, Engineering And Mathematics (STEM) And Gender
- HIST 31505 - American Beauty
- HIST 33000 - History Of The British Empire And Commonwealth, 1783 To 1960
- HIST 33400 - Science And Society In Western Civilization II
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 38001 - History Of United States Agriculture
- HIST 38400 - History Of Aviation
- HIST 38700 - History Of The Space Age
- HIST 49400 - Science And Society In American Civilization
- POL 42900 - Contemporary Political Problems

## Lab Science Selective

- ASTR 26300 - Descriptive Astronomy: The Solar System
- ASTR 26400 - Descriptive Astronomy: Stars And Galaxies
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II
- BIOL 12100 - Biology I: Diversity, Ecology, And Behavior
- BIOL 13100 - Biology II: Development, Structure, And Function Of Organisms
- BIOL 13500 - First year Biology Laboratory
- BIOL 14600 - Introduction To Biology
- BIOL 20300 - Human Anatomy And Physiology
- BIOL 20400 - Human Anatomy And Physiology
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry
- CHM 11200 - General Chemistry
- CHM 11500 - General Chemistry
- CHM 11600 - General Chemistry
- CHM 12500 - Introduction To Chemistry I
- CHM 12600 - Introduction To Chemistry II
- CHM 13600 - General Chemistry Honors
- CHM 20000 - Fundamentals Of Chemistry
- EAPS 10900 - The Dynamic Earth
- EAPS 11100 - Physical Geology
- EAPS 11200 - Earth Through Time
- EAPS 24300 - Earth Materials I
- EAPS 24400 - Earth Materials II
- HORT 10100 - Fundamentals Of Horticulture
- PHYS 17200 - Modern Mechanics
- PHYS 21800 - General Physics
- PHYS 21900 - General Physics II
- PHYS 22000 - General Physics
- PHYS 22100 - General Physics
- PHYS 24100 - Electricity And Optics
- PHYS 27200 - Electric And Magnetic Interactions

## Free Electives (credits: 9)

## University Core Requirements

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

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

## Prerequisite Information:

For current pre-requisites for courses, click here.

# Additional Requirements

Select here for additional lists.

# Program Requirements

## Fall 1st Year (15 credits)

- COM 11400 - Fundamentals Of Speech Communication

- MA 15555 - Quantitative Reasoning
  or
- MA 15800 - Precalculus- Functions And Trigonometry

- TECH 12000 - Design Thinking In Technology
- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems
- Humanities Selective - Credit Hours: 3.00 *

## Spring 1st Year (15-16 credits)

- TLI 11200 - Foundations Of Organizational Leadership

- PSY 12000 - Elementary Psychology
  or
- SOC 10000 - Introductory Sociology *
- Mathematics/Statistics Selective - Credit Hours: 3.00
- Written Communication Selective - Credit Hours: 3.00 - 4.00 *
- Lab Science Selective - Credit Hours: 3.00 *

## Fall 2nd Year (15 credits)

- ECON 21000 - Principles Of Economics
- TLI 21300 - Project Management
- TLI 25500 - Foundations Of Human Resource Development
- TLI 31400 - Leading Innovation In Organizations

- History of Science & Tech Selective - Credit Hours: 3.00

## Spring 2nd Year (15 credits)

- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 31600 - Statistical Quality Control

- TLI 33400 - Economic Analysis For Technology Systems
  or
- MGMT 20010 - Business Accounting
- Science Selective - Credit Hours: 3.00 *
- Free Elective - Credit Hours: 3.00

## Fall 3rd Year (15 credits)

- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- TLI 35510 - Training And Development
- TLI 35520 - Organization Development
- TLI 35540 - Staffing Organizations
- TLI 35560 - Legal Aspects And Issues In Organizations

## Spring 3rd Year (15 credits)

- TLI 31500 - New Product Development
  or
- TLI 36700 - Teaching Design And Innovation I

- TLI 35530 - Strategic Planning
- Human Resource Management minor - Credit Hours: 9.00

## Fall 4th Year (15 credits)

- TLI 41400 - Financial Analysis For Technology Systems
- TLI 45570 - Cross-Cultural Issues In Organizations
- TLI 45580 - Human Resource Information Systems

- ENGL 42000 - Business Writing
  or
- ENGL 42100 - Technical Writing
- Organizational Experience Selective - Credit Hours: 3.00
- Globalization Experience - Credit Hours: 0.00

## Spring 4th Year (15 credits)

- TLI 48800 - Technology Leadership And Innovation Capstone
  (Capstone Selective)
- Human Resource Management minor - Credit Hours: 6.00
- Free Elective - Credit Hours: 6.00

## Note:

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

"C-" or better required in all HRD major courses

[1]Students are required to complete a globalization experience that addresses the corresponding embedded outcome from the University Core Curriculum.

*Fulfills University Core

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Industrial Engineering Technology, BS

# About the Program

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

Industrial Engineering Technology Website

## Degree Requirements

# 120 Credits Required

# Department/Program Major Courses (66 credits)

## Required Department Courses (27 credits)

- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 21300 - Project Management
- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- TLI 31400 - Leading Innovation In Organizations

- TLI 31500 - New Product Development
  or
- TLI 36700 - Teaching Design And Innovation I

- TLI 31600 - Statistical Quality Control
- TLI 41400 - Financial Analysis For Technology Systems

## Required Major Courses (39 credits)

- CGT 11000 - Technical Graphics Communications

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

- MET 24500 - Manufacturing Systems
- TLI 23500 - Introduction To Lean And Sustainable Systems
- TLI 33400 - Economic Analysis For Technology Systems
- TLI 33520 - Human Factors For Technology Systems
- TLI 33620 - Total Productive Maintenance
- TLI 43530 - Operations Planning And Management
- TLI 43640 - Lean Six Sigma
- TLI 45700 - Technology Policy And Law
- TLI 48390 - Industrial Engineering Technology Capstone I: Problem Identification And Analysis
- TLI 48395 - Industrial Engineering Technology Capstone II: Facility Design
- TLI Selective - Credit Hours: 3.0

## Other Major Requirements

### Internship Experience

Internship Experience - Credit Hours: 0.0

- Complete an IET-related internship (min 160 hours)
- Complete an industry cooperative experience
- Employment during the academic year related to IET
- Complete an industry-based, undergraduate research experience
- Student-proposed alternative: must be commensurate with the expectations of the IET internship experience

### Globalization Experience

Globalization Experience - Credit Hours: 0.0

- Complete Intercultural Development Inventory (IDI) Pre and Post Tests
- Complete Beliefs, Events, and Values Inventory (BEVI) Pre and Post Tests
- Complete an Intercultural Knowledge and Effectiveness (IKE) component
- Complete TLI-approved Global Course, Faculty-Led Study Abroad, International Internship, or International Capstone/Collaborative Project

## Other Departmental Requirements (37 credits)

## Other Departmental Courses (13 credits)

- ECON 21000 - Principles Of Economics

- MA 15555 - Quantitative Reasoning
  or
- MA 15800 - Precalculus- Functions And Trigonometry

- PHYS 21800 - General Physics
  *(satisfies SCI for univ core)*

- TECH 12000 - Design Thinking In Technology
  *(satisfies both IL* and *STS for univ core)*

## Selectives (24 credits)

- Behavioral/Social Science Selective *(satisfies BSS for univ core)* - Credit Hours: 3.0
- Humanities Selective *(satisfies HUM for univ core)* - Credit Hours: 3.0
- Science Selective *(satisfies SCI for univ core)* - Credit Hours: 3.0
- Oral Communication Selective *(satisfies OC for univ core)* - Credit Hours: 3.0
- Written Communication Selective *(satisfies WC for univ core)* - Credit Hours: 3.0
- Mathematics/Statistics Selective - Credit Hours: 3.0
- History of Science & Technology Selective - Credit Hours: 3.0
- Advanced Communication Selective - Credit Hours: 3.0

## Technical Electives (8 credits)

- Technical Electives - Credit Hours: 8.0

## Electives (9 credits)

Free Electives - Credit Hours: 9.0

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

### Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Select here for additional lists.

## Program Requirements

### Fall 1st Year

- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems

- MA 15800 - Precalculus- Functions And Trigonometry
  or
- MA 15555 - Quantitative Reasoning

- TECH 12000 - Design Thinking In Technology
- Humanities Selective - Credit Hours: 3.0
- Oral Communication Selective - Credit Hours: 3.0

### 15 Credits

## Spring 1st Year

- TLI 11200 - Foundations Of Organizational Leadership

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

- PHYS 21800 - General Physics
- Mathematics/Statistics Selective - Credit Hours: 3.0
- Written Communication Selective - Credit Hours: 3.0

16-17 Credits

## Fall 2nd Year

- CGT 11000 - Technical Graphics Communications
- TLI 21300 - Project Management
- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 23500 - Introduction To Lean And Sustainable Systems
- Science Selective - Credit Hours: 3.0

15 Credits

## Spring 2nd Year

- ECON 21000 - Principles Of Economics
- MET 24500 - Manufacturing Systems
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- Behavioral & Social Science Selective - Credit Hours: 3.0
- History of Science & Tech Selective - Credit Hours: 3.0

15 Credits

## Fall 3rd Year

- TLI 31400 - Leading Innovation In Organizations
- TLI 31600 - Statistical Quality Control
- TLI 33400 - Economic Analysis For Technology Systems
- TLI 33520 - Human Factors For Technology Systems

- TLI Selective - Credit Hours: 3.0

15 Credits

## Spring 3rd Year

- TLI 31500 - New Product Development
  or
- TLI 36700 - Teaching Design And Innovation I

- TLI 33620 - Total Productive Maintenance
- TLI 43530 - Operations Planning And Management
- TLI 43640 - Lean Six Sigma
- Technical Elective - Credit Hours: 3.0

15 Credits

## Fall 4th Year

- TLI 41400 - Financial Analysis For Technology Systems
- TLI 45700 - Technology Policy And Law
- TLI 48390 - Industrial Engineering Technology Capstone I: Problem Identification And Analysis
- Advanced Communication Selective - Credit Hours: 3.0
- Free Elective - Credit Hours: 3.0
- Internship Experience - Credit Hours: 0.0

15 Credits

## Spring 4th Year

- TLI 48395 - Industrial Engineering Technology Capstone II: Facility Design
- Technical Elective - Credit Hours: 5.0
- Free Elective - Credit Hours: 6.0
- Globalization Experience - Credit Hours: 0.0

14 Credits

## Notes

2.0 Graduation GPA required for Bachelor of Science degree.

32 credits of upper division courses (30000 level or higher) must be taken at Purdue University, West Lafayette.

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

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

## Selectives Lists

### Oral Communcation Selectives

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

### Written Communcation Selectives

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

### Mathematics/Statistics Selectives

- MA 16010 - Applied Calculus I
- MA 16100 - Plane Analytic Geometry And Calculus I
- MA 16200 - Plane Analytic Geometry And Calculus II
- MA 16500 - Analytic Geometry And Calculus I
- MA 16600 - Analytic Geometry And Calculus II
- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods

## History of Science and Technology Selectives

- HIST 30305 - Kitchens, Cooking And Food In Modern America
- HIST 31405 - Science, Technology, Engineering And Mathematics (STEM) And Gender
- HIST 31505 - American Beauty
- HIST 33000 - History Of The British Empire And Commonwealth, 1783 To 1960
- HIST 33400 - Science And Society In Western Civilization II
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 38001 - History Of United States Agriculture
- HIST 38400 - History Of Aviation
- HIST 38700 - History Of The Space Age
- HIST 49400 - Science And Society In American Civilization
- POL 42900 - Contemporary Political Problems

## Advanced Communication Selectives

- 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
- 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

## TLI Selectives

Any IT, OLS, or TLI course not already required

- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- ENTR 31000 - Marketing And Management For New Ventures
- ENTR 48000 - Entrepreneurship Capstone

## Technical Electives

Any Purdue Polytechnic or Engineering (ENGR) course not already required on the plan of study.

# Organizational Leadership, BS

# About the Program

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

Organizational Leadership Website

## Degree Requirements

# 120 Credits Required

## Department/Program Major Courses (75 credits)

### Required Department Courses (27 credits)

- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 21300 - Project Management
- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 31400 - Leading Innovation In Organizations
- TLI 31500 - New Product Development
- TLI 31600 - Statistical Quality Control
- TLI 41400 - Financial Analysis For Technology Systems
- TECH 22000 - Designing Technology For People

### Required Major Courses (48 credits)

- TLI 15200 - Business Principles For Organizational Leadership
- TLI 25300 - Principles Of Technology Strategy
- TLI 25400 - Leading Change In Technology Organizations

- TLI 33400 - Economic Analysis For Technology Systems
  or
- MGMT 20010 - Business Accounting

- TLI 35600 - Global Technology Leadership
- TLI 43640 - Lean Six Sigma

- TLI 45700 - Technology Policy And Law
- TLI 45800 - Leadership For Competitive Advantage
- TLI 48590 - Organizational Leadership Capstone I
- TLI 48595 - Organizational Leadership Capstone II
- Leadership Experience Selective - Credit Hours: 3.0
- Technology Focus Selectives - Credit Hours: 12.0
- TLI Selective - Credit Hours: 3.0

## Other Major Requirements

### Globalization Experience

Globalization Experience - Credit Hours: 0.0

- Complete Intercultural Development Inventory (IDI) Pre and Post Tests
- Complete Beliefs, Events, and Values Inventory (BEVI) Pre and Post Tests
- Complete an Intercultural Knowledge and Effectiveness (IKE) component
- Complete TLI-approved Global Course, Faculty-Led Study Abroad, International Internship, or International Capstone/Collaborative Project

## Other Departmental Requirements (36 credits)

### Other Departmental Courses (9 credits)

- ECON 21000 - Principles Of Economics

- MA 15555 - Quantitative Reasoning
  or
- MA 15800 - Precalculus- Functions And Trigonometry
  *(satisfies Quant Reasoning for univ core)*

- TECH 12000 - Design Thinking In Technology

*(satisfies both IL* and *STS for univ core)*

### Selectives (27 credits)

- Behavioral/Social Science Selective *(satisfies BSS for univ core)* - Credit Hours: 3.0
- Humanities Selective *(satisfies HUM for univ core)* - Credit Hours: 3.0
- Lab Science Selective *(satisfies SCI for univ core)* - Credit Hours: 3.0
- Science Selective *(satisfies SCI for univ core)* - Credit Hours: 3.0
- Oral Communication Selective *(satisfies OC for univ core)* - Credit Hours: 3.0
- Written Communication Selective *(satisfies WC for univ core)* - Credit Hours: 3.0
- Mathematics/Statistics Selective - Credit Hours: 3.00

- History of Science & Technology Selective - Credit Hours: 3.0
- Advanced Communication Selective - Credit Hours: 3.0

## Electives (9 credits)

Free Electives - Credit Hours: 9.0

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Select here for additional lists.

## Program Requirements

## Fall 1st Year

- MA 15555 - Quantitative Reasoning
  or
- MA 15800 - Precalculus- Functions And Trigonometry

- TECH 12000 - Design Thinking In Technology
- TLI 11200 - Foundations Of Organizational Leadership
- Communication Selective - Credit Hours: 3.0
- Humanities Selective - Credit Hours: 3.0

## 15 Credits

## Spring 1st Year

- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems
- TLI 15200 - Business Principles For Organizational Leadership
- Lab Science Selective - Credit Hours: 3.0
- Mathematics/Statistics Selective - Credit Hours: 3.0
- Written Communication Selective - Credit Hours: 3.0

15 Credits

## Fall 2nd Year

- ECON 21000 - Principles Of Economics
- TLI 21300 - Project Management
- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 25300 - Principles Of Technology Strategy
- Behavioral/Social Science Selective - Credit Hours: 3.0

15 Credits

## Spring 2nd Year

- TLI 25400 - Leading Change In Technology Organizations
- Free Elective - Credit Hours: 3.0
- History of Science & Technology Selective - Credit Hours: 3.0
- Science Selective - Credit Hours: 3.0
- Technology Focus Selective - Credit Hours: 3.0

15 Credits

## Fall 3rd Year

- TLI 31400 - Leading Innovation In Organizations
- TLI 31600 - Statistical Quality Control
- TECH 22000 - Designing Technology For People
- Technology Focus Selective - Credit Hours: 3.0
- TLI Selective - Credit Hours: 3.0

15 Credits

## Spring 3rd Year

- TLI 31500 - New Product Development

- TLI 33400 - Economic Analysis For Technology Systems
  or
- MGMT 20010 - Business Accounting

- TLI 35600 - Global Technology Leadership
- Technology Focus Selective - Credit Hours: 3.0
- Technology Focus Selective - Credit Hours: 3.0

15 Credits

## Fall 4th Year

- TLI 41400 - Financial Analysis For Technology Systems
- TLI 45700 - Technology Policy And Law
- TLI 45800 - Leadership For Competitive Advantage
- TLI 48590 - Organizational Leadership Capstone I
- Leadership Experiential Selective - Credit Hours: 3.0

15 Credits

## Spring 4th Year

- TLI 43640 - Lean Six Sigma
- TLI 48595 - Organizational Leadership Capstone II
- Advanced Communication Selective - Credit Hours: 3.0
- Free Elective - Credit Hours: 3.0
- Free Elective - Credit Hours: 3.0
- Globalization Experience - Credit Hours: 0.0

15 Credits

## Selectives Lists

## Oral Communication Selective

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

## Written Communication Selective

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

## Mathematics/Statistics Selective

- MA 16010 - Applied Calculus I
- MA 16100 - Plane Analytic Geometry And Calculus I
- MA 16200 - Plane Analytic Geometry And Calculus II
- MA 16500 - Analytic Geometry And Calculus I
- MA 16600 - Analytic Geometry And Calculus II

## History of Science & Technology Selective

- HIST 30305 - Kitchens, Cooking And Food In Modern America
- HIST 31405 - Science, Technology, Engineering And Mathematics (STEM) And Gender
- HIST 31505 - American Beauty
- HIST 33000 - History Of The British Empire And Commonwealth, 1783 To 1960
- HIST 33400 - Science And Society In Western Civilization II
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 38001 - History Of United States Agriculture
- HIST 38400 - History Of Aviation
- HIST 38700 - History Of The Space Age
- HIST 49400 - Science And Society In American Civilization
- POL 42900 - Contemporary Political Problems

## Advanced Communication Selective

- 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
- 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

## Leadership Experiential Selective

- TLI 45810 - Internship Program
- TLI 45820 - Internship Program Seminar
- TLI 45830 - Service Learning

## TLI Selective

Any IT, OLS, or TLI course not already required.

- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- ENTR 31000 - Marketing And Management For New Ventures
- ENTR 48000 - Entrepreneurship Capstone

## Technical Electives

Any Purdue Polytechnic or Engineering (ENGR or EPIC) course not already required on the plan of study.

## Technology Focus Selectives

### Advanced Manufacturing

- MET 14300 - Materials And Processes I
- MET 24500 - Manufacturing Systems
- MFET 30000 - Applications Of Automation In Manufacturing
- TLI 23500 - Introduction To Lean And Sustainable Systems
- TLI 33520 - Human Factors For Technology Systems

### Biometrics

- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- STAT 30100 - Elementary Statistical Methods
- IT 54000 - Biometric Performance And Usability Analysis
- IT 54500 - Biometrics Technology And Applications

- TLI 49800 - Undergraduate Research In Technology Leadership And Innovation

## Entrepreneurship

- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- ENTR 31000 - Marketing And Management For New Ventures
- TLI 21400 - Introduction To Supply Chain Management Technology
- ENTR 48000 - Entrepreneurship Capstone
- ENTR option course

## Human Capital

- OLS 37500 - Training Methods
- OLS 47600 - Compensation Planning And Management
- MGMT 44301 - Management Of Human Resources
- PSY 27200 - Introduction To Industrial-Organizational Psychology
- PSY 47500 - Work Motivation And Job Satisfaction
- SOC 31600 - Industry And Society
- SOC 52000 - Work In Contemporary America

## International Leadership

- AGEC 34000 - International Economic Development
- AGEC 43500 - Leadership In A Changing World
- COM 30300 - Intercultural Communication
- POL 23500 - International Relations Among Rich And Poor Nations
- POL 34500 - West European Democracies In The Post-Industrial Era
- POL 43300 - International Organization
- POL 43500 - International Law
- Any spoken foreign language course 20100 or higher (max 6 credits)
- Any Purdue-approved study abroad course credit (1-6 credits)

## Military Science & Technology

Any minor in Military Science & Technology

- Aerospace Studies (AEST)
- Military Science & Leadership (MILT)
- Naval Science (NAVL)

## Sales and Marketing

- AGEC 33100 - Principles Of Selling In Agricultural Business
- COM 25300 - Introduction To Public Relations

- COM 25600 - Introduction To Advertising
- COM 31800 - Principles Of Persuasion *(can fulfill either Technology Focus or Advanced Communication not both)*
- CSR 28200 - Customer Relations Management
- MGMT 32300 - Principles Of Marketing

### Supply Chain Mgmt Tech

- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 23500 - Introduction To Lean And Sustainable Systems
- TLI 34200 - Warehouse And Inventory Management
- TLI 34250 - Purchasing And Contract Management
- TLI 34300 - Technical And Service Selling
- TLI 34350 - Business To Business Sales Management
- TLI 44275 - Global Transportation And Logistics Management

## Notes

2.0 Graduation GPA required for Bachelor of Science degree.

32 credits of upper division courses (30000 level or higher) must be taken at Purdue University, West Lafayette.

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

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

# Supply Chain Management Technology, BS

# About the Program

Virtually all corporations are dependent upon their supply chains to manage the flow of goods, services and information to help customers. You will study the entire supply chain enterprise yet have the flexibility to select courses for your chosen career path. The top ERP (Enterprise Resource Planning) software in the industry, SAP ERP, is embedded throughout the curriculum. The latest technology and software is also used to help graduates become career-ready.

Supply Chain Management Technology Website

## Degree Requirements

# 120 Credits Required

## Department/Program Major Courses (75 credits)

### Required Department Courses (27 credits)

- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 21300 - Project Management
- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- TLI 31400 - Leading Innovation In Organizations

- TLI 31500 - New Product Development
  or
- TLI 36700 - Teaching Design And Innovation I

- TLI 31600 - Statistical Quality Control
- TLI 41400 - Financial Analysis For Technology Systems

### Required Major Courses (48 credits)

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

- MGMT 20010 - Business Accounting
- MGMT 32300 - Principles Of Marketing
- TLI 23500 - Introduction To Lean And Sustainable Systems
- TLI 34200 - Warehouse And Inventory Management
- TLI 34250 - Purchasing And Contract Management
- TLI 34300 - Technical And Service Selling
- TLI 34350 - Business To Business Sales Management
- TLI 43530 - Operations Planning And Management
- TLI 43640 - Lean Six Sigma
- TLI 44275 - Global Transportation And Logistics Management
- TLI 48490 - Supply Chain Management Technology Capstone I: Strategic Planning
- TLI 48495 - Supply Change Management Technology Capstone II: Strategic Analytics
- Technical Electives - Credit Hours: 9.0

## Other Major Requirements

### Internship Experience

Internship Experience - Credit Hours: 0.0

### Globalization Experience

Globalization Experience - Credit Hours: 0.0

- Complete Intercultural Development Inventory (IDI) Pre and Post Tests
- Complete Beliefs, Events, and Values Inventory (BEVI) Pre and Post Tests
- Complete an Intercultural Knowledge and Effectiveness (IKE) component
- Complete TLI-approved Global Course, Faculty-Led Study Abroad, International Internship, or International Capstone/Collaborative Project

## Other Departmental Requirements (36 credits)

### Other Departmental Courses (9 credits)

- ECON 21000 - Principles Of Economics

- MA 15555 - Quantitative Reasoning
  or
- MA 15800 - Precalculus- Functions And Trigonometry
  *(satisfies Quant Reasoning for univ core)*

- TECH 12000 - Design Thinking In Technology

*(satisfies both IL* and *STS for univ core)*

### Selectives (27 credits)

- Behavioral/Social Science Selective *(satisfies BSS for univ core)* - Credit Hours: 3.00
- Humanities Selective *(satisfies HUM for univ core)* - Credit Hours: 3.00
- Lab Science Selective *(satisfies SCI for univ core)* - Credit Hours: 3.00
- Science Selective *(satisfies SCI for univ core)* - Credit Hours: 3.00
- Oral Communication Selective *(satisfies OC for univ core)* - Credit Hours: 3.00
- Written Communication Selective *(satisfies WC for univ core)* - Credit Hours: 3.00
- Mathematics/Statistics Selective - Credit Hours: 3.00
- History of Science & Technology Selective - Credit Hours: 3.00
- Advanced Communication Selective - Credit Hours: 3.00

### Electives (9 credits)

Free Electives - Credit Hours: 9.0

## University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
- For a complete listing of course selectives, visit the Provost's Website.

## Prerequisite Information:

For current pre-requisites for courses, click here.

## Additional Requirements

Select here for additional lists.

## Program Requirements

### Fall 1st Year

- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems

- MA 15555 - Quantitative Reasoning
  or
- MA 15800 - Precalculus- Functions And Trigonometry

- TECH 12000 - Design Thinking In Technology
- Communication Selective - Credit Hours: 3.0
- Humanities Selective - Credit Hours: 3.0

#### 15 Credits

### Spring 1st Year

- TLI 11200 - Foundations Of Organizational Leadership
- TLI 21400 - Introduction To Supply Chain Management Technology

- Behavioral/Social Science Selective - Credit Hours: 3.0
- Lab Science Selective - Credit Hours: 3.0
- Written Communication Selectiv - Credit Hours: 3.0

15 Credits

## Fall 2nd Year

- TLI 21300 - Project Management
- TLI 23500 - Introduction To Lean And Sustainable Systems

- MET 14300 - Materials And Processes I
  or
- MET 14400 - Materials And Processes II
- Mathematics/Statistics Selective - Credit Hours: 3.0
- Science Selective - Credit Hours: 3.0

15 Credits

## Spring 2nd Year

- ECON 21000 - Principles Of Economics
- MGMT 20010 - Business Accounting
- Free Elective - Credit Hours: 3.0
- History of Science and Tech Selective - Credit Hours: 3.0
- Technical Elective - Credit Hours: 3.0

15 Credits

## Fall 3rd Year

- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
- TLI 31400 - Leading Innovation In Organizations
- TLI 31600 - Statistical Quality Control
- MGMT 32300 - Principles Of Marketing
- Advanced Communication Selective - Credit Hours: 3.0

15 Credits

## Spring 3rd Year

- TLI 31500 - New Product Development
  or
- TLI 36700 - Teaching Design And Innovation I

- TLI 34200 - Warehouse And Inventory Management
- TLI 34250 - Purchasing And Contract Management
- TLI 34300 - Technical And Service Selling
- TLI 43530 - Operations Planning And Management

15 Credits

## Fall 4th Year

- TLI 34350 - Business To Business Sales Management
- TLI 41400 - Financial Analysis For Technology Systems
- TLI 43640 - Lean Six Sigma
- TLI 44275 - Global Transportation And Logistics Management
- TLI 48490 - Supply Chain Management Technology Capstone I: Strategic Planning
- Internship Experience - Credit Hours: 0.0

15 Credits

## Spring 4th Year

- TLI 48495 - Supply Change Management Technology Capstone II: Strategic Analytics
- Free Elective - Credit Hours: 3.0
- Free Elective - Credit Hours: 3.0
- Technical Elective - Credit Hours: 3.0
- Technical Elective - Credit Hours: 3.0
- Globalization Experience - Credit Hours: 0.0

15 Credits

# Selectives Lists

## Oral Communication Selectives

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

## Written Communication Selectives

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

## Mathematics/Statistics Selectives

- MA 16010 - Applied Calculus I
- MA 16100 - Plane Analytic Geometry And Calculus I
- MA 16200 - Plane Analytic Geometry And Calculus II
- MA 16500 - Analytic Geometry And Calculus I
- MA 16600 - Analytic Geometry And Calculus II
- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods

## History of Science & Technology Selectives

- HIST 30305 - Kitchens, Cooking And Food In Modern America
- HIST 31405 - Science, Technology, Engineering And Mathematics (STEM) And Gender
- HIST 31505 - American Beauty
- HIST 33000 - History Of The British Empire And Commonwealth, 1783 To 1960
- HIST 33400 - Science And Society In Western Civilization II
- HIST 35000 - Science And Society In The Twentieth Century World
- HIST 38001 - History Of United States Agriculture
- HIST 38400 - History Of Aviation
- HIST 38700 - History Of The Space Age
- HIST 49400 - Science And Society In American Civilization
- POL 42900 - Contemporary Political Problems

## Advanced Communication Selectives

- 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

- 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

## Technical Electives

Any Purdue Polytechnic or Engineering (ENGR) course not already required on the plan of study.

## Notes

2.0 Graduation GPA required for Bachelor of Science degree.

32 credits of upper division courses (30000 level or higher) must be taken at Purdue University, West Lafayette.

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

## Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

## Disclaimer

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

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

## Minor

# Biometrics Minor

# 15 Credits Required

## Requirements for the Minor

### Required Courses (15 credits)

- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics
  or
- IT 34500 - Automatic Identification And Data Capture
- STAT 30100 - Elementary Statistical Methods
- IT 54000 - Biometric Performance And Usability Analysis
- IT 54500 - Biometrics Technology And Applications
- TLI 49800 - Undergraduate Research In Technology Leadership And Innovation

## Note

All courses must have a grade of a "C" or higher.

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# Biotechnology Minor

# 23 Credits Required

Biotechnology refers to harnessing the properties of a living organism to develop and manufacture products that benefit human life. With this minor, you will gain the basic knowledge and understanding of life science-based products, processess, and product quality to prepare you for employment oppurtunities in the area of biotechnology and biotech-manufacturing.

## Requirements for the Minor

## Required Courses (16 credits minimum)

- IT 22600 - Biotechnology Laboratory I
- IT 22700 - Biotechnology Laboratory II
- Lab Science Selectives - Credit Hours: 6.00 minimum
- Statistics Selective - Credit Hours: 3.00

- TLI 52100 - Drug Development
  or
- TLI 52200 - Good Regulatory Practice

## Selectives List

### Lab Science Selectives

- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II
- CHM 11100 - General Chemistry
- CHM 11200 - General Chemistry
- CHM 11500 - General Chemistry
- CHM 11600 - General Chemistry

### Statistics Selective

- CHE 32000 - Statistical Modeling And Quality Enhancement
- IT 34200 - Introduction To Statistical Quality
- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods
- STAT 35000 - Introduction To Statistics
- STAT 50300 - Statistical Methods For Biology
- TLI 31600 - Statistical Quality Control

## Notes

All courses must have a grade of a "C" or higher.

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# Organizational Leadership Minor

# 12 Credits Required

A minor in organizational leadership and supervision will expose you to current issues in leadership and how organizations operate. The knowledge and skills you learn from these classes will be beneficial in any career after graduation.

## Requirements for the Minor

### Required Courses (12 credits)

- TLI 11200 - Foundations Of Organizational Leadership
  or
- OLS 25200 - Human Relations In Organizations

- TLI 15200 - Business Principles For Organizational Leadership
  or
- OLS 27400 - Applied Leadership

- TLI 21300 - Project Management
  or
- TLI 25300 - Principles Of Technology Strategy
  or
- OLS 28400 - Leadership Principles

- TLI 25400 - Leading Change In Technology Organizations
  or
- OLS 38600 - Leadership For Organizational Change And Innovation

## Notes

All TLI courses must have a grade of a "C" or higher.

TLI 11100 is only accepted for the TLI 15200 or OLS 27400 OL minor requirement for the Fall 2015/Spring 2016 semesters.

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# Supply Chain Management Technology Minor

# 15 Credits Required

Supply chain management technology is a discipline that is needed to some degree by virtually every organization. The minor offers the basic knowledge and understanding of supply chain management technologies to seek employment opportunities with a supporting skill set for supply chain operations.

Four key technologies typically influence the supply chain: software, electronic business technologies (including web portals), visibility and productivity technologies (bar codes, RFID, etc.), and process advances, such as Six Sigma and Lean processes.

## Required Courses (15 credits)

- TLI 23500 - Introduction To Lean And Sustainable Systems
- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 34300 - Technical And Service Selling

- TLI 34200 - Warehouse And Inventory Management
  or
- TLI 34250 - Purchasing And Contract Management
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics

## Note

All courses must have a grade of a "C" or higher.

## Disclaimer

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

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