College of Technology

College of Technology

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

As one of the *Purdue Moves* initiatives, the college is undergoing a major transformation that affects all facets of the college, the scope of which is so profound that a name change was warranted. The Polytechnic name best embodies the characteristics, elements, and philosophy of the transformed college and readily represents a distinctive brand that highlights the unique nature of the learning experience.

The academic programs 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, communications, and leadership skills sought by industries and communities.

Research within the college also continues to expand and strengthen, with five signature areas propelling the college to the technological and scientific forefront:

- Bio-Inspired Sustainability
- Robotics, Manufacturing, and Autonomy
- Closed-Loop Healthcare
- Innovative STEM Education
- Human Scale Computing

Whether it's delivering a transformed learning experience to produce industry-ready graduates who have the skills for today's economy, or conducting use-inspired research to advance the evolution of technology and solve real-world challenges, the Purdue Polytechnic Institute aims to be a global leader.

Admissions

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

Admission to Teacher Education

Teacher Education Program Guidelines 2015-16

Advising

Students in the College of Technology 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: choosetechnology@purdue.edu

Technology Statewide

The Purdue College of Technology Statewide is a unique partnership between education and business, industry and government. Statewide Technology was created to extend Purdue's existing technology programs across the state to meet Indiana's need for educated technologists, technicians and innovators in communities where highly skilled workers with problem-solving skills are in great demand. Statewide Technology also provides a mechanism for training presently employed people in state-of-the-industry technology, as well as meeting the needs of recent high school graduates who, for whatever reason, don't enroll at West Lafayette or a regional campus. In cooperation with community, educational and business/industrial leaders, Purdue is able to identify local educational needs and develop programs to meet these needs virtually anywhere in the state.

Through cooperative efforts, arrangements are made with local industries and other public and independent institutions to provide support courses, services and facilities. Local business and industrial representatives are involved in the planning, development

and implementation of the program through business and industrial committees. All technical courses are taught by Purdue faculty.

Statewide Technology represents a direct academic and administrative extension of the College of Technology 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 2015-16 Program Listings and Locations.

College of Technology Administration

Overview

Propel ideas into reality

Welcome to the fast lane. At the College of Technology, 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.

College of Technology Website

Faculty

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

Contact Information

For more information on the College of Technology, 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 Technology Administration Graduate Program Information.

Department of Aviation Technology

Overview

The Department of Aviation Technology is widely recognized as a leader in aviation education. Students learn from faculty with rich industry experience and ongoing research that will improve the future of aviation. From air traffic control to NextGen aviation research, the department is leading the way to produce the best graduates and best knowledge in the aviation and aerospace industry. A part of the department's success is its top-of-the-line fleet that includes almost two dozen airplanes and several virtual training simulators.

In addition to the four year undergraduate degrees, the Department of Aviation Technology offers a program to qualifying undergraduates who wish to earn both their bachelor's and master's degrees in five years.

Faculty

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

Contact Information

Department of Aviation 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 Technology Graduate Program Information.

Baccalaureate

Aeronautical Engineering Technology, BS

About the Program

The curriculum of the Aeronautical Engineering Technology program focuses on a student's ability to think critically, manage projects, and be successful as part of an engineering team. Students learn alongside other aviation technology majors, providing a broader perspective of the aerospace industry and creating opportunities for cross-training.

With these skills, Aeronautical Engineering Technology graduates can become leaders in a variety of fields: aerospace and spacecraft manufacturing, airlines repair engineering, aerospace leadership development programs, and corporate flight operations management. The industry has a global reach and provides many avenues in which Purdue's graduates can make significant contributions. Communication skills are highly valued as well, because many potential career paths require coordination with machinists, mechanics, regulators, other engineers and customers.

The program is designed around small, close-knit classes that feature individualized attention combined with the diversity and activities of a large university.

This program can be completed in three years; ask an academic advisor how.

The aeronautical engineering technology program is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org. The bachelor's degree in aeronautical engineering technology is accredited by Aviation Accreditation Board International (AABI).

Aeronautical Engineering Technology Website

Summary of Program Requirements

The Summary of Program Requirements for Aeronautical Engineering Technology is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

AENT-BS
120 credits for graduation

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 49600 - Applied Research Proposal

- AT 49700 - Applied Research Project
- 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

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 (satisfies Written Communication for core) 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 22100 - Calculus For Technology I (satisfies Quantitative Reasoning Selective for core)
- MA 16010 - Applied Calculus 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 - UCC Selective
- Human Cultures Behavioral/Social Science - UCC Selective
- Information Literacy - TECH 12000 - Design Thinking In Technology
- Science #1 - PHYS 21800 - General Physics
- Science #2 - UCC Selective
- Science, Technology & Society Selective - TECH 12000 - Design Thinking In Technology

- Written Communication - ENGL 10600 - First-Year Composition or
- Written Communication - ENGL 10800 - Accelerated First-Year Composition

- Oral Communication - COM 11400 - Fundamentals Of Speech Communication
- Quantitative Reasoning - MA 15800 - Precalculus- Functions And Trigonometry
  Quantitative Reasoning - UCC Calculus Selective

Program Requirements

(201610)

Fall 1st Year

First Semester

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

16 Credits

Spring 1st Year

Second Semester

- 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

Third Semester

- 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

Fourth Semester

- 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

Fifth Semester

- 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

Sixth Semester

- 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

Seventh Semester

- 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

Eighth Semester

- 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

15 Credits

Note

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

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

Degree Works is knowledge source for specific requirements and completion

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.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

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.

Industry leaders are asking for more experts in aviation and aerospace finances as their contracts become more complex, their leases more numerous, and their capacity more flexible. You will gain a broad exposure to aviation management with a strong focus on its financial aspects. Your courses will provide insights into how companies in the industry operate and how financial decisions affect operations.

Special Features

- Take advantage of firsthand knowledge from professors who have worked in the industry
- Utilize real-time data collected at Purdue University Airport for projects
- Study in one of only a few programs with a focus on finances and analysis
- Explore other aspects of the aviation industry as your learn alongside students with majors in other aviation disciplines
- Enjoy high demand for your talents
- Engage with industry on a regular basis and be considered for their internships and other placement opportunities
- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Aerospace Financial Analysis is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

AEFA
120 credits for graduation

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 49800 - Aviation Technology Capstone
- 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
- MGMT 20000 - Introductory Accounting
- MGMT 20100 - Management Accounting I
- MGMT 30400 - Introduction To Financial Management
- Aviation Management Selectives - Credit Hours: 3.00

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 (satisfies Written Communication for core) 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 22100 - Calculus For Technology I (satisfies Quantitative Reasoning Selective for core) or
- MA 16010 - Applied Calculus 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 - UCC Selective
- Human Cultures Behavioral/Social Science - UCC Selective
- Information Literacy - TECH 12000 - Design Thinking In Technology
- Science #1 - PHYS 21800 - General Physics
- Science #2 - UCC Selective
- Science, Technology & Society Selective - TECH 12000 - Design Thinking In Technology

- Written Communication - ENGL 10600 - First-Year Composition or
- Written Communication - ENGL 10800 - Accelerated First-Year Composition

- Oral Communication - COM 11400 - Fundamentals Of Speech Communication
- Quantitative Reasoning - MA 15800 - Precalculus- Functions And Trigonometry
  Quantitative Reasoning - UCC Calculus Selective

Program Requirements

Fall 1st Year

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

14 Credits

Spring 1st Year

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

16 Credits

Fall 2nd Year

- AT 20300 - Aviation Operations Management
- AT 25200 - Aviation Projects
- MGMT 20000 - Introductory Accounting
- COM 11400 - Fundamentals Of Speech Communication
- 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

- MGMT 30400 - Introduction To Financial Management
- STAT 30100 - Elementary Statistical Methods
- AT 34000 - Aerospace Business Statistics - 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 48100 - Aviation Safety Problems
- Aviation Management Selective - Credit Hours: 3.00
- Thematic Area Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- AT 49800 - Aviation Technology Capstone
- Thematic Area Selective - Credit Hours: 3.00
- AT 42200 - Aerospace Risk Management - Credit Hours: 3.00
- Technical Communication Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Globalization - 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.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Expired Course

Any course without a link to its description is one that has been expired. However, this course could fulfill the degree requirement historically.

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.

Special Features

- Take advantage of firsthand knowledge from professors who have worked in the industry

- Explore other aspects of the aviation industry as your learn alongside students with majors in other aviation disciplines
- Engage with industry on a regular basis and be considered for their internships and other placement opportunities
- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Airline Management and Operations is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

ALMO
120 credits for graduation

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 49800 - Aviation Technology Capstone
- 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
- MGMT 20000 - Introductory Accounting
- MGMT 20100 - Management Accounting I
- Aviation Management Selectives - Credit Hours: 6.00

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 (satisfies Written Communication for core) 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 22100 - Calculus For Technology I (satisfies Quantitative Reasoning Selective for core) or
- MA 16010 - Applied Calculus 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 - UCC Selective
- Human Cultures Behavioral/Social Science - UCC Selective
- Information Literacy - TECH 12000 - Design Thinking In Technology
- Science #1 - PHYS 21800 - General Physics
- Science #2 - UCC Selective
- Science, Technology & Society Selective - TECH 12000 - Design Thinking In Technology

- Written Communication - ENGL 10600 - First-Year Composition or
- Written Communication - ENGL 10800 - Accelerated First-Year Composition

- Oral Communication - COM 11400 - Fundamentals Of Speech Communication
- Quantitative Reasoning - MA 15800 - Precalculus- Functions And Trigonometry
  Quantitative Reasoning - UCC Calculus Selective

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
- TECH 12000 - Design Thinking In Technology
- PHYS 21800 - General Physics
- Calculus Selective - Credit Hours: 3.00

16 Credits

Fall 2nd Year

- AT 20300 - Aviation Operations Management
- AT 25200 - Aviation Projects
- MGMT 20000 - Introductory Accounting
- COM 11400 - Fundamentals Of Speech Communication
- 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 48100 - Aviation Safety Problems
- AT 43800 - Airline Operations
- Thematic Area Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- AT 49800 - Aviation Technology Capstone
- 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

15 Credits

Notes

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120 semester credits required for Bachelor of Science degree.
2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

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

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Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

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.

Special Features

- Take advantage of firsthand knowledge from professors who have worked in the industry
- Explore other aspects of the aviation industry as your learn alongside students with majors in other aviation disciplines
- Engage with industry on a regular basis and be considered for their internships and other placement opportunities
- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Airport Management and Operations is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

APMO
120 credits for graduation

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 49800 - Aviation Technology Capstone
- 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
- MGMT 20000 - Introductory Accounting
- MGMT 20100 - Management Accounting I
- Aviation Management Selectives - Credit Hours: 3.00

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 (satisfies Written Communication for core) 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 22100 - Calculus For Technology I (satisfies Quantitative Reasoning Selective for core) or
- MA 16010 - Applied Calculus 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 - UCC Selective
- Human Cultures Behavioral/Social Science - UCC Selective
- Information Literacy - TECH 12000 - Design Thinking In Technology

- Science #1 - PHYS 21800 - General Physics
- Science #2 - UCC Selective
- Science, Technology & Society Selective - TECH 12000 - Design Thinking In Technology

- Written Communication - ENGL 10600 - First-Year Composition or
- Written Communication - ENGL 10800 - Accelerated First-Year Composition

- Oral Communication - COM 11400 - Fundamentals Of Speech Communication
- Quantitative Reasoning - MA 15800 - Precalculus- Functions And Trigonometry
  Quantitative Reasoning - UCC Calculus Selective

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
- TECH 12000 - Design Thinking In Technology
- PHYS 21800 - General Physics
- Calculus Selective - Credit Hours: 3.00

16 Credits

Fall 2nd Year

- AT 20300 - Aviation Operations Management
- AT 25200 - Aviation Projects
- MGMT 20000 - Introductory Accounting
- COM 11400 - Fundamentals Of Speech Communication
- 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 48100 - Aviation Safety Problems
- AT 45100 - Airport Operations
- Thematic Area Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- AT 49800 - Aviation Technology Capstone
- AT 45900 - Airport Manager Certification
- 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

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.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Aviation Management, BS

About the Program

Students in the program develop strong managerial and operational skills. Courses also stress critical thinking, decision-making, and communication abilities coupled with a technical background. Teamwork and responsibility are emphasized.

Students have the chance to work on research projects with airlines and airports to help them improve performance.

Purdue's aviation management program is recognized by the airport, aviation, airline, and aerospace industries for its high quality programs and graduates.

This program can be completed in three years; ask an academic advisor how.

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

The bachelor's degree in aviation management is accredited by Aviation Accreditation Board International (AABI).

Aviation Management Website

Summary of Program Requirements

The Summary of Program Requirements for Aviation Management is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

AVMG
120 credits for graduation

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 49800 - Aviation Technology Capstone
- 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
- MGMT 20000 - Introductory Accounting
- MGMT 20100 - Management Accounting I
- Aviation Management Selectives - Credit Hours: 12.00

Other Departmental /Program Course Requirements (52 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 (satisfies Written Communication for core) 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 22100 - Calculus For Technology I (satisfies Quantitative Reasoning Selective for core) or
- MA 16010 - Applied Calculus 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
- Any University-approved minor or departmentally-approved thematic area of study - Credit Hours: 12.00

Electives (9 credits)

- Free Electives - Credit Hours: 9.00

University Core Requirements

- Human Cultures Humanities - UCC Selective
- Human Cultures Behavioral/Social Science - UCC Selective
- Information Literacy - TECH 12000 - Design Thinking In Technology
- Science #1 - PHYS 21800 - General Physics
- Science #2 - UCC Selective
- Science, Technology & Society Selective - TECH 12000 - Design Thinking In Technology

- Written Communication - ENGL 10600 - First-Year Composition or
- Written Communication - ENGL 10800 - Accelerated First-Year Composition

- Oral Communication - COM 11400 - Fundamentals Of Speech Communication
- Quantitative Reasoning - MA 15800 - Precalculus- Functions And Trigonometry
  Quantitative Reasoning - UCC Calculus Selective

Program Requirements

(201610)

Fall 1st Year

First 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

Second Semester

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

16 Credits

Fall 2nd Year

Third Semester

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

15 Credits

Spring 2nd Year

Fourth Semester

- 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

Fifth Semester

- 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

Sixth Semester

- 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

Seventh Semester

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

15 Credits

Spring 4th Year

Eighth Semester

- AT 49800 - Aviation Technology Capstone
- 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

15 Credits

Note

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

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

Degree Works is knowledge source for specific requirements and completion

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.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Professional Flight Technology, BS

About the Program

Professional flight is a program for those seeking a career as a commercial airline, corporate, or charter pilot. Students develop strong technical skills supported by critical thinking, decision-making, and communication abilities. Cockpit resource management, teamwork, and responsibility are emphasized. Students obtain their basic flight certificates and ratings by the end of the sophomore year. During the junior and senior years, students gain experience flying both turbine-powered aircraft and large airline-style simulators.

Purdue recently upgraded its fleet of airplanes to include an Embraer Phenom 100 jet and 16 Cirrus SR-20G3 single engine aircraft. The planes and their corresponding simulators (as well as a regional jet simulator) are equipped with a Garmin G1000 glass cockpit avionics system. Students in this program can apply to participate in five-year combined bachelor's/master's degree program in aviation technology.

This program can be completed in three years; ask an academic advisor how.

The bachelor's degree in professional flight is accredited by Aviation Accreditation Board International (AABI).

Flight (Professional Flight Technology) Website

Summary of Program Requirements

The Summary of Program Requirements for Professional Flight Technology is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

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 49800 - Aviation Technology Capstone

- 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

Other Departmental /Program Course Requirements (52 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 (satisfies Written Communication for core) 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 22100 - Calculus For Technology I (satisfies Quantitative Reasoning Selective for core) or
- MA 16010 - Applied Calculus 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
- Any University-approved minor or departmentally-approved thematic area of study - Credit Hours: 12.00

Electives (8 credits)

- Free Electives - Credit Hours: 8.00

University Core Requirements

- Human Cultures Humanities - UCC Selective
- Human Cultures Behavioral/Social Science - UCC Selective
- Information Literacy - TECH 12000 - Design Thinking In Technology
- Science #1 - PHYS 21800 - General Physics
- Science #2 - UCC Selective
- Science, Technology & Society Selective - TECH 12000 - Design Thinking In Technology

- Written Communication - ENGL 10600 - First-Year Composition or
- Written Communication - ENGL 10800 - Accelerated First-Year Composition

- Oral Communication - COM 11400 - Fundamentals Of Speech Communication
- Quantitative Reasoning - MA 15800 - Precalculus- Functions And Trigonometry
  Quantitative Reasoning - UCC Calculus Selective

Program Requirements

(201610)

Fall 1st Year

First Semester

- 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

Second Semester

- 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

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

14 Credits

Fall 2nd Year

Third Semester

- 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

Fourth Semester

- Behavioral / Social Science Selective - Credit Hours: 3.00
- AT 21100 - Ground Trainer II

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

- AT 25400 - Commercial Flight Lectures
- Thematic Area Selective - Credit Hours: 3.00
- Humanities Foundational Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

Fifth Semester

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

14 Credits

Spring 3rd Year

Sixth Semester

- 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

Seventh Semester

- 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

Eighth Semester

- AT 41600 - Airline Indoctrination
- AT 48700 - Transport Aircraft Simulation Laboratory
- AT 49800 - Aviation Technology Capstone
- Thematic Area Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 4.00
- Globalization - Credit Hours: 0.00

14 Credits

Note

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

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

Degree Works is knowledge source for specific requirements and completion

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.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

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.

This major examines the entire unmanned aerial system. You will learn about the different aircraft, how they are made and how they work. You will explore how they fit into the larger aviation system, including safety policies and regulations. Most exciting, professors believe, is the exploration of the possibilities for unmanned aircraft. They are already in use for agricultural, scientific and military purposes. You will research more creative uses for your project-based final capstone experience.

SPECIAL FEATURES

- Learn about the entire unmanned aerial system, including how to fly the aircraft
- Gain experience through data collection on research projects
- Qualify for certification as an unmanned aerial vehicle (UAV) operator
- Strengthen teamwork skills as you work with students and professors from a variety of majors
- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Unmanned Aerial Systems is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

AUAS
120 credits for graduation

Departmental/Program Major Courses (111 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 14500 - Private Pilot Flight
- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 20300 - Aviation Operations Management
- AT 20900 - Civilian Unmanned Aerial Systems
- AT 21000 - Ground Trainer I
- AT 21100 - Ground Trainer II

- 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: 11.00

Required Major Courses (59 credits)

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 (satisfies Written Communication for core) 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 22100 - Calculus For Technology I (satisfies Quantitative Reasoning Selective for core) or
- MA 16010 - Applied Calculus 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
- 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
- STAT 30100 - Elementary Statistical Methods

Electives (9 credits)

University Core Requirements

- Human Cultures Humanities - UCC Selective
- Human Cultures Behavioral/Social Science - UCC Selective
- Information Literacy - TECH 12000 - Design Thinking In Technology
- Science #1 - PHYS 21800 - General Physics
- Science #2 - UCC Selective
- Science, Technology & Society Selective - TECH 12000 - Design Thinking In Technology

- Written Communication - ENGL 10600 - First-Year Composition or
- Written Communication - ENGL 10800 - Accelerated First-Year Composition

- Oral Communication - COM 11400 - Fundamentals Of Speech Communication
- Quantitative Reasoning - MA 15800 - Precalculus- Functions And Trigonometry
  Quantitative Reasoning - UCC Calculus Selective

Program Requirements

Fall 1st Year

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

14 Credits

Spring 1st Year

- AT 10200 - Aviation Business
- AT 10300 - Aerospace Vehicle Propulsion And Tracking Systems
- AT 11900 - Unmanned Aerial Systems Inspection And Repair
- AT 14500 - Private Pilot Flight
- COM 11400 - Fundamentals Of Speech Communication
- Calculus Selective - Credit Hours: 3.00

17 Credits

Fall 2nd Year

- AT 20300 - Aviation Operations Management
- AT 20900 - Civilian Unmanned Aerial Systems
- AT 21000 - Ground Trainer I
- AT 28600 - National Airspace Systems Operations
- PHYS 21800 - General Physics

14 Credits

Spring 2nd Year

- AT 20200 - Aerospace Vehicle Systems Design, Analysis And Operations
- AT 21100 - Ground Trainer II
- 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

16 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: 2.00
- Technical Communication Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Globalization - Credit Hours: 0.00

14 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.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Minor

Aerospace Entrepreneurship Minor

ASEN Minor

12 Credits

Required Courses

- AT 31000 - Aerospace Enterprise Organization
- AT 31100 - Aerospace Internship
- AT 41001 - Aerospace Innovation
- AT 41101 - Aerospace Internship II

Airframe and Powerplant Maintenance Minor

12 Credit Hours

AFPM

Effective Fall 2015

Requirements for the Minor

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

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. Graduate degrees, offered on campus and online, prepare today's professionals for the next level of leadership in the construction industry. 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: bcminfo@purdue.edu

Contact an advisor

Graduate Information

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

Baccalaureate

Building Construction Management Technology, BS

About the Program

Building construction management (BCM) prepares students for a challenging and rewarding career in management or project management within the construction industry. Through interactive classes and hands-on projects, BCM students experience all aspects of a construction project.

Classes focus on leadership and organization as well as materials and processes. They also include the latest industry technologies, including building information modeling.

Building Construction Management Technology Website

Summary of Program Requirements

The Summary of Program Requirements for Building Construction Management Technology is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TBCM-BS
120 Credits
"C-" or better required in all major courses and all courses that are a prerequisite to a BCM course

Building Construction Management Major Courses (59 credits)

- BCM 10001 - Introduction To Construction (Satisfies Science, Technology & Society selective for core.)
- BCM 17500 - Construction Materials And Methods
- BCM 11201 - Construction Surveying Fundamentals
- BCM 21200 - Construction Layout
- BCM 21500 - Mechanical Construction
- BCM 27500 - Construction Plans And Measurements
- BCM 25001 - Construction Project And Administrative Management
- BCM 21601 - Electrical Construction
- BCM 28500 - Construction Mechanics
- BCM 30101 - Introduction To Construction Company Financial Management
- BCM 34500 - Scheduling
- BCM 35000 - Construction Site Planning
- BCM 35501 - Construction Site Supervision
- BCM 37500 - Estimating
- BCM 38000 - Concrete Construction
- BCM 38501 - Soils In Construction
- BCM 45500 - Construction Company Management
- BCM 45701 - Construction Safety
- BCM 47500 - Construction Costs
- BCM 48701 - Construction Capstone

BCM Elective (3 credits)

Any other BCM class for BCM Majors or

- CGT 36000 - Applications Of Construction Documentation I or
- CGT 46000 - Building Information Modeling For Commercial Construction or
- CGT 46200 - Applications Of Construction Documentation II

Other Departmental/Program Course Requirements (58 credits)

- 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)

- 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
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective as well as the Science, Technology and Society Selective for core)
- PHYS 21800 - General Physics (satisfies one Science Selective for core)
- Science Lab Selective (satisfies second Science Selective for core)- See Approved BCM List - Credit Hours: 4.00
- English First Year Composition Selective: See list of approved selectives) (satisfies Written Communication for core) - Credit Hours: 3.00
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- MA 15800 - Precalculus- Functions And Trigonometry (can satisfy Quantitative Reasoning Selective for core)
- CGT 16400 - Graphics For Civil Engineering And Construction
- MA 16010 - Applied Calculus I (can satisfy Quantitative Reasoning Selective for core)
- OLS 27400 - Applied Leadership
- MGMT 20010 - Business Accounting
- MGMT 45500 - Legal Background For Business I

English selective (3 credits)

- ENGL 42000 - Business Writing or
- ENGL 42100 - Technical Writing or
- ENGL 49000 - Worksite Internship Practicum or
- ENGL 30400 - Advanced Composition

Business Selective (3 credits)

- IT 34200 - Introduction To Statistical Quality or
- STAT 30100 - Elementary Statistical Methods or
- STAT 22500 - Introduction To Probability Models or
- ENTR 20000 - Introduction To Entrepreneurship And Innovation or
- MGMT 32300 - Principles Of Marketing or
- MGMT 20100 - Management Accounting I

Communication Selective (3 credits)

- AGEC 33100 - Principles Of Selling In Agricultural Business or
- COM 31400 - Advanced Presentational Speaking or
- COM 31500 - Speech Communication Of Technical Information or
- COM 31800 - Principles Of Persuasion or
- COM 32000 - Small Group Communication or
- COM 32400 - Introduction To Organizational Communication or
- COM 32500 - Interviewing: Principles And Practice or
- COM 41500 - Discussion Of Technical Problems or
- a Foreign Language - Credit Hours: 3.00

Human Relations Selective (3 credits)

- PSY 12000 - Elementary Psychology or
- SOC 10000 - Introductory Sociology or
- OLS 25200 - Human Relations In Organizations or
- OLS 28400 - Leadership Principles or
- OLS 38600 - Leadership For Organizational Change And Innovation

Global Selective (3 credits)

- TECH 33000 - Technology And The Global Society or
- Study Abroad or
- other global courses listed

Technical Elective (3 credits)

Any course within the Colleges of Technology, Engineering, Management or approved course.

Electives (3 credits)

- Free - Credit Hours: 3.00

University Core Requirements

- Human Cultures - Humanities - UCC Selective

- Human Cultures - Behavioral/Social Science - ECON 21000 - Principles Of Economics or
- Human Cultures - Behavioral/Social Science - AGEC 21700 - Economics

- Information Literacy - TECH 12000 - Design Thinking In Technology
- Science #1 - PHYS 21800 - General Physics
- Science #2 - See BCM's list

- Science, Technology & Society - BCM 10001 - Introduction To Construction or
- Science, Technology & Society - TECH 12000 - Design Thinking In Technology

- Written Communication - See BCM's list
- Oral Communication - COM 11400 - Fundamentals Of Speech Communication

- Quantitative Reasoning - MA 15300 - Algebra And Trigonometry I or
- Quantitative Reasoning - MA 15800 - Precalculus- Functions And Trigonometry or
- Quantitative Reasoning - MA 16010 - Applied Calculus I

Program Requirements

Accredited by the American Council for Construction Education (ACCE)

Fall 1st Year

- BCM 10001 - Introduction To Construction *
- 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

- BCM 17500 - Construction Materials And Methods
- BCM 11201 - Construction Surveying Fundamentals
- MA 16010 - Applied Calculus I *
- OLS 27400 - Applied Leadership
- COM 11400 - Fundamentals Of Speech Communication *

15 Credits

Fall 2nd Year

- BCM 21200 - Construction Layout
- BCM 21500 - Mechanical Construction
- BCM 27500 - Construction Plans And Measurements
- PHYS 21800 - General Physics *
- Human Relations Selective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- BCM 25001 - Construction Project And Administrative Management
- BCM 21601 - Electrical Construction

- BCM 28500 - Construction Mechanics
- MGMT 20010 - Business Accounting
- Lab Science Selective - Credit Hours: 4.00 *

15 Credits

Fall 3rd Year

- BCM 34500 - Scheduling
- BCM 37500 - Estimating
- Technical Elective - Credit Hours: 3.00
- BCM 38000 - Concrete Construction
- Humanities Foundation Selective - Credit Hours: 3.00 *

15 Credits

Spring 3rd Year

- BCM 30101 - Introduction To Construction Company Financial Management
- BCM 35000 - Construction Site Planning
- BCM 38501 - Soils In Construction
- BCM 45701 - Construction Safety
- Free Elective - Credit Hours: 3.00
- MGMT 45500 - Legal Background For Business I

16 Credits

Fall 4th Year

- BCM 35501 - Construction Site Supervision
- BCM 47500 - Construction Costs
- BCM 45500 - Construction Company Management
- English Selective - Credit Hours: 3.00

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

14 Credits

Spring 4th Year

- BCM 48701 - Construction Capstone
- Global Selective - Credit Hours: 3.00
- BCM Elective - Credit Hours: 3.00
- Business Selective - Credit Hours: 3.00

- Communication Selective - Credit Hours: 3.00

15 Credits

Note

*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)

Degree Requirements

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

myPurduePlan is knowledge source for specific requirements and completion

Supplemental BCM 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, which can be used towards the Lab Science Selective.

***Note:** Students may have to take MA 15300 - Algebra And Trigonometry I 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.

BCM Elective

Any non-required BCM class (excluding courses for Non- Majors: BCM 13000 and BCM 23000). BIM courses can also be used, such as CGT 36000, CGT 46000, or CGT 46200

Technical Elective

Any course within the College of Technology, Engineering, or Management, or approved courses.

English Composition First Year Selective

Any course from the following:

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- ENGL 10100 - English Composition I or
- ENGL 10200 - English Composition II or
- ENGL 10300 - Comprehensive First Year Composition or

- ENGL 10400 or
- ENGL 10500 - English Composition II or
- ENG W1310 or
- ENG W1400 or
- ENG W2330

Human Relations Selective

- PSY 12000 - Elementary Psychology
- SOC 10000 - Introductory Sociology
- OLS 25200 - Human Relations In Organizations
- OLS 28400 - Leadership Principles
- OLS 38600 - Leadership For Organizational Change And Innovation

Communication Selective

- Credit in a Foreign Language
- 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
- AGEC 33100 - Principles Of Selling In Agricultural Business

Lab Science Selective

4 credits in this area are needed for graduation. The courses listed below in bold are 4 or more credit hour courses. You may take two of the 3 credit hour courses instead of one 4 credit hour course. The course(s) must have a lab component. It must not have an online lab component, unless it is a computer class. You must meet all course pre-requisites.

At least one class must be chosen from the following

Chemistry

- 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

Earth, Atmospheric, and Planetary Sciences

- EAPS 11100 - Physical Geology
- EAPS 11200 - Earth Through Time

Physics

- PHYS 21900 - General Physics II
- PHYS 22100 - General Physics
- PHYS 27200 - Electric And Magnetic Interactions

If taking two 3 credit hour courses

If taking two 3 credit hour courses, you may choose the second course from the above list or from among the following:

Computer Graphics Technology CGT courses

- CGT 11000 - Technical Graphics Communications
- CGT 11600 - Geometric Modeling For Visualization And Communication
- CGT 14100 - Internet Foundations Technologies And Development
- CGT 21100 - Raster Imaging For Computer Graphics
- CGT 21600 - Vector Imaging For Computer Graphics

Not Accepted

- CGT 16400 - Graphics For Civil Engineering And Construction
- CGT 26200 - Introduction To Construction Graphics
- CGT 36000 - Applications Of Construction Documentation I
- CGT 46000 - Building Information Modeling For Commercial Construction
- CGT 46200 - Applications Of Construction Documentation II

Computer and Information Technology

Computer and Information Technology courses with a lab such as

- CNIT 15500 - Introduction to Object-Oriented Programming
- CNIT 17500 - Visual Programming
- CNIT 18000 - Introduction To Systems Development

Computer Science

Computer Science course with a lab such as

- CS 11000 - Introduction To Computers or
- CNIT 13600 - Personal Computing Technology And Applications

- CS 15800 - C Programming
- CS 17700 - Programming With Multimedia Objects
- CS 18000 - Problem Solving And Object-Oriented Programming
- CS 23500 - Introduction To Organizational Computing

Note

Other courses may apply, see academic advisor.

Business Selective

- IT 34200 - Introduction To Statistical Quality
- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods
- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- MGMT 20100 - Management Accounting I
- MGMT 32300 - Principles Of Marketing
- MGMT 44301 - Management Of Human Resources

Global Selective

TECH 33000, or Study Abroad, or any of the following courses:

- AD 22600 - History Of Art To 1400
- AD 25500 - Art Appreciation
- AD 45400 - Modern Architecture
- AGEC 25000 - Economic Geography Of World Food And Resources
- ANTH 10000 - Introduction To Anthropology
- ANTH 20500 - Human Cultural Diversity
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 31200 - The Archaeology Of Ancient Egypt And The Near East
- ANTH 32700 - Environment And Culture
- ANTH 33600 - Human Variation
- ANTH 33700 - Human Diet: Origins And Evolution
- ANTH 38000 - Using Anthropology In The World
- ARAB 23000 - Arabic Literature In Translation
- ASAM 24000 - Introduction To Asian American Studies
- ASAM 34000 - Contemporary Issues In Asian American Studies
- CHNS 28000 - Topics in Chinese Civilization and Culture
- CLCS 18100 - Classical World Civilizations
- CLCS 23100 - Survey Of Latin Literature
- CLCS 23200 - Classical Roots Of English Words
- CLCS 23300 - Comparative Mythology
- CLCS 28000 - Topics In Classical Civilization
- CLCS 38500 - Science, Medicine And Magic In The Ancient West
- CMPL 23000 - Crossing Borders: Introduction To Comparative Literature
- CMPL 26600 - World Literature: From The Beginnings To 1700 A D
- CMPL 26700 - World Literature: From 1700 A D To The Present
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- EAPS 10000 - Planet Earth

- EAPS 12000 - Introduction To Geography
- EAPS 37500 - Great Issues - Fossil Fuels, Energy And Society
- EEE 35500 - Engineering Environmental Sustainability
- ENGL 23000 - Great Narrative Works
- ENGL 24000 - Survey Of The British Literature: From The Beginnings Through The Neoclassical Period
- ENGL 24100 - Survey Of The British Literature: From The Rise Of Romanticism To The Modern Period
- ENGL 25700 - Literature Of Black America
- ENGL 26600 - World Literature: From The Beginnings To 1700 A.D.
- ENGL 26700 - World Literature: From 1700 A.D. To The Present
- ENGL 34100 - Topics In Science, Literature, And Culture
- ENGL 35800 - Black Drama
- ENGL 36000 - Gender And Literature
- FNR 10300 - Introduction To Environmental Conservation
- HDFS 28000 - Diversity In Individual And Family Life
- HEBR 28000 - Modern Israel: Cinema, Literature, Politics And History
- HEBR 28400 - Ancient Near Eastern History And Culture
- HIST 10300 - Introduction To The Medieval World
- HIST 10400 - Introduction To The Modern World
- HIST 10500 - Survey Of Global History
- HIST 24100 - East Asia In The Modern World
- HIST 25000 - United States Relations With The Middle East And North Africa
- HIST 27200 - Introduction To Modern Latin American History (1810 To The Present)
- HIST 31700 - A History Of The Christian Church And The Expansion Of Christianity I
- HIST 32900 - History Of Women In Modern Europe
- HIST 33400 - Science And Technology In Western Civilization II
- HIST 35100 - The Second World War
- HIST 36100 - Violence in Africa
- HIST 37500 - Women In America Since 1870
- JPNS 28000 - Introduction To Modern Japanese Civilization
- JWST 33000 - Introduction To Jewish Studies
- LC 23500 - East Asian Literature In Translation
- LC 23900 - Women Writers In Translation
- MUS 25000 - Music Appreciation
- PHIL 11400 - Global Moral Issues
- PHIL 20600 - Philosophy Of Religion
- PHIL 21900 - Introduction To Existentialism
- PHIL 22500 - Philosophy And Gender
- PHIL 24000 - Social And Political Philosophy
- PHIL 24200 - Philosophy, Culture, And The African American Experience
- PHIL 27000 - Biomedical Ethics
- PHIL 29000 - Environmental Ethics
- PHIL 33000 - Religions of the East
- PHIL 33100 - Religions of the West
- POL 13000 - Introduction To International Relations
- POL 14100 - Governments Of The World
- POL 22200 - Women, Politics, And Public Policy
- POL 22300 - Introduction To Environmental Policy
- POL 23000 - Introduction To The Study Of Peace

- 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 34800 - East Asian Politics
- Study Abroad Experience
- Foreign Language - in class only

English Selective

- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing
- ENGL 30400 - Advanced Composition
- ENGL 49000 - Worksite Internship Practicum

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, BCM internships, or BCM Co-op programs may be used to satisfy this requirement. To document your work hours, go to the BCM website and look for Work Experience Folder. That will bring up a Word file with directions for you to follow. Concentrations require 400 hours of work experience within the concentration.

Progression Policy

Students must meet the following requirements to progress in the BCM major. Failure to meet these standards will require the student to CODO out of the BCM Department. BCM majors must earn a grade of "C-" or better in all BCM courses and all courses that are a prerequisite to a BCM course. The "C-" grade must be earned before enrolling in subsequent courses. BCM courses can be repeated only once.

Appeal

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

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 BCM advisor.

Concentrations

Students desiring to have a concentration designated on their transcripts should consult with the appropriate concentration coordinator. Students may be limited to one concentration depending on space availability. BCM Concentrations are:

Electrical Construction Management (ELCM)

- BCM 31600 - Electrical Construction Estimating
- BCM 41700 - Design/Build For Mep Contractors

Electrical Concentration Selective

Pick one of the following:

- BCM 31700 - Mechanical And Electrical Construction Management
- BCM 51000 - Topics In Environmentally Sustainable Construction, Design And Development
- CGT 36000 - Applications Of Construction Documentation I
- CGT 46000 - Building Information Modeling For Commercial Construction
- BCM 43000

Mechanical Construction Management (MCNM)

- BCM 31500 - Mechanical Construction Estimating
- BCM 41700 - Design/Build For Mep Contractors

Mechanical Concentration Selective

Pick one of the following:

- BCM 31700 - Mechanical And Electrical Construction Management
- BCM 51000 - Topics In Environmentally Sustainable Construction, Design And Development
- CGT 36000 - Applications Of Construction Documentation I
- CGT 46000 - Building Information Modeling For Commercial Construction
- BCM 43000

Demolition and Reconstruction Management (DEMR)

- BCM 33000 - Introduction To Demolition And Reconstruction Management
- BCM 33100 - Advanced Demolition And Reconstruction Management

Residential Construction Management (RSCM)

- BCM 36000 - Residential Construction
- BCM 46100 - Residential Design Build

Residential Concentration Selective

Pick one of the following:

- BCM 36100 - Residential Field Management
- BCM 36200 - Construction Competition
- BCM 41200 - Field Engineering
- BCM 46000 - Residential Land Development
- AD 45000
- AGEC 33100 - Principles Of Selling In Agricultural Business

- CGT 36000 - Applications Of Construction Documentation I
- LA 15000 - Preservation Issues
- LA 15100 - Building Preservation
- LA 15200 - Community Preservation

Disaster Restoration & Reconstruction Management (DRRM)

- BCM 32000 - Introduction To Disaster Restoration And Reconstruction Management
- BCM 32100 - Disaster Restoration And Reconstruction Project Management

Healthcare Construction Management (HLCM)

- BCM 34000 - Introduction To Healthcare Construction Management
- BCM 34100 - Advanced Topics In Healthcare Construction Management

Organizational Leadership & Supervision Minor

- OLS 25200 - Human Relations In Organizations
- OLS 27400 - Applied Leadership (a required course for BCM)
- OLS 28400 - Leadership Principles
- OLS 38600 - Leadership For Organizational Change And Innovation

Note

OLS 25200, OLS 28400, or OLS 38600 can fulfill the Human Relations Selective, the Technical Elective, or the Free Elective.

Computer Graphics (BIM) Minor

- CGT 16400 - Graphics For Civil Engineering And Construction (required for BCM)
- CGT 36000 - Applications Of Construction Documentation I
- CGT 46000 - Building Information Modeling For Commercial Construction
- CGT 46200 - Applications Of Construction Documentation II

Note

CGT 36000, CGT 46000, or CGT 46200 can fulfill the Technical Elective, the Free Elective, or the BCM Elective.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Expired Course

Any course without a link to its description is one that has been expired. However, this course could fulfill the degree requirement historically.

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 study the unique features of this sector of the construction industry. The School of Construction Management Technology has been a leader in this field for several years.

You will examine the common lifecycles of structures and learn new skills that will be critical after natural or man-made disasters. You will gain a broad exposure to building construction management topics while focusing on these highly specialized areas. Your courses will expose you to project management skills, and your capstone course will allow you to apply your new skills to a well-integrated demolition and disaster restoration project management process and solution. The plan of study includes technical and managerial concepts for reconstruction interwoven throughout the coursework.

Meet our faculty, most of whom have industry experience.

Special Features

- Combine the growing demand for graduates with this knowledge with a major that few universities offer
- Network with leading demolition and restoration organizations
- Take advantage of project-based learning in updated labs and with some of the newest technology in the industry, such as 3D laser scanners and robotic total stations
- Gain valuable experience as you complete 800 hours of on-site construction work as part of your graduation requirements
- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Demolition & Restoration Management in the Built Environment is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TBCM-BS-DRMBE
120 Credits
"C-" or better required in all major courses and all courses that are a prerequisite to a BCM course

Building Construction Management Major Courses (65 credits)

- BCM 10001 - Introduction To Construction (Satisfies Science, Technology & Society selective for core.)
- BCM 17500 - Construction Materials And Methods
- BCM 11201 - Construction Surveying Fundamentals
- BCM 21200 - Construction Layout
- BCM 21500 - Mechanical Construction
- BCM 27500 - Construction Plans And Measurements
- BCM 25001 - Construction Project And Administrative Management
- BCM 21601 - Electrical Construction
- BCM 28500 - Construction Mechanics
- BCM 30101 - Introduction To Construction Company Financial Management
- BCM 32000 - Introduction To Disaster Restoration And Reconstruction Management
- BCM 33000 - Introduction To Demolition And Reconstruction Management
- BCM 34500 - Scheduling
- BCM 35000 - Construction Site Planning
- BCM 35501 - Construction Site Supervision
- BCM 37500 - Estimating
- BCM 38000 - Concrete Construction
- BCM 38501 - Soils In Construction
- BCM 45500 - Construction Company Management
- BCM 45701 - Construction Safety
- BCM 47500 - Construction Costs
- BCM 48701 - Construction Capstone
- DRMBE Selective:
    - BCM 32100 - Disaster Restoration And Reconstruction Project Management or
    - BCM 33100 - Advanced Demolition And Reconstruction Management

Other Departmental/Program Course Requirements (55 credits)

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

- 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
- TECH 12000 - Design Thinking In Technology *(satisfies Information Literacy Selective & Science, Technology and Society Selective for core)*
- PHYS 21800 - General Physics *(satisfies one Science Selective for core)*
- Science Lab Selective *(satisfies second Science Selective for core) - See Approved BCM List* - Credit Hours: 4.00
- English First Year Composition Selective (satisfies Written Communication for core) - *See list of approved selectives* - Credit Hours: 3.00
- COM 11400 - Fundamentals Of Speech Communication *(satisfies Oral Communication for core)*
- MA 15800 - Precalculus- Functions And Trigonometry *(can satisfy Quantitative Reasoning Selective for core)*

- CGT 16400 - Graphics For Civil Engineering And Construction
- MA 16010 - Applied Calculus I *(can satisfy Quantitative Reasoning Selective for core)*
- OLS 27400 - Applied Leadership
- MGMT 20010 - Business Accounting
- MGMT 45500 - Legal Background For Business I
- English selective (ENGL 42000 or ENGL 42100 or ENGL 49000 or ENGL 30400) - Credit Hours: 3.00
- Business Selective (IT 34200 or STAT 30100 or STAT 22500 or ENTR 20000 or MGMT 32300 or MGMT 20100 or MGMT 44301) - Credit Hours: 3.00
- Communication Selective (AGEC 33100 or COM 31400 or COM 31500 or COM 31800 or COM 32000 or COM 32400 or COM 32500 or COM 41500 or a Foreign Language) - Credit Hours: 3.00
- Human Relations Selective (PSY 12000 or SOC 10000 or OLS 25200 or OLS 28400 or OLS 38600) - Credit Hours: 3.00
- Global Selective (TECH 33000, Study Abroad, or other global courses listed) - Credit Hours: 3.00

University Core Requirements

- Human Cultures - Humanities - UCC Selective
- Human Cultures - Behavioral/Social Science - ECON 21000 or AGEC 21700
- Information Literacy - TECH 12000
- Science #1 - PHYS 21800
- Science #2 - See BCM's list
- Science, Technology & Society - BCM 10001 or TECH 12000
- Written Communication - See BCM's list
- Oral Communication - COM 11400
- Quantitative Reasoning - MA 15300 or MA 15800 or MA 16010

Program Requirements

Fall 1st Year

- BCM 10001 - Introduction To Construction *
- 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

- BCM 17500 - Construction Materials And Methods
- BCM 11201 - Construction Surveying Fundamentals
- MA 16010 - Applied Calculus I *
- OLS 27400 - Applied Leadership
- COM 11400 - Fundamentals Of Speech Communication *

15 Credits

Fall 2nd Year

- BCM 21200 - Construction Layout
- BCM 21500 - Mechanical Construction
- BCM 27500 - Construction Plans And Measurements
- PHYS 21800 - General Physics *
- Human Relations Selective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- BCM 25001 - Construction Project And Administrative Management
- BCM 21601 - Electrical Construction
- BCM 28500 - Construction Mechanics
- MGMT 20010 - Business Accounting
- Lab Science Selective - Credit Hours: 4.00 *

15 Credits

Fall 3rd Year

- BCM 34500 - Scheduling
- BCM 37500 - Estimating
- BCM 32000 - Introduction To Disaster Restoration And Reconstruction Management
- BCM 38000 - Concrete Construction
- Humanities Foundation Selective - Credit Hours: 3.00 *

15 Credits

Spring 3rd Year

- BCM 30101 - Introduction To Construction Company Financial Management
- BCM 35000 - Construction Site Planning
- BCM 38501 - Soils In Construction
- BCM 45701 - Construction Safety
- BCM 33000 - Introduction To Demolition And Reconstruction Management
- MGMT 45500 - Legal Background For Business I

15 Credits

Fall 4th Year

- BCM 35501 - Construction Site Supervision
- BCM 47500 - Construction Costs
- BCM 45500 - Construction Company Management
- DRMBE Selective - Credit Hours: 3.00

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

15 Credits

Spring 4th Year

- BCM 48701 - Construction Capstone
- Global Selective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Business Selective - Credit Hours: 3.00
- Communication Elective - Credit Hours: 3.00

15 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)

For BCM Supplemental Information click here.

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Expired Course

Any course without a link to its description is one that has been expired. However, this course could fulfill the degree requirement historically.

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. You will gain a broad exposure to building construction management topics while focusing on this specialized area. Your courses will also expose you to project management skills that can be applied in most construction projects. This major is offered by the School of Construction Management Technology.

Meet our faculty, most of whom have industry experience.

Special Features

- Prepare for the American Society for Healthcare Engineering (ASHE) certification as Certified Healthcare Constructor or Certified Healthcare Facilities Manager.
- Gain valuable experience as you complete 800 hours of on-site construction work as part of your graduation requirements
- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Healthcare Construction Management is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TBCM-BS-HCM
120 Credits
"C-" or better required in all major courses and all courses that are a prerequisite to a BCM course

Building Construction Management Major Courses (62 Credits)

- BCM 10001 - Introduction To Construction
- BCM 17500 - Construction Materials And Methods
- BCM 11201 - Construction Surveying Fundamentals
- BCM 21200 - Construction Layout
- BCM 21500 - Mechanical Construction
- BCM 27500 - Construction Plans And Measurements
- BCM 25001 - Construction Project And Administrative Management
- BCM 21601 - Electrical Construction
- BCM 28500 - Construction Mechanics
- BCM 30101 - Introduction To Construction Company Financial Management
- BCM 34000 - Introduction To Healthcare Construction Management
- BCM 34100 - Advanced Topics In Healthcare Construction Management
- BCM 34500 - Scheduling
- BCM 35000 - Construction Site Planning
- BCM 35501 - Construction Site Supervision
- BCM 37500 - Estimating
- BCM 38000 - Concrete Construction
- BCM 38501 - Soils In Construction
- BCM 45500 - Construction Company Management
- BCM 45701 - Construction Safety
- BCM 47500 - Construction Costs
- BCM 48701 - Construction Capstone

Other Departmental/Program Course Requirements (58 credits)

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

- 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
- TECH 12000 - Design Thinking In Technology *(satisfies Information Literacy Selective & Science, Technology and Society Selective for core)*
- PHYS 21800 - General Physics *(satisfies one Science Selective for core)*
- Science Lab Selective *(satisfies second Science Selective for core)* - See Approved BCM List - Credit Hours: 4.00
- English First Year Composition Selective *(satisfies Written Communication for core)* - See list of approved selectives - Credit Hours: 3.00
- COM 11400 - Fundamentals Of Speech Communication *(satisfies Oral Communication for core)*
- MA 15800 - Precalculus- Functions And Trigonometry *(can satisfy Quantitative Reasoning Selective for core)*
- CGT 16400 - Graphics For Civil Engineering And Construction
- MA 16010 - Applied Calculus I *(can satisfy Quantitative Reasoning Selective for core)*
- OLS 27400 - Applied Leadership
- MGMT 20010 - Business Accounting
- MGMT 45500 - Legal Background For Business I
- English selective (ENGL 42000 or ENGL 42100 or ENGL 49000 or ENGL 30400) - Credit Hours: 3.00

- Business Selective (IT 34200 or STAT 30100 or STAT 22500 or ENTR 20000 or MGMT 32300 or MGMT 20100 or MGMT 44301) - Credit Hours: 3.00
- Communication Selective (AGEC 33100 or COM 31400 or COM 31500 or COM 31800 or COM 32000 or COM 32400 or COM 32500 or COM 41500 or a Foreign Language) - Credit Hours: 3.00
- Human Relations Selective (PSY 12000 or SOC 10000 or OLS 25200 or OLS 28400 or OLS 38600) - Credit Hours: 3.00
- Global Selective (TECH 33000, Study Abroad, or other global courses listed) - Credit Hours: 3.00
- Healthcare Selective (AD 12500, or AD 39700, or BCM 31500, or BCM 31600, or BCM 31700, or BCM 32000, or BCM 33000, or BCM 41700, or CGT 46000, or course approved by HCM Coordinator) - Credit Hours: 3.00

University Core Requirements

- Human Cultures - Humanities - UCC Selective
- Human Cultures - Behavioral/Social Science - ECON 21000 or AGEC 21700
- Information Literacy - TECH 12000
- Science #1 - PHYS 21800
- Science #2 - See BCM's list
- Science, Technology & Society - BCM 10001 or TECH 12000
- Written Communication - See BCM's list
- Oral Communication - COM 11400
- Quantitative Reasoning - MA 15300 or MA 15800 or MA 16010

Program Requirements

Fall 1st Year

- BCM 10001 - Introduction To Construction *
- 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

- BCM 17500 - Construction Materials And Methods
- BCM 11201 - Construction Surveying Fundamentals
- MA 16010 - Applied Calculus I *
- OLS 27400 - Applied Leadership
- COM 11400 - Fundamentals Of Speech Communication *

15 Credits

Fall 2nd Year

- BCM 21200 - Construction Layout
- BCM 21500 - Mechanical Construction
- BCM 27500 - Construction Plans And Measurements
- PHYS 21800 - General Physics *
- Human Relations Selective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- BCM 25001 - Construction Project And Administrative Management
- BCM 21601 - Electrical Construction
- BCM 28500 - Construction Mechanics
- MGMT 20010 - Business Accounting
- Lab Science Selective - Credit Hours: 4.00 *

15 Credits

Fall 3rd Year

- BCM 34500 - Scheduling
- BCM 37500 - Estimating
- BCM 34000 - Introduction To Healthcare Construction Management
- BCM 38000 - Concrete Construction
- Humanities Foundation Selective - Credit Hours: 3.00 *

15 Credits

Spring 3rd Year

- BCM 30101 - Introduction To Construction Company Financial Management
- BCM 35000 - Construction Site Planning
- BCM 38501 - Soils In Construction
- BCM 45701 - Construction Safety
- BCM 34100 - Advanced Topics In Healthcare Construction Management
- MGMT 45500 - Legal Background For Business I

15 Credits

Fall 4th Year

- BCM 35501 - Construction Site Supervision
- BCM 47500 - Construction Costs
- BCM 45500 - Construction Company Management
- Healthcare Selective - Credit Hours: 3.00

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

15 Credits

Spring 4th Year

- BCM 48701 - Construction Capstone
- Global Selective - Credit Hours: 3.00
- Business Selective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00

15 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)

For BCM Supplemental Information click here.

Degree Requirements

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

myPurdue Plan 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.

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. You need to understand the technology of the building to make the overall project a success.

When you major in electrical and mechanical construction management at Purdue, you will focus on these highly specialized areas of the construction industry. 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.

You will gain plenty of hands-on experience in state-of-the-art labs and during the required 800 hours of field experience, which is a requirement for all majors in the School of Construction Management Technology.

Meet our faculty, most of whom have industry experience.

Special Features

- Combine the growing demand for graduates with this knowledge with a major that few universities offer
- Take advantage of project-based learning in updated labs and with some of the newest technology in the industry, such as 3D laser scanners and robotic total stations
- Gain valuable experience as you complete 800 hours of on-site construction work as part of your graduation requirements
- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Mechanical & Electrical Construction Management is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TBCM-BS-MEP
120 Credits
"C-" or better required in all major courses and all courses that are a prerequisite to a BCM course

Building Construction Management Major Courses (62 credits)

- BCM 10001 - Introduction To Construction (Satisfies Science, Technology & Society selective for core.)
- BCM 17500 - Construction Materials And Methods
- BCM 11201 - Construction Surveying Fundamentals
- BCM 21200 - Construction Layout
- BCM 21500 - Mechanical Construction
- BCM 27500 - Construction Plans And Measurements
- BCM 25001 - Construction Project And Administrative Management
- BCM 21601 - Electrical Construction
- BCM 28500 - Construction Mechanics
- BCM 30101 - Introduction To Construction Company Financial Management

- BCM 31500 - Mechanical Construction Estimating or
- BCM 31600 - Electrical Construction Estimating

- BCM 34500 - Scheduling
- BCM 35000 - Construction Site Planning
- BCM 35501 - Construction Site Supervision
- BCM 37500 - Estimating
- BCM 38000 - Concrete Construction
- BCM 38501 - Soils In Construction
- BCM 45500 - Construction Company Management
- BCM 45701 - Construction Safety
- BCM 47500 - Construction Costs
- BCM 48701 - Construction Capstone
- BCM 41700 - Design/Build For Mep Contractors

Other Departmental/Program Course Requirements (58 credits)

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

- 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
- TECH 12000 - Design Thinking In Technology *(satisfies Information Literacy Selective & Science, Technology and Society Selective for core)*
- PHYS 21800 - General Physics *(satisfies one Science Selective for core)*
- Science Lab Selective *(satisfies second Science Selective for core)- See Approved BCM List* - Credit Hours: 4.00
- English First Year Composition Selective *(satisfies Written Communication for core) - See list of approved selectives)* - Credit Hours: 3.00
- COM 11400 - Fundamentals Of Speech Communication *(satisfies Oral Communication for core)*
- MA 15800 - Precalculus- Functions And Trigonometry *(can satisfy Quantitative Reasoning Selective for core)*
- CGT 16400 - Graphics For Civil Engineering And Construction
- MA 16010 - Applied Calculus I *(can satisfy Quantitative Reasoning Selective for core)*
- OLS 27400 - Applied Leadership
- MGMT 20010 - Business Accounting
- MGMT 45500 - Legal Background For Business I
- English selective (ENGL 42000 or ENGL 42100 or ENGL 49000 or ENGL 30400) - Credit Hours: 3.00
- Business Selective (IT 34200 or STAT 30100 or STAT 22500 or ENTR 20000 or MGMT 32300 or MGMT 20100 or MGMT 44301) - Credit Hours: 3.00
- Communication Selective (AGEC 33100 or COM 31400 or COM 31500 or COM 31800 or COM 32000 or COM 32400 or COM 32500 or COM 41500 or a Foreign Language) - Credit Hours: 3.00
- Human Relations Selective (PSY 12000 or SOC 10000 or OLS 25200 or OLS 28400 or OLS 38600) - Credit Hours: 3.00
- Global Selective (TECH 33000, Study Abroad, or other global courses listed) - Credit Hours: 3.00
- MEP Selective (BCM 31700, BCM 51000, or BCM 58100 - Industrial Construction, or CGT 36000, CGT 46000) - Credit Hours: 3.00

University Core Requirements

- Human Cultures - Humanities - UCC Selective
- Human Cultures - Behavioral/Social Science - ECON 21000 or AGEC 21700
- Information Literacy - TECH 12000
- Science #1 - PHYS 21800
- Science #2 - See BCM's list
- Science, Technology & Society - BCM 10001 or TECH 12000
- Written Communication - See BCM's list
- Oral Communication - COM 11400
- Quantitative Reasoning - MA 15300 or MA 15800 or MA 16010

Program Requirements

Fall 1st Year

- BCM 10001 - Introduction To Construction *
- 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

- BCM 17500 - Construction Materials And Methods
- BCM 11201 - Construction Surveying Fundamentals
- MA 16010 - Applied Calculus I *
- OLS 27400 - Applied Leadership
- COM 11400 - Fundamentals Of Speech Communication *

15 Credits

Fall 2nd Year

- BCM 21200 - Construction Layout
- BCM 21500 - Mechanical Construction
- BCM 27500 - Construction Plans And Measurements
- PHYS 21800 - General Physics *
- Human Relations Selective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- BCM 25001 - Construction Project And Administrative Management

- BCM 21601 - Electrical Construction
- BCM 28500 - Construction Mechanics
- MGMT 20010 - Business Accounting
- Lab Science Selective - Credit Hours: 4.00 *

15 Credits

Fall 3rd Year

- BCM 34500 - Scheduling
- BCM 37500 - Estimating

- BCM 31500 - Mechanical Construction Estimating or
- BCM 31600 - Electrical Construction Estimating

- BCM 38000 - Concrete Construction
- Humanities Foundation Selective - Credit Hours: 3.00 *

15 Credits

Spring 3rd Year

- BCM 30101 - Introduction To Construction Company Financial Management
- BCM 35000 - Construction Site Planning
- BCM 38501 - Soils In Construction
- BCM 45701 - Construction Safety
- BCM 41700 - Design/Build For Mep Contractors
- BCM 45500 - Construction Company Management

15 Credits

Fall 4th Year

- BCM 35501 - Construction Site Supervision
- BCM 47500 - Construction Costs
- BCM 45500 - Construction Company Management
- MEP Selective - Credit Hours: 3.00

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

15 Credits

Spring 4th Year

- BCM 48701 - Construction Capstone

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

15 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)

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

For BCM Supplemental Information click here.

Degree Requirements

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

myPurdue Plan 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.

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.

When you major in residential construction management at Purdue University, you will gain experience in all facets of the home-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. This major is offered by the School of Construction Management Technology.

Your coursework includes information to help you prepare for certifications as a green professional or an aging-in-place specialist.

Meet our faculty, many of whom have industry experience.

Special Features

- Gain valuable work experience when you participate in the national Residential Construction Student Competition in Las Vegas (you'll earn academic credit, too)
- Take advantage of networking opportunities with the Builders Association of Greater Lafayette
- Work alongside students majoring in interior design and computer graphics
- Use your construction knowledge to volunteer with local organizations, such as Habitat for Humanity and the Humane Society
- Gain valuable experience as you complete 800 hours of on-site construction work as part of your graduation requirements
- Take advantage of the program's contacts within the industry during career fairs and special events on campus
- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Residential Construction Management is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TBCM-BS-RCM
120 Credits
"C-" or better required in all major courses and all courses that are a prerequisite to a BCM course

Building Construction Management Major Courses (61 credits)

- BCM 10001 - Introduction To Construction (Satisfies Science, Technology & Society selective for core.)
- BCM 17500 - Construction Materials And Methods
- BCM 11201 - Construction Surveying Fundamentals
- BCM 21200 - Construction Layout
- BCM 21500 - Mechanical Construction
- BCM 27500 - Construction Plans And Measurements
- BCM 25001 - Construction Project And Administrative Management
- BCM 21601 - Electrical Construction
- BCM 28500 - Construction Mechanics
- BCM 30101 - Introduction To Construction Company Financial Management
- BCM 34500 - Scheduling
- BCM 35000 - Construction Site Planning
- BCM 35501 - Construction Site Supervision
- BCM 36000 - Residential Construction
- BCM 37500 - Estimating
- BCM 38000 - Concrete Construction
- BCM 38501 - Soils In Construction

- BCM 45500 - Construction Company Management
- BCM 45701 - Construction Safety
- BCM 46100 - Residential Design Build
- BCM 47500 - Construction Costs
- BCM 48701 - Construction Capstone

Other Departmental/Program Course Requirements (58 credits)

- 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)

- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective as well as the Science, Technology and Society Selective for core)
- PHYS 21800 - General Physics (satisfies one Science Selective for core)
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- MA 15800 - Precalculus- Functions And Trigonometry (can satisfy Quantitative Reasoning Selective for core)
- CGT 16400 - Graphics For Civil Engineering And Construction
- MA 16010 - Applied Calculus I (can satisfy Quantitative Reasoning Selective for core)
- OLS 27400 - Applied Leadership
- 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 (satisfies second Science Selective for core)- See Approved BCM List - Credit Hours: 4.00
- English First Year Composition Selective: See list of approved selectives) (satisfies Written Communication for core) - Credit Hours: 3.00
- English selective (ENGL 42000 or ENGL 42100 or ENGL 49000 or ENGL 30400)
- Business Selective (IT 34200 or STAT 30100 or STAT 22500 or ENTR 20000 or MGMT 32300 or MGMT 20100 or MGMT 44301)
- Communication Selective (AGEC 33100 or COM 31400 or COM 31500 or COM 31800 or COM 32000 or COM 32400 or COM 32500 or COM 41500 or a Foreign Language)
- Human Relations Selective (PSY 12000 or SOC 10000 or OLS 25200 or OLS 28400 or OLS 38600)
- Global Selective (TECH 33000, Study Abroad, or other global courses listed)
- Residential Selective (at least 1 credit hour from the following: AD 12500, AD 39500, AD 39700, AD 45400, AGEC 33100, BCM 32000, BCM 33000, BCM 36100, BCM 41200, BCM 46000, BCM 51000, CGT 36000, LA 15000, LA 15100, LA 15200 the remainder of the three hours may be free electives)

Electives (1 credit)

University Core Requirements

- Human Cultures - Humanities - UCC Selective
- Human Cultures - Behavioral/Social Science - ECON 21000 or AGEC 21700
- Information Literacy - TECH 12000
- Science #1 - PHYS 21800
- Science #2 - See BCM's list

- Science, Technology & Society - BCM 10001 or TECH 12000
- Written Communication - See BCM's list
- Oral Communication - COM 11400
- Quantitative Reasoning - MA 15300 or MA 15800 or MA 16010

Program Requirements

Accredited by the American Council for Construction Education (ACCE)

Fall 1st Year

- BCM 10001 - Introduction To Construction *
- 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

- BCM 17500 - Construction Materials And Methods
- BCM 11201 - Construction Surveying Fundamentals
- MA 16010 - Applied Calculus I *
- OLS 27400 - Applied Leadership
- COM 11400 - Fundamentals Of Speech Communication *

15 Credits

Fall 2nd Year

- BCM 21200 - Construction Layout
- BCM 21500 - Mechanical Construction
- BCM 27500 - Construction Plans And Measurements
- PHYS 21800 - General Physics *
- Human Relations Selective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- BCM 25001 - Construction Project And Administrative Management
- BCM 21601 - Electrical Construction
- BCM 28500 - Construction Mechanics
- MGMT 20010 - Business Accounting

- Lab Science Selective - Credit Hours: 4.00 *

15 Credits

Fall 3rd Year

- BCM 34500 - Scheduling
- BCM 37500 - Estimating
- BCM 36000 - Residential Construction
- BCM 38000 - Concrete Construction
- Humanities Foundation Selective - Credit Hours: 3.00 *

15 Credits

Spring 3rd Year

- BCM 30101 - Introduction To Construction Company Financial Management
- BCM 35000 - Construction Site Planning
- BCM 38501 - Soils In Construction
- BCM 45701 - Construction Safety
- BCM 46100 - Residential Design Build
- MGMT 45500 - Legal Background For Business I

15 Credits

Fall 4th Year

- BCM 35501 - Construction Site Supervision
- BCM 47500 - Construction Costs
- BCM 45500 - Construction Company Management

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

- English Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 1.00

15 Credits

Spring 4th Year

- BCM 48701 - Construction Capstone
- Global Selective - Credit Hours: 3.00
- Residential Elective - Credit Hours: 3.00 ** see list
- Business Selective - Credit Hours: 3.00
- Communication Elective - Credit Hours: 3.00

15 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)

For BCM Supplemental Information click here.

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Expired Course

Any course without a link to its description is one that has been expired. However, this course could fulfill the degree requirement historically.

Minor

Building Construction Management Technology Minor

Objective: The BCM 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.

Admissions Requirements: Students must be in good academic standing for consideration of being admitted into the BCM Minor. This is a limited-access program based on available seats for enrollment. The BCM Department will review the enrollment numbers each semester to determine the availability for further admissions into the minor. Any students admitted to the BCM minor are subject to all current CODO (Change of Curricula) requirements if they desire to obtain full admissions into the TBCM-BS degree program.

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

Requirements for the Minor

Foundational Topics

- BCM 10001 - Introduction To Construction
- BCM 17500 - Construction Materials And Methods
- BCM 27500 - Construction Plans And Measurements

10 Credits

Selective Topics (Minimum of 6 credit hours)

- BCM 23000 - Mechanical And Electrical Systems
- BCM 25001 - Construction Project And Administrative Management
- BCM 32000 - Introduction To Disaster Restoration And Reconstruction Management
- BCM 33000 - Introduction To Demolition And Reconstruction Management
- BCM 34000 - Introduction To Healthcare Construction Management
- BCM 35000 - Construction Site Planning
- BCM 36000 - Residential Construction
- BCM 51000 - Topics In Environmentally Sustainable Construction, Design And Development
- BCM 45500 - Construction Company Management
- BCM 45701 - Construction Safety
- EPCS XXXX - EPICS - Construction Related - Credit Hours: 1.00 - 3.00
- Other

6 Credits

16 Total Credits

Note

REQUIREMENTS NOTE: Up to 3 credit hours can be used in equivalent courses, as determined by the BCM Department Head.

Disaster Restoration, Demolition & Reconstruction Management

Special skills are needed to bring order from chaos after a natural or manmade disaster. Students in the disaster restoration, demolition, and reconstruction (DRDR) minor will gain an understanding of the actions competent contractors must complete

and how they must be guided. Upon completion of the minor, students will be much better prepared to engage with specialty contractors to restore facilities and other property in the most economical and timely way.

The 11 credit-hour minor provides skills and knowledge essential for restoration and reconstruction of structures and personal property items damaged by disastrous events. After the preliminary work of planners and designers is complete, it is restoration and demolition specialty contractors who work closest with the property owner to do the critical work of restoring normalcy to the stricken area, whether large or small.

Managing projects to restore water, fire, and microbial losses, and understanding the role of demolition are the primary focus of the studies, but the courses inform students of other emergent damages and recovery, too.

Availability

The DRDR minor is open to any Purdue University West Lafayette campus major.

Students interested in specific careers may have a special interest in thei smminor, including:

- Healthcare
- Hospitality
- Agriculture
- Engineering
- Technology
- Emergency management

Requirements

Agrade of C- or better must be earned in any course used to fulfill the DRDR minor.

Required Courses

- BCM 32000 - Introduction To Disaster Restoration And Reconstruction Management
- BCM 32100 - Disaster Restoration And Reconstruction Project Management
- BCM 33000 - Introduction To Demolition And Reconstruction Management
- BCM 42100 - Disaster Restoration And Reconstruction Industry Problem Investigation

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 technology and network engineering technology focus on four core areas: software development, systems integration, data management, computer networks. The drive to solve problems extends to industrial and corporate partners and funded faculty research projects as well.

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 (CIT), BS

About the Program

Tackle society's grand challenges with a degree in information technology. For example, helping make solar energy economical requires skills in programming, big data analytics and networking. Engineering better medicines requires skills in bioinformatics, big data analytics and artificial intelligence. And keeping cyberspace safe requires skills in networking, cyber security and cyber forensics.

You will learn to harness the power of computers, software, and computer networks to create systems that help solve business problems and create a competitive advantage. Information technology professionals are responsible for information systems that provide timely and correct information, support efficient business processes, and promote effective communication. The flexible curriculum allows you to focus on specific topics throughout your time at Purdue.

This program is also offered at the Purdue College of Technology locations in Anderson, Columbus and Kokomo.

Computer and Information Technology Website

Summary of Program Requirements

The Summary of Program Requirements for Computer Information Technology (2015-16) is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TCIT-BS CNIT
120 CREDITS FOR GRADUATION
"C-" or better required in all CNIT courses that are a prerequisite to CNIT course

Departmental/Program Major Courses (120 credits)

Computer and Information Technology Required Major Courses (52 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 27200 - Database Fundamentals
- CNIT 28000 - Systems Analysis And Design Methods
- CNIT 48000 - Managing Information Technology Projects
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology

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

- CNIT 38000 - Advanced Analysis and Design

Programming Selective (3 credits)

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

Information Systems Selectives (15 credits)

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

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
- ENGL 10100 - English Composition I

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
- MA 16020 - Applied Calculus II (satisfies Quantitative Reasoning Selective for core)

- OLS 25200 - Human Relations In Organizations or
- TLI 11200 - Foundations Of Organizational Leadership

- Science Selective (satisfies Science Selective for core) - Credit Hours: 3.00
- Science Lab Selective (satisfies Science Selective for core) - Credit Hours: 3.00
- Interdisciplinary Selective (see supplemental information) - Credit Hours: 15.00

- Humanitites Selective (satisfies Human Cultures Humanities for core). See approved list at:http://www.purdue.edu/provost/initiatives/curriculum/course.html - Credit Hours: 3.00
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core). See approved list at:http://www.purdue.edu/provost/initiatives/curriculum/course.html - Credit Hours: 3.00

Communications Selective (3 credits)

- COM 21000 - Debating Public Issues
- COM 21200 - Approaches To The Study Of Interpersonal 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

Economics Selective (3 credits)

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

- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics

Accounting Selective (3 credits)

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

Statistics Selective (3 credits)

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

Professional Speaking Selective (3 credits)

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

Professional Writing Selective (3 credits)

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

General Business Selective (3 credits)

- TLI 11100 - Gateway To Technology Leadership And Innovation
- TLI 15200 - Business Principles For Organizational Leadership
- IT 10400 - Industrial Organization

Free Elective (2 credits)

(Any course except: BUS K201, CNIT 10700, CNIT 13600, CNIT 23500, CS 11000, CS 23500, and CSCI N100)

University Core Requirements

- Human Cultures Humanities - UCC Selective
- Human Cultures Behavioral/Social Science - UCC Selective
- Information Literacy - TECH 12000 - Design Thinking In Technology
- Science #1 - UCC Selective
- Science #2 - UCC Selective
- Science, Technology & Society Selective - TECH 12000 - Design Thinking In Technology

- Written Communication - ENGL 10100 - English Composition I or
- Written Communication - ENGL 10600 - First-Year Composition or
- Written Communication - ENGL 10800 - Accelerated First-Year Composition

- Oral Communication - COM 11400 - Fundamentals Of Speech Communication
- Quantitative Reasoning - MA 16010 - Applied Calculus I
- Quantitative Reasoning - MA 16020 - Applied Calculus II

Program Requirements

Fall 1st Year

First Semester

- CNIT 18000 - Introduction To Systems Development **

- OLS 25200 - Human Relations In Organizations or
- TLI 11200 - Foundations Of Organizational Leadership

- ENGL 10600 - First-Year Composition * or
- ENGL 10800 - Accelerated First-Year Composition * or
- ENGL 10100 - English Composition I * or
- ENGL 10300 - Comprehensive First Year Composition *

- MA 16010 - Applied Calculus I *
- TECH 12000 - Design Thinking In Technology *

15 Credits

Spring 1st Year

Second Semester

- CNIT 15501 - Introduction To Software Development Concepts **
- CNIT 17600 - Information Technology Architectures **
- COM 11400 - Fundamentals Of Speech Communication *
- MA 16020 - Applied Calculus II *
- Business Selective[1] - Credit Hours: 3.00

15 Credits

Fall 2nd Year

Third Semester

- CNIT 25501 - Object-Oriented Programming Introduction **
- CNIT 27200 - Database Fundamentals **
- Accounting Selective [2] - Credit Hours: 3.00
- Economics Selective [3] - Credit Hours: 3.00
- Science Selective [4] - Credit Hours: 3.00 *

15 Credits

Spring 2nd Year

Fourth Semester

- CNIT 24200 - System Administration
- CNIT 28000 - Systems Analysis And Design Methods **
- Communications Selective [5] - Credit Hours: 3.00
- Statistics Selective [6] - Credit Hours: 3.00
- Lab Science Selective [7] - Credit Hours: 3.00 *

15 Credits

Fall 3rd Year

Fifth Semester

- CNIT 38000 - Advanced Analysis and Design
- CNIT 37200 - Database Programming

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

- Professional Speaking Selective [8] - Credit Hours: 3.00

- Interdisciplinary Selective [9] - Credit Hours: 3.00

16 Credits

Spring 3rd Year

Sixth Semester

- Information Systems Selective [10] - Credit Hours: 3.00
- Information Systems Selective [10] - Credit Hours: 3.00
- Professional Writing Selective [11] - Credit Hours: 3.00
- Interdisciplinary Selective [9] - Credit Hours: 3.00
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology

15 Credits

Fall 4th Year

Seventh Semester

- Free Elective [12] - Credit Hours: 2.00
- Interdisciplinary Selective [9] - Credit Hours: 3.00
- Information Systems Selective [10] - Credit Hours: 3.00
- Information Systems Selective [10] - Credit Hours: 3.00
- Humanities Foundational Selective [13] - Credit Hours: 3.00 *

14 Credits

Spring 4th Year

Eighth Semester

- CNIT 48000 - Managing Information Technology Projects
- Information Systems Selective [10] - Credit Hours: 3.00
- Interdisciplinary Selective [9] - Credit Hours: 3.00
- Interdisciplinary Selective [9] - Credit Hours: 3.00
- Behavioral/Social Sciences Foundational Selective [14] - Credit Hours: 3.00 *

15 Credits

Note

*Fulfills University Core

1. Students must earn a C- or better in all CNIT courses that are a prerequisite to CNIT courses.
2. 120 semester credits listed above are required for the CIT Bachelor of Science degree.
3. 2.0 Graduation GPA required for Bachelor of Science degree.

4. 2.0 Graduation GPA in all CNIT courses required for Bachelor of Science degree.
5. CNIT COURSES MAY BE TAKEN MO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, or WN, I AND IF GRADES): STUDENTS NOT FULFILLING THIS POLICY MUST WITHDRAW FROM THE PROGRAM.
6. ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, WN, I and IF).
7. Courses with ** are essential for the CIT degree critical path to graduation.

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

Business Selective

[1]BUSINESS SELECTIVE

- TLI 11100 - Gateway To Technology Leadership And Innovation or
- TLI 15200 - Business Principles For Organizational Leadership (for students pursuing the OL Minor) or
- IT 10400 - Industrial Organization

Accounting Selective

[2]ACCOUNTING SELECTIVE

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

Economics Selective

[3]ECONOMICS SELECTIVE

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

- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics

Science Selective & Lab Science Selective

[4]SCIENCE SELECTIVE &
7LAB SCIENCE SELECTIVE **(must take at least 3 credits of Science Selective with a Lab Component)**

See approved list at: *http://www.purdue.edu/provost/initiatives/curriculum/course.html* and check schedule of classes to ensure the course is being offered with a lab component.

The following courses are typically offered with a lab component:

- BIOL 11000 - Fundamentals Of Biology I *
- BIOL 11100 - Fundamentals Of Biology II *
- BIOL 13500 - First year Biology Laboratory *
- BIOL 14501 - First Year Biology Laboratory With Neuro Research Project *
- BIOL 14502 - First Year Biology Laboratory With Micro Research Project *
- BIOL 14600 - Introduction To Biology *
- BIOL 20300 - Human Anatomy And Physiology *
- BIOL 20400 - Human Anatomy And Physiology *
- BIOL 20500 - Biology For Elementary School Teachers *
- BIOL 20600 - Biology For Elementary School Teachers *
- 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 *
- CHM 12901 - General Chemistry With A Biological Focus *
- EAPS 10200 - Earth Science For Elementary Teachers *
- EAPS 10900 - The Dynamic Earth *
- 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 27200 - Electric And Magnetic Interactions *

Communications Selective

[5]COMMUNICATIONS SELECTIVE

- COM 21000 - Debating Public Issues
- COM 21200 - Approaches To The Study Of Interpersonal 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

Statistics Selective

[6]STATISTICS SELECTIVE

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

Professional Speaking Selective

[8]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

Interdisciplinary Selectives (15 credits)

[9]Interdisciplinary Selectives

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

http://www.admissions.purdue.edu/majors/minors.php

- COM 32400 - Introduction To Organizational Communication
- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- ENTR 31000 - Marketing And Management For New Ventures
- IET 45100 - Monetary Analysis For Industrial Decisions
- IT 34200 - Introduction To Statistical Quality
- IT 34500 - Automatic Identification And Data Capture
- IT 45000 - Production Cost Analysis
- MET 45100 - Manufacturing Quality Control
- MFET 40000 - Computer Integrated Manufacturing
- MFET 45100 - Manufacturing Quality Control
- MGMT 20100 - Management Accounting I
- MGMT 30400 - Introduction To Financial Management
- MGMT 32300 - Principles Of Marketing
- MGMT 44301 - Management Of Human Resources
- MGMT 45500 - Legal Background For Business I
- OLS 37500 - Training Methods
- OLS 37600 - Human Resource Issues
- OLS 38600 - Leadership For Organizational Change And Innovation
- OLS 47700 - Conflict Management
- OLS 48400 - Leadership Strategies For Quality And Productivity
- PSY 27200 - Introduction To Industrial-Organizational Psychology

Information Systems Selectives

[10]INFORMATION SYSTEMS SELECTIVE

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

Professional Writing Selective

[11]PROFESSIONAL WRITING SELECTIVE

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

Free Elective

[12]FREE ELECTIVE: Any course except BUS K201, CNIT 10700, CNIT 13600, CNIT 23500, CS 11000, CS 23500, and CSCI N100

Humanities Foundational Selective

[13]HUMANITIES FOUNDATIONAL SELECTIVE: see *http://www.purdue.edu/provost/initiatives/curriculum/course.html*

Behavioral/Social Sciences Foundational Selective

[14]BEHAVIORAL/SOCIAL SCIENCES FOUNDATIONAL SELECTIVE: see *http://www.purdue.edu/provost/initiatives/curriculum/course.html*

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Expired Course

Any course without a link to its description is one that has been expired. However, this course could fulfill the degree requirement historically.

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

Summary of Program Requirements

The Summary of Program Requirements for Network Engineering Technology is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TCIT-BS NENT
120 CREDITS FOR GRADUATION
"C-"or better required in all CNIT courses that are a prerequisite to CNIT course

Departmental/Program Major Courses (120 credits)

Computer and Information Technology Major Courses (57 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 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 34200 - Advanced System And Network Administration
- CNIT 34500 - Internetwork Design And Implementation
- CNIT 34600 - Wireless Networks
- CNIT 45500 - Network Security
- CNIT 48000 - Managing Information Technology Projects
- Information Systems Selectives (any other CNIT or CGT 30000 level or higher courses, EPCS (3 credits) approved by CIT faculty) - Credit Hours: 6.00

Other Departmental /Program Course Requirements (63 credits)

- ENGL 10100 - English Composition I (satisfies Written Communication for core) or
- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
- ENGL 10800 - Accelerated First-Year Composition (satisfies Written Communication for core)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
- MA 16020 - Applied Calculus II (satisfies Quantitative Reasoning Selective for core)

- OLS 25200 - Human Relations In Organizations or
- TLI 11200 - Foundations Of Organizational Leadership

- Physics Selective (satisfies Science Selective for core) - Credit Hours: 4.00
- Physics Selective (satisfies Science Selective for core) - Credit Hours: 4.00
- Interdisciplinary Selective (see supplemental information) - Credit Hours: 7.00
- Humanities Selective (satisfies Human Cultures Humanities for core). See approved list at: http://www.purdue.edu/provost/initiatives/curriculum/course.html - Credit Hours: 3.00
- Behavioral/Social Science Foundational Selective (satisfies Human Culture Behavioral/Social Science for core). See approved list at: http://www.purdue.edu/provost/initiatives/curriculum/course.html - Credit Hours: 3.00
- ECET 22400 - Electronic Systems

Communications Selective

- COM 21000 - Debating Public Issues
- COM 21200 - Approaches To The Study Of Interpersonal 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

Economics Selective

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

- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics

Accounting Selective

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

Statistics Selective

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

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

Professional Writing Selective

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

General Business Selective

- TLI 11100 - Gateway To Technology Leadership And Innovation
- TLI 15200 - Business Principles For Organizational Leadership
- IT 10400 - Industrial Organization

University Core Requirements

- Human Cultures Humanities - UCC Selective
- Human Cultures Behavioral/Social Science - UCC Selective
- Information Literacy - TECH 12000 - Design Thinking In Technology
- Science Selective - PHYS Selective
- Science Selective - PHYS Selective
- Science, Technology & Society Selective - TECH 12000 - Design Thinking In Technology

- Written Communication - ENGL 10600 - First-Year Composition or
- Written Communication - ENGL 10100 - English Composition I
- Written Communication - ENGL 10800 - Accelerated First-Year Composition

- Oral Communication - COM 11400 - Fundamentals Of Speech Communication
- Quantitative Reasoning - MA 16010 - Applied Calculus I
- Quantitative Reasoning - MA 16020 - Applied Calculus II

Program Requirements

Fall 1st Year

First Semester

- CNIT 18000 - Introduction To Systems Development

- OLS 25200 - Human Relations In Organizations or
- TLI 11200 - Foundations Of Organizational Leadership

- ENGL 10100 - English Composition I * or
- ENGL 10600 - First-Year Composition * or
- ENGL 10800 - Accelerated First-Year Composition *

- MA 16010 - Applied Calculus I *
- TECH 12000 - Design Thinking In Technology *

15 Credits

Spring 1st Year

Second Semester

- CNIT 15501 - Introduction To Software Development Concepts
- CNIT 17600 - Information Technology Architectures
- COM 11400 - Fundamentals Of Speech Communication *
- MA 16020 - Applied Calculus II *
- Business Selective[1] - Credit Hours: 3.00

15 Credits

Fall 2nd Year

Third Semester

- CNIT 25501 - Object-Oriented Programming Introduction
- Economics Selective [3] - Credit Hours: 3.00
- CNIT 24000 - Data Communications And Networking
- Accounting Selective [4] - Credit Hours: 3.00

- Physics Selective (PHYS 21800 or 22000) - Credits Hours: 4.00 *

16 Credits

Spring 2nd Year

Fourth Semester

- CNIT 24200 - System Administration
- CNIT 27200 - Database Fundamentals
- ECET 22400 - Electronic Systems
- Statistics Selective [5] - Credit Hours: 3.00

- Physics Selective (PHYS 21900 or 22100) - Credit Hours: 4.00 *

16 Credits

Fall 3rd Year

Fifth Semester

- CNIT 34000 - UNIX Administration
- CNIT 34500 - Internetwork Design And Implementation
- Interdisciplinary Selective [7] - Credit Hours: 3.00
- Professional Speaking Selective [6] - Credit Hours: 3.00
- CNIT 28000 - Systems Analysis And Design Methods

16 Credits

Spring 3rd Year

Sixth Semester

- CNIT 34200 - Advanced System And Network Administration
- CNIT 34600 - Wireless Networks
- Professional Writing Selective [9] - Credit Hours: 3.00
- CNIT 32000 - Policy, Regulation, And Globalization In Information Technology

14 Credits

Fall 4th Year

Seventh Semester

- CNIT 45500 - Network Security
- CNIT 31500 - Systems Programming
- Communications Selective [2] - Credit Hours: 3.00
- Information Systems Selective [8] - Credit Hours: 3.00
- Humanities Foundational Selective [10] - Credit Hours: 3.00 *

15 Credits

Spring 4th Year

Eighth Semester

- CNIT 48000 - Managing Information Technology Projects
- Information Systems Selective [8] - Credit Hours: 3.00
- Interdisciplinary Selective [7] - Credit Hours: 3.00
- Interdisciplinary Selective [7] - Credit Hours: 2.00 - 3.00
- Behavioral/Social Sciences Foundational Selective [11] - Credit Hours: 3.00 *

13 Credits

Total Credits 120

Note

*Fulfills University Core

1. Students must earn a C- or better in all CNIT courses that are a prerequisite to CNIT courses.
2. 120 semester credits listed above are required for the CIT Bachelor of Science degree with a NET concentration.
3. 2.0 Graduation GPA required for Bachelor of Science degree.
4. 2.0 Graduation GPA in all CNIT courses required for Bachelor of Science degree.
5. CNIT COURSES MAY BE TAKEN NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF or WN and I GRADES): STUDENTS NOT FULFILLING THIS POLICY MUST WITHDRAW FROM THE PROGRAM.
6. ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, WN, I and IF).

Degree Requirements

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

myPurduePlan is knowledge source for specific requirements and completion.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

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

Summary of Program Requirements

The Summary of Program Requirements for System Analysis and Design is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TCIT-BS SAAD
120 CREDITS FOR GRADUATION
"C-" or better in all CNIT courses that are a prerequisite to CNIT course

Departmental/Program Major Courses (120 credits)

Computer and Information Technology Required Major Courses (46 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 27200 - Database Fundamentals
- CNIT 28000 - Systems Analysis And Design Methods
- CNIT 32100 - Enterprise Collaboration
- 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

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

Information Systems Selectives

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

SAAD Selectives (6 credits from the following selectives options)

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

Other Departmental /Program Course Requirements (68 credits)

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

- ENGL 10800 - Accelerated First-Year Composition (satisfies Written Communication for core) or
- ENGL 10100 - English Composition I (satisfies Written Communication for core)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- PHIL 15000 - Principles Of Logic
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy Selective 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 or
- OLS 25200 - Human Relations In Organizations

- Science Selective (satisfies Science Selective for core) - Credit Hours: 3.00
- Science Lab Selective (satisfies Science Selective for core) - Credit Hours: 3.00
- Interdisciplinary Selective (see supplemental information) - Credit Hours: 14.00

Communications Selective (3 credits)

- COM 21000 - Debating Public Issues
- COM 21200 - Approaches To The Study Of Interpersonal 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

Economics Selective (3 credits)

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

- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics

Accounting Selective (3 credits)

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

Statistics Selective (3 credits)

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

Professional Speaking Selective (3 credits)

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

Professional Writing Selective (3 credits)

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

General Business Selective (3 credits)

- TLI 11100 - Gateway To Technology Leadership And Innovation
- TLI 15200 - Business Principles For Organizational Leadership
- IT 10400 - Industrial Organization

Humanities Selective (3 credits)

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

Behavioral/Social Science Foundational Selective

(satisfies Human Culture Behavioral/Social Science for core). See approval list at:
http://www.purdue.edu/provost/initiatives/curriculum/course.html

University Core Requirements

- Human Cultures Humanities - UCC Selective
- Human Cultures Behavioral/Social Science - UCC Selective
- Information Literacy - TECH 12000 - Design Thinking In Technology
- Science #1 - UCC Selective
- Science #2 - UCC Selective
- Science, Technology & Society Selective - TECH 12000 - Design Thinking In Technology

- Written Communication - ENGL 10600 - First-Year Composition or
- Written Communication - ENGL 10800 - Accelerated First-Year Composition or
- Written Communication - ENGL 10100 - English Composition I

- Oral Communication - COM 11400 - Fundamentals Of Speech Communication
- Quantitative Reasoning - MA 16010 - Applied Calculus I
- Quantitative Reasoning - MA 16020 - Applied Calculus II

Program Requirements

Fall 1st Year

First Semester

- CNIT 18000 - Introduction To Systems Development **

- OLS 25200 - Human Relations In Organizations or
- TLI 11200 - Foundations Of Organizational Leadership

- ENGL 10600 - First-Year Composition * or
- ENGL 10800 - Accelerated First-Year Composition * or
- ENGL 10100 - English Composition I *

- MA 16010 - Applied Calculus I *
- TECH 12000 - Design Thinking In Technology *

15 Credits

Spring 1st Year

Second Semester

- CNIT 15501 - Introduction To Software Development Concepts **
- CNIT 17600 - Information Technology Architectures **
- COM 11400 - Fundamentals Of Speech Communication *
- MA 16020 - Applied Calculus II *
  Business Selective [1] - Credit Hours: 3.00

15 Credits

Fall 2nd Year

Third Semester

- CNIT 25501 - Object-Oriented Programming Introduction **
- CNIT 27200 - Database Fundamentals **
- Economics Selective [3] - Credit Hours: 3.00
- PHIL 15000 - Principles Of Logic
- Science Selective [4] - Credit Hours: 3.00 *

15 Credits

Spring 2nd Year

Fourth Semester

- CNIT 24200 - System Administration
- CNIT 28000 - Systems Analysis And Design Methods **
- Communications Selective [2] - Credit Hours: 3.00
- Statistics Selective [6] - Credit Hours: 3.00

- Lab Science Selective [7] - Credit Hours: 3.00 *

15 Credits

Fall 3rd Year

Fifth Semester

- CNIT 38000 - Advanced Analysis and Design
- CNIT 32100 - Enterprise Collaboration
- Programming Selective - Credit Hours: 3.00
- Professional Speaking Selective [9] - Credit Hours: 3.00
- Accounting Selective [5] - Credit Hours: 3.00

16 Credits

Spring 3rd Year

Sixth Semester

- SAAD Selective [8] - Credit Hours: 3.00
- CNIT 39200 - Enterprise Data Management
- Professional Writing Selective [12] - Credit Hours: 3.00
- Interdisciplinary Selective [10] - Credit Hours: 3.00
- CGT 25600 - Principles Of User Experience Design

15 Credits

Fall 4th Year

Seventh Semester

- Interdisciplinary Selective [10] - Credit Hours: 3.00
- Interdisciplinary Selective [10] - Credit Hours: 3.00
- SAAD Selective [8] - Credit Hours: 3.00
- Information Systems Selective [11] - Credit Hours: 3.00
- Humanities Foundational Selective [13] - Credit Hours: 3.00 *

15 Credits

Spring 4th Year

Eighth Semester

- CNIT 48000 - Managing Information Technology Projects
- Information Systems Selective [11] - Credit Hours: 3.00
- Interdisciplinary Selective [10] - Credit Hours: 3.00

- Interdisciplinary Selective [10] - Credit Hours: 2.00
- Behavioral/Social Sciences Foundational Selective [14] - Credit Hours: 3.00 *

14 Credits

120 Total Credits

Note

*Fulfills University core

1. Students must earn a C- or better in all CNIT courses that are a prerequisite to CNIT courses.
2. 120 semester credits listed above are required for the CIT Bachelor of Science degree with a SA&D concentration.
3. 2.0 Graduation GPA required for Bachelor of Science degree.
4. 2.0 Graduation GPA in all CNIT courses required for Bachelor of Science degree.
5. CNIT COURSES MAY BE TAKEN NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, OR WN, AND I GRADES): STUDENTS NOT FULFILLING THIS POLICY MUST WITHDRAW FROM THE PROGRAM.
6. ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, WN, I, AND IF).
7. Courses with ** are essential for the CIT degree critical path to graduation.

Degree Requirements

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

myPurduePlan is knowledge source for specific requirements and completion.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Minor

Computer and Information Technology Minor

FOR STUDENTS EARNING DEGREES OUTSIDE COMPUTER & INFORMATION TECHNOLOGY

EFFECTIVE FALL 2014

Minor Code: CNIT
15 Credit Hours Required
CNIT 18000 *(3 credits) required + 12 credits CNIT credits that fulfill CIT Major Requirements*

Requirements for the Minor

- 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

15 Credits

Minor Requirements

1. A 2.0 GPA in all minor courses
2. No course may be taken pass/fail
3. Transfer credit, course substitutions, and credit by exam limited to three (3) credit hours
4. Only one (1) of CNIT 10500, CNIT 15500, CNIT 15501, or CNIT 17500 may be used to fulfill the minor requirements
    a. CS 17700, CS 18000, CGT 21500 or any 3 credit programming course at Purdue may fulfill a requirement. This will count as a substitute.
5. CNIT 13600 cannot be used to fulfill the minor requirements
6. Course requisites (pre-requisites, concurrent pre-requisites, and restrictions) must be met

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

Department of Computer Graphics Technology

Overview

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.

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

Contact an advisor

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.

Graduates of the program work primarily in the animated film and video game industries. In fact, eight of our alumni were part of the creative teams behind 2014 Oscar winner "Big Hero 6" and 2014 Golden Globe winner "How to Train Your Dragon 2". Others have found success working with educational software, forensics animation and advertising.

Special Features

- Delve into the technical side of and develop innovative tools for animation
- Work on projects that can help automate animation processes, which can be used by others in the animation industry
- Improve your career prospects and portfolio with real-world projects that allow you to work alongside faculty and real clients.
- Access knowledge and experience of professors who are leading experts in animation and its uses for healthcare, education, human-computer interaction, scientific visualization, assistive technology, film and games.
- Gain leadership skills and network with other experts as part of Purdue's ACM SIGGRAPH chapter, the first student chapter of the professional computer graphics organization.
- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Animation is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

ANIM
TCGT-BS
120 Credit Hours to Graduate
"C-" or better required in all major courses

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 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34100 - Motion for Computer Animation
- CGT 41100 - Contemporary Problems In Applied Computer Graphics
- CGT 45000 - Professional Practices

Major Selectives* - Select 4 of the following courses (12 credits)

http://www.tech.purdue.edu/CGT/academics/coursepages.cfm

- CGT Selective - Credit Hours: 3.00
- CGT Selective - Credit Hours: 3.00
- CGT Selective - Credit Hours: 3.00
- CGT Selective - 400 Level Selective (CGT 44200 or CGT 44600) Credit Hours: 3.00

Other Departmental /Program Course Requirements (28 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)*

Electives (51 credits)

- Human Behavior Humanities for core - Credit Hours: 3.00
- Science Selective for core - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 6.00
- Technical Elective - Credit Hours: 9.00
- 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
- Free Elective - Credit Hours: 15.00

University Core Requirements

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

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 Behavior Core* - Credit Hours: 3.00
- PHYS 21800 - General Physics *
- Free Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- CGT 24100 - Introduction to Computer Animation
- 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

15 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 Selective (40000 Level) - 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

15 Credits

Spring 4th Year

- CGT 45000 - Professional Practices
- CGT 41100 - Contemporary Problems In Applied Computer Graphics
- Free Elective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Notes

*Satisfies a University Core Requirement

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

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Purdue policy states that a student may attempt a course no more than 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

For Supplemental CGT Information click here.

Degree Requirements

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

myPurdue Plan 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.

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. On the job, your work will be used by design teams and project managers to assist in every step of the construction process, from material selection to estimating.

This major includes courses in computer graphics, programming, and construction materials and methods, and you will have opportunities to research and test new technologies and materials. You will continuously learn new technologies, processes, workflows and protocols within AEC.

Special Features

- Benefit from faculty experience in BIM-related careers.
- Network with successful alumni who work for top companies in the construction industry.
- Gain industry-standard experience in labs and facilities with the latest BIM technologies and collaborate with your peers on group projects.
- Improve your career prospects with real-world BIM research projects for industry clients.
- Prepare for certification tests for Revit, AutoCAD and Blue Beam software
- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Building Information Modeling is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

BINM
TCGT-BS
Catalog Term: 201610
120 Credit Hours to Graduate
"C-" or better required in all major courses

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 26200 - Introduction To Construction Graphics
- CGT 36000 - Applications Of Construction Documentation I
- CGT 41100 - Contemporary Problems In Applied Computer Graphics
- CGT 45000 - Professional Practices
- CGT 46000 - Building Information Modeling For Commercial Construction
- CGT 46200 - Applications Of Construction Documentation II

Major Selectives* - Select 3 of the following courses (9 credits)

http://www.tech.purdue.edu/CGT/academics/coursepages.cfm

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

Other Departmental /Program Course Requirements (28 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)*

Electives (51 credits)

- Human Behavior Humanities for core - Credit Hours: 3.00
- Science Selective for core - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 6.00
- Technical Elective - Credit Hours: 9.00
- 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
- Free Elective - Credit Hours: 15.00

University Core Requirements

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

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
- CGT 26200 - Introduction To Construction Graphics
- PHYS 21800 - General Physics *
- Free Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- CGT 36000 - Applications Of Construction Documentation I

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

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

15 Credits

Spring 4th Year

- CGT 45000 - Professional Practices
- CGT 41100 - Contemporary Problems In Applied Computer Graphics
- Free Elective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Notes

*Satisfies a University Core Requirement

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

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Purdue policy states that a student may attempt a course no more than 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

For Supplemental CGT Information click here.

Degree Requirements

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

myPurdue Plan 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.

Computer Graphics Technology, BS

About the Program

Use your creativity to bring all kinds of ideas to life, from animation to production simulations, and from gaming to building designs. In Purdue's computer graphics program, you will turn your ideas (and ideas of others) into models, digital animations, interactive games and more. Wherever people need to visualize a final product or another world, the skills of a computer graphics graduate can help.

In addition to a general computer graphics degree, you can develop more in-depth knowledge and skills in other areas:

- Animation
- Building Information Modeling/Construction Graphics
- Computer Gaming Development
- Information Visualization
- Interactive Multimedia Design
- User Experience/Mobile Computing/Human Computer Interaction
- Virtual Product Integration
- Web Design and Programming

Summary of Program Requirements

The Summary of Program Requirements for Computer Graphics Technology is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TCGT-BS
Catalog Term: 201610
120 Credit Hours to Graduate
"C-"or better required in all major courses

Departmental/Program Major Courses (41 credits)

Required Major Courses (17 credits)

- CGT 10101 - Foundations Of Computer Graphics Technology
- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 14100 - Internet Foundations Technologies And Development
- CGT 21500 - Computer Graphics Programming I
- CGT 41100 - Contemporary Problems In Applied Computer Graphics
- CGT 45000 - Professional Practices

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

http://www.tech.purdue.edu/CGT/academics/coursepages.cfm

- CGT 10000 - 100 Level Selective (CGT 11100 or CGT 11600) - Credit Hours: 3.00
- CGT Selective - Credit Hours: 3.00
- CGT Selective - Credit Hours: 3.00
- CGT Selective - Credit Hours: 3.00
- CGT Selective - Credit Hours: 3.00
- CGT Selective - 300 or 400 Level Selective - Credit Hours: 3.00
- CGT Selective - 300 or 400 Level Selective - Credit Hours: 3.00
- CGT Selective - 400 Level Selective - Credit Hours: 3.00

Other Departmental /Program Course Requirements (28 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)

Electives (51 credits)

- Human Behavior Humanities for core - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Science Selective for core - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Management Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Advanced English Selective - Credit Hours: 3.00
- CGT Global Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

University Core Requirements

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

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 Behavior: Human Core - Credit Hours: 3.00 *
- PHYS 21800 - General Physics *
- Free Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- CGT Selective - Credit Hours: 3.00
- 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

15 Credits

Fall 3rd Year

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

15 Credits

Fall 4th Year

- CGT Selective (40000 Level) - 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

15 Credits

Spring 4th Year

- CGT 45000 - Professional Practices
- CGT 41100 - Contemporary Problems In Applied Computer Graphics
- Free Elective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Note

*Satisfies a University Core Requirement

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

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Purdue policy states that a student may attempt a course no more than 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

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

Supplemental CGT Information

CGT Selectives

10000 Selective

- CGT 11600 - Geometric Modeling For Visualization And Communication

Product Lifecycle Management

- CGT 22600 - Introduction To Constraint-Based Modeling
- CGT 32600 - Graphics Standards For Product Definition (SP)
- CGT 42300 - Product Data Management (SP)
- CGT 42600 - Industry Applications Of Simulation And Visualization (FA)

Computer Animation

- CGT 24100 - Introduction to Computer Animation
- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34100 - Motion for Computer Animation
- CGT 34600 - Digital Video And Audio
- CGT 44200 - Production for Computer Animation (FA)
- CGT 44600 - Post-Production And Special Effects For Computer Animation (SP)

Construction Graphics

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

Web Programming, Gaming & Design

- CGT 25600 - Principles Of User Experience Design (SP)
- CGT 34500 - Game And Simulation Development (FA)
- CGT 35300 - Principles Of Interactive And Dynamic Media (FA)
- CGT 35600 - Web Programming, Development And Data Integration
- CGT 44500 - Video Game Design And Development (SP)
- CGT 45600 - Advanced Web Programming, Development And Data Integration (SP)

Technical Elective

Any course within the College of Technology, Engineering, Management, or Science.

Human Cultures: Humanities Core

See http://www.purdue.edu/provost/initiatives/curriculum/course.html for approved Humanities Core Courses.

Communication Selective

- COM 30000 or 40000 level

Advanced English Selective

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

Science Foundational Selective Core

See http://www.purdue.edu/provost/initiatives/curriculum/course.html for approved Science Core Courses.

Statistics Selective

- STAT 22500 - Introduction To Probability Models
- STAT 30100 - Elementary Statistical Methods
- PSY 20100 - Introduction To Statistics In Psychology
- IT 34200 - Introduction To Statistical Quality

Management Selective

Any course in Organizational Leadership & Supervision (OLS), Management (MGMT), Economics (ECON), Entrepreneurship (ENTR), or Organizational Behavior & Human Resources (OBHR)

CGT Globalization Selective

- AD 25500 - Art Appreciation
- AD 45400 - Modern Architecture
- AGEC 25000 - Economic Geography Of World Food And Resources
- ANTH 10000 - Introduction To Anthropology
- ANTH 20500 - Human Cultural Diversity
- ANTH 21200 - Culture, Food And Health
- ANTH 23000 - Gender Across Cultures
- ANTH 31200 - The Archaeology Of Ancient Egypt And The Near East
- ANTH 32700 - Environment And Culture
- ANTH 33600 - Human Variation

- ANTH 38000 - Using Anthropology In The World
- ARAB 23000 - Arabic Literature In Translation
- ASAM 24000 - Introduction To Asian American Studies
- ASAM 34000 - Contemporary Issues In Asian American Studies
- CHNS 28000 - Topics in Chinese Civilization and Culture
- CLCS 18100 - Classical World Civilizations
- CLCS 23100 - Survey Of Latin Literature
- CLCS 28000 - Topics In Classical Civilization
- CLCS 38500 - Science, Medicine And Magic In The Ancient West
- CMPL 23000 - Crossing Borders: Introduction To Comparative Literature
- CMPL 26600 - World Literature: From The Beginnings To 1700 A D
- CMPL 26700 - World Literature: From 1700 A D To The Present
- COM 22400 - Communicating In The Global Workplace
- COM 30300 - Intercultural Communication
- EAPS 37500 - Great Issues - Fossil Fuels, Energy And Society
- EEE 35500 - Engineering Environmental Sustainability
- ENGL 23000 - Great Narrative Works
- ENGL 24000 - Survey Of The British Literature: From The Beginnings Through The Neoclassical Period
- ENGL 24100 - Survey Of The British Literature: From The Rise Of Romanticism To The Modern Period
- ENGL 26600 - World Literature: From The Beginnings To 1700 A.D.
- ENGL 26700 - World Literature: From 1700 A.D. To The Present
- ENGL 34100 - Topics In Science, Literature, And Culture
- FNR 10300 - Introduction To Environmental Conservation
- HDFS 28000 - Diversity In Individual And Family Life
- HEBR 28000 - Modern Israel: Cinema, Literature, Politics And History
- HEBR 28400 - Ancient Near Eastern History And Culture
- HIST 10300 - Introduction To The Medieval World
- HIST 10400 - Introduction To The Modern World
- HIST 10500 - Survey Of Global History
- HIST 20400 - East Asia in the Modern World
- HIST 24100 - East Asia In The Modern World
- 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 27200 - Introduction To Modern Latin American History (1810 To The Present)
- HIST 31700 - A History Of The Christian Church And The Expansion Of Christianity I
- HIST 32900 - History Of Women In Modern Europe
- HIST 33400 - Science And Technology In Western Civilization II
- HIST 34200 - Africa And The West
- HIST 35100 - The Second World War
- HIST 36100 - Violence in Africa
- HIST 37500 - Women In America Since 1870
- JPNS 28000 - Introduction To Modern Japanese Civilization
- JWST 33000 - Introduction To Jewish Studies
- LC 23500 - East Asian Literature In Translation
- LC 23900 - Women Writers In Translation
- PHIL 11400 - Global Moral Issues
- PHIL 20600 - Philosophy Of Religion

- PHIL 21900 - Introduction To Existentialism
- PHIL 24000 - Social And Political Philosophy
- PHIL 24200 - Philosophy, Culture, And The African American Experience
- PHIL 27000 - Biomedical Ethics
- PHIL 29000 - Environmental Ethics
- PHIL 33000 - Religions of the East
- PHIL 33100 - Religions of the West
- POL 13000 - Introduction To International Relations
- POL 14100 - Governments Of The World
- POL 22200 - Women, Politics, And Public Policy
- POL 23000 - Introduction To The Study Of Peace
- 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 30400 - Israel and World Politics
- POL 32700 - Global Green Politics
- POL 34200 - Govt and Politics in the Communist Successor States
- POL 34500 - West European Democracies In The Post-Industrial Era
- POL 34800 - East Asian Politics
- SOC 33800 - Global Social Movements
- SOC 33900 - Introduction To The Sociology Of Developing Nations
- TECH 33000 - Technology And The Global Society
- Any foreign language course of 201, 202, 301, 302, 401, 402, or 235
- Any Study Abroad experience on your Purdue Transcript

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 CGT advisor.

Each student must have 32 credit hours of 300- or 400-level Purdue courses for graduation.

Minors Approved by CGT Faculty

Art & Design (ARTS) https://www.cla.purdue.edu/students/academics/minors/asdm.html

Building Construction Management (BCMT) http://www.tech.purdue.edu/bcm/academics/undergraduate/bcm-minor/

Computer & Information Technology (CNIT)
http://www.tech.purdue.edu/cit/academics/undergraduate/curricula/documents/minors-worksheet.pdf

Computer Science (CS) http://www.cs.purdue.edu/academic_programs/undergraduate/curriculum/minor/index.sxhtml

Film/Video Studies (FILV) https://www.cla.purdue.edu/students/academics/minors/ifmvm.html

Mathematics (MATH) http://www.science.purdue.edu/Current_Students/minors/Math%20Minor%20REVISED%209-23-15.pdf

Management (MGMT) http://www.krannert.purdue.edu/undergraduate/current-students/MGMT%20Minor%20Requirements.pdf

Organizational Leadership & Supervision (OLSV)
http://www.tech.purdue.edu/TLI/academics/undergraduate/OLS/ols_minors.cfm

Psychology (PSY) http://www.purdue.edu/hhs/psy/undergraduate/majors_req_courses/index.php

Foreign Language: Choose a language from this page http://www.cla.purdue.edu/academics/programs/minors/

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Expired Course

Any course without a link to its description is one that has been expired. However, this course could fulfill the degree requirement historically.

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. Additionally, courses in animation and compositing will supplement your studies to provide a well-rounded understanding of the animation and VFX workflows.

Summary of Program Requirements

The Summary of Program Requirements for Effects Technical Direction is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

ETDR
TCGT-BS

Catalog Term: 201610
120 Credit Hours to Graduate
"C-" or better required in all major courses

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 24100 - Introduction to Computer Animation
- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34600 - Digital Video And Audio
- CGT 41100 - Contemporary Problems In Applied Computer Graphics
- CGT 45000 - Professional Practices
- CGT 14700 - VFX - Introduction
- CGT 24600 - Compositing I
- CGT 24700 - VFX - Particles & Procedural FX
- CGT 24800 - VFX3 - Pyro & Destruction
- CGT 24900 - VFX - Programming
- CGT 34800 - Photorealistic Shaders
- CGT 34900 - VFX - Technical Directing
- CGT 44800 - VFX - Capstone

Major Selectives* - Select 1 of the following courses (3 credits)

http://www.tech.purdue.edu/CGT/academics/coursepages.cfm

- CGT VFX/Animation Selective - Credit Hours: 3.00

Other Departmental /Program Course Requirements (51 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)
- TECH 12000 - Design Thinking In Technology (satisfies Information Literacy AND Science, Technology & Society Selective for core)

Electives (22 credits)

- Humanities Elective - Credit Hours: 3.00
- Computer Science Selective - Credit Hours: 4.00
- CGT Global Selective - Credit Hours: 3.00
- Psychology Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 6.00

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

Program Requirements

Fall 1st Year

- CGT 10101 - Foundations Of Computer Graphics Technology
- TECH 12000 - Design Thinking In 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

- CGT 11800 - Fundamentals Of Imaging Technology
- COM 11400 - Fundamentals Of Speech Communication *
- MA 16200 - Plane Analytic Geometry And Calculus II
- CGT 14700 VFX - Introduction

14 Credits

Fall 2nd Year

- CGT 24100 - Introduction to Computer Animation
- MA 26500 - Linear Algebra
- PHYS 21800 - General Physics *
- CGT 24700 VFX-Particles & Procedural FX
- CGT 24600 - Compositing I

16 Credits

Spring 2nd Year

- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- MA 26100 - Multivariate Calculus
- CGT 24800 VFX3-Pyro & Destruction
- CGT 24900 VFX-Programming
- Humanities Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34600 - Digital Video And Audio
- PHIL 11400 - Global Moral Issues
- CGT 34800 Photorealistic Shaders
- Psychology Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- ENTR 31000 - Marketing And Management For New Ventures
- COM 31400 - Advanced Presentational Speaking
- ENGL 42000 - Business Writing
- CGT 34900 VFX-Technical Directing
- Free Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- ENTR 48000 - Entrepreneurship Capstone

- ENGL 42100 - Technical Writing
- CGT 44800 VFX Capstone
- CGT VFX/Anim. Selective - Credit Hours: 3.00
- Globalization Selective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- CGT 45000 - Professional Practices
- CGT 41100 - Contemporary Problems In Applied Computer Graphics
- Free Elective - 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.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Purdue policy states that a student may attempt a course no more than 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

For Supplemental CGT Information click here.

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Expired Course

Any course without a link to its description is one that has been expired. However, this course could fulfill the degree requirement historically.

Game Studies, 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. Alumni have worked for EA Games, Riot Games, and more.

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. The final result? You will be a career-ready graduate who knows how to prototype games and game systems and who can consider their impact on society.

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.

Special Features

- Work on impactful projects with professors to gain valuable experience in the industry
- Among the Top 50 undergraduate schools to study game design, according to Princeton Review (2016)
- As the gaming industry expands into non-entertainment realms, be at the forefront of exploring how video games can positively affect society
- Multiple opportunities for graduate-level education, to help you become a researcher or respected leader in your field of expertise.
- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Game Studies is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

GASD
TCGT-BS
Catalog Term: 201610

120 Credit Hours to Graduate
"C-" or better required in all major courses

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 25600 - Principles Of User Experience Design
- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34500 - Game And Simulation Development
- CGT 41100 - Contemporary Problems In Applied Computer Graphics
- CGT 44500 - Video Game Design And Development
- CGT 45000 - Professional Practices

Major Selectives* - Select 2 of the following courses (6 credits)

https://polytechnic.purdue.edu/degrees/computer-graphics-technology/courses

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

Other Departmental /Program Course Requirements (28 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)*

Electives (51 credits)

- Human Behavior Humanities for core - Credit Hours: 3.00

- Science Selective for core - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 6.00
- Technical Elective - Credit Hours: 9.00
- 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
- Free Elective - Credit Hours: 15.00

University Core Requirements

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

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

15 Credits

Fall 3rd Year

- CGT 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34500 - Game And Simulation Development
- 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 - Video Game Design And Development
- 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 Selective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- CGT 45000 - Professional Practices
- CGT 41100 - Contemporary Problems In Applied Computer Graphics
- Free Elective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Notes

*Satisfies a University Core Requirement

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

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Purdue policy states that a student may attempt a course no more than 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

For Supplemental CGT Information click here.

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Human Centered Design & Development, 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.

Summary of Program Requirements

The Summary of Program Requirements for Human Centered Design & Development is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

HCDD
TCGT-BS
Catalog Term: 201610
120 Credit Hours to Graduate
"C-" or better required in all major courses

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 17207 - Human-Centered Design And Development Experience Studio I
- CGT 17208 - Human-Centered Design And Development Learning Studio I
- CGT 27207 - Human-Centered Design And Development Experience Studio II
- CGT 30900 - Internship In Computer Graphics Technology
- CGT 37207 - Human-Centered Design And Development Experience Studio III
- CGT 47107 - Human-Centered Design And Development Capstone I
- CGT 47207 - Human-Centered Design And Development Capstone II

Major Selectives* - Select 2 of the following courses (6 credits)

http://www.tech.purdue.edu/CGT/academics/coursepages.cfm

- CGT 20000 - 200 Level Selective (CGT 27108 or CGT 27208) - Credit Hours: 3.00
- CGT 30000 - 300 Level Selective (CGT 37108 or CGT 37208) - Credit Hours: 3.00

Other Departmental /Program Course Requirements (43 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 - Entrepreneurship Section
- 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 (satisfies Quantitative Reasoning Selective for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
- PHIL 11400 - Global Moral Issues (satisfies Human Cultures Humanities 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)

Electives (42 credits)

- Science Selective for core - Credit Hours: 3.00
- CGT Global Selective - Credit Hours: 3.00
- Psychology Selective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 6.00
- Technical Elective - Credit Hours: 12.00
- Free Elective - Credit Hours: 15.00

University Core Requirements

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

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 17207 - Human-Centered Design And Development Experience Studio I
- CGT 17208 - Human-Centered Design And Development Learning Studio I
- COM 11400 - Fundamentals Of Speech Communication *
- MA 16010 - Applied Calculus I
- PHIL 11400 - Global Moral Issues

15 Credits

Fall 2nd Year

- CGT 27207 - Human-Centered Design And Development Experience Studio II
- PHYS 21800 - General Physics *
- PSY 12000 - Elementary Psychology
- CGT 20000 Level Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- Science Foundational Selective Core - Credit Hours: 3.00 *
- Humanities Elective - Credit Hours: 3.00
- Tech Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- CGT 37207 - Human-Centered Design And Development Experience Studio III
- CGT 30000 Level Selective - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 3.00
- Psychology Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- ENTR 31000 - Marketing And Management For New Ventures
- COM 31400 - Advanced Presentational Speaking
- ENGL 42000 - Business Writing
- CGT 30900 - Internship In Computer Graphics Technology
- Free Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- CGT 47107 - Human-Centered Design And Development Capstone I
- ENTR 48000 - Entrepreneurship Capstone
- ENGL 42100 - Technical Writing
- CGT Globalization Selective - Credit Hours: 3.00
- Tech Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- CGT 47207 - Human-Centered Design And Development Capstone II
- Tech Elective - Credit Hours: 3.00
- Tech 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.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Purdue policy states that a student may attempt a course no more than 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

For Supplemental CGT Information click here.

Degree Requirements

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

myPurdue Plan 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.

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. You will develop simulations and visualizations to demonstrate and validate how products function. Your work will be done primarily with product lifecycle management (PLM) software tools for simulation, computer-aided design (CAD), and product data management (PDM). To gain relevant experience, you will have the opportunity to work in industry and be an integral part of teams that implement and utilize these technologies.

The foundation of virtual product integration is the use of digital representations of a product. They are created using trusted processes focused on information technology and how the product is used. In the workforce, digital data and the data stream make the workflow for design, manufacturing, collaboration and sustainment more efficient.

You will join others students in the program who design data workflows and data flow processes to communicate product information throughout the product lifecycle to those people who need it. In addition, your work can be used to develop new software tools or modify and extend existing software tools.

Special Features

- Combine your skills in modeling, information technology and engineering concepts to help companies produce better projects
- Learn the skills necessary to connect the knowledge of other members of a work team and move a project forward
- Work on research projects with faculty and graduate students to add to your portfolio and improve industry processes
- Be considered for industry and research internships with leading companies and in faculty laboratories.
- Multiple opportunities for graduate-level education, to help you become a researcher or respected leader in your field of expertise.
- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Virtual Product Integration is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

VIPI
TCGT-BS
Catalog Term: 201610
120 Credit Hours to Graduate
"C-" or better required in all major courses

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 22600 - Introduction To Constraint-Based Modeling
- CGT 32600 - Graphics Standards For Product Definition
- CGT 41100 - Contemporary Problems In Applied Computer Graphics
- CGT 42300 - Product Data Management
- CGT 42600 - Industry Applications Of Simulation And Visualization
- CGT 45000 - Professional Practices

Major Selectives* - Select 3 of the following courses (9 credits)

http://www.tech.purdue.edu/CGT/academics/coursepages.cfm

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

Other Departmental /Program Course Requirements (28 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)*

Electives (51 credits)

- Human Behavior Humanities for core - Credit Hours: 3.00
- Science Selective for core - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 6.00
- Technical Elective - Credit Hours: 9.00
- 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
- Free Elective - Credit Hours: 15.00

University Core Requirements

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

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 Behr: Human Core - Credit Hours: 3.00 *
- Free Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- CGT 22600 - Introduction To Constraint-Based Modeling
- 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

15 Credits

Fall 3rd Year

- CGT Selective - Credit Hours: 3.00
- 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 32600 - Graphics Standards For Product Definition
- CGT 42300 - Product Data Management
- 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 42600 - Industry Applications Of Simulation And Visualization

- 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

15 Credits

Spring 4th Year

- CGT 45000 - Professional Practices
- CGT 41100 - Contemporary Problems In Applied Computer Graphics
- Free Elective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Notes

*Satisfies a University Core Requirement

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

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Purdue policy states that a student may attempt a course no more than 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

For Supplemental CGT Information click here.

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Visual Effects Compositing, BS

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. You will learn to integrate effects, place actors who were filmed in front of a green screen into virtual environments, merge 3-D models with live action sets, and layer video and photo elements to create stunning imagery. You will also learn proper techniques for filming your own videos for use in professional video compositing.

Summary of Program Requirements

The Summary of Program Requirements for Visual Effects Compositing is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

VECO
TCGT-BS
Catalog Term: 201610
120 Credit Hours to Graduate
"C-" or better required in all major courses

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 34000 - Digital Lighting And Rendering for Computer Animation
- CGT 34600 - Digital Video And Audio
- CGT 41100 - Contemporary Problems In Applied Computer Graphics
- CGT 44600 - Post-Production And Special Effects For Computer Animation
- CGT 45000 - Professional Practices

Major Selectives* - Select 2 of the following courses (6 credits)

https://polytechnic.purdue.edu/degrees/computer-graphics-technology/courses

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

Other Departmental /Program Course Requirements (43 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)

Electives (42 credits)

- Human Behavior Humanities for core - Credit Hours: 3.00
- Science Selective for core - Credit Hours: 3.00
- Foreign Language Elective - Credit Hours: 6.00
- Psychology Selective - Credit Horus: 3.00
- Technical Elective - Credit Hours: 9.00
- CGT Global Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 15.00

University Core Requirements

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

Program Requirements

Fall 1st Year

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

14 Credits

Spring 1st Year

- CGT 11800 - Fundamentals Of Imaging Technology
- CGT 24100 - Introduction to Computer Animation
- COM 11400 - Fundamentals Of Speech Communication *
- MA 16010 - Applied Calculus I *
- Foreign Language Selective - Credit Hours: 3.00

15 Credits

Fall 2nd Year

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

16 Credits

Spring 2nd Year

- ENTR 20000 - Introduction To Entrepreneurship And Innovation
- Human Behavior: 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

15 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

- ENTR 48000 - Entrepreneurship Capstone
- ENGL 42100 - Technical Writing
- CGT 44800 - Visual Effects Capstone - Credit Hours: 3.00
- CGT Globalization Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- CGT 45000 - Professional Practices
- CGT 41100 - Contemporary Problems In Applied Computer Graphics
- Free Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

15 Credits

Notes

*Satisfies a University Core Requirement

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

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Purdue policy states that a student may attempt a course no more than 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

For Supplemental CGT Information click here.

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Expired Course

Any course without a link to its description is one that has been expired. However, this course could fulfill the degree requirement historically.

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.

Special Features

- Combine programming expertise with design sensibilities to be more marketable
- Take advantage of other departmental expertise to add user experience and animation skills
- Capitalize on the increasing demand for interactive experiences on every platform
- Pair your skills with campus entrepreneurial efforts to prepare for your own business or service.
- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Web Programming and Design is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TCGT-BS
120 Credit Hours to Graduate
"C-" or better required in all major courses

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 25600 - Principles Of User Experience Design
- CGT 35300 - Principles Of Interactive And Dynamic Media
- CGT 35600 - Web Programming, Development And Data Integration
- CGT 41100 - Contemporary Problems In Applied Computer Graphics
- CGT 45000 - Professional Practices
- CGT 45600 - Advanced Web Programming, Development And Data Integration

Major Selectives* - Select 3 of the following courses (9 credits)

http://www.tech.purdue.edu/CGT/academics/coursepages.cfm

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

Other Departmental /Program Course Requirements (28 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)*

Electives (51 credits)

- Human Behavior Humanities for core - Credit Hours: 3.00
- Science Selective for core - Credit Hours: 3.00
- Humanities Elective - Credit Hours: 6.00
- Technical Elective - Credit Hours: 9.00
- 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
- Free Elective - Credit Hours: 15.00

University Core Requirements

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

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 *

Credits 14

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 *

Credits 15

Fall 2nd Year

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

Credits 16

Spring 2nd Year

- CGT 25600 - Principles Of User Experience Design
- 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

Credits 15

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

Credits 15

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

Credits 15

Fall 4th Year

- CGT 35300 - Principles Of Interactive And Dynamic Media
- 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

Credits 15

Spring 4th Year

- CGT 45000 - Professional Practices
- CGT 41100 - Contemporary Problems In Applied Computer Graphics
- Free Elective - Credit Hours: 3.00
- Communication Selective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00

Credits 15

Note

*Satisfies a University Core Requirement

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

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Purdue policy states that a student may attempt a course no more than 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

For Supplemental CGT Information click here.

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Minor

Construction Graphics Minor

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.

Availability

The BIM minor is open to any Purdue University student on the West Lafayette campus.

Requirements

- 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.

Prerequisite Courses

- None

Required Courses (12 credit hours)

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

Note

Other independent courses may be offered upon student request to the major professor in charge of BIM.

Product Lifecycle Management Minor

A minor in product lifecycle management (PLM) will expose any Purdue major to manufacturing graphics expertise. Students who complete the minor will gain applied knowledge in current and emerging graphics theories and computer technologies associated with the design, documentation, and manufacture and support of products and related services.

Availability

The PLM minor is open only to any Purdue University West Lafayette campus major.

Requirements

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 PLM minor classes.

Only students pursuing four-year degrees are eligible for the PLM minor.

Prerequisite Courses

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 (9 credit hours)

All courses in the minor must be taken for a grade. A grade of "C-" or better is required in all classes.

Select three from the following:

- CGT 22600 - Introduction To Constraint-Based Modeling
- CGT 32600 - Graphics Standards For Product Definition

Choose one

- CGT 42300 - Product Data Management
- CGT 42600 - Industry Applications Of Simulation And Visualization

Note

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.

School of Engineering Technology

Overview

In Purdue's engineering technology degree programs, students learn about and practice designing, building, testing and refining. They use class projects to discover how to use the right materials, the right sensors and electronic parts, and the right processes to 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

Our relationship to sound is critical. It is one of the main ways we interpret the world around us, from your personal ear buds and your desktop, to a concert hall, sports stadiums, amusement parks, the halls of congress, and even the battlefield.

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.

From mechanical and electrical design through theatre sound implementation, you will focus on how audio technology hardware works and why, as well as how to apply it in a variety of spaces. Your skills will be in demand by hardware manufacturers,

convention centers, museums and performance spaces. You may work in a state-of-the-art lab, in a studio or theatre with performance stars, around the world installing your designs, or on the technical road staff for a live performance company.

Special Features

- Enhance your credentials with a minor in theatre, built into your plan of study.
- Prepare for professional certifications.
- Gain global and work experience through regional and international study, internships and/or co-ops.
- Earn your advanced degree sooner through our 5-year combined BS/MS program.
- Take advantage of firsthand knowledge from professors who have worked in the industry, doing just what they are teaching you to do.
- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Audio Engineering Technology is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TECET-BS
AUET
120-cr for graduation
"D-" or better required in all major courses

Departmental Program Major Courses (120 credits)

Required Major Courses (52 credits)

- ECET 12000 - Gateway To Electrical Engineering Technology
- ECET 17700 - Data Acquisition And Systems Control
- ECET 17900 - Introduction To Digital Systems
- ECET 22000 - Professional Career Development
- ECET 22700 - DC And Pulse Electronics
- ECET 22900 - Concurrent Digital Systems
- ECET 27000 - Electronics Prototype Development And Construction
- ECET 27300 - Modern Energy Systems
- ECET 27400 - Wireless Communications
- ECET 27700 - AC And Power Electronics
- ECET 27900 - Embedded Digital Systems
- ECET 33700 - Analog Signal Processing
- ECET 33900 - Digital Signal Processing
- ECET 38001 - Global Professional Issues In Engineering Technology
- ECET 38800 - Analog IC Applications
- ECET 42800 - Audio Electronics-Selected Topics

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

ECET Selectives (3 credits)

Select one of the following courses by category

- ECET Selective - Credit Hours: 3.00

Other Departmental/Program Course Requirements (65 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 16021 - Applied Calculus II And Differential Equations
- 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)

- English Composition Selective (choose from ENGL 10600 or ENGL 10800) (satisfies Written Communication for core) - Credit Hours: 3.00
- 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 Sel. or a General Education Sel.) - Credit Hours: 6.00
- Communication Selectives (choose from list) - Credit Hours: 6.00
- Industrial Economics Selective (choose from IET 45100 or IT 45000) - Credit Hours: 3.00
- Statistics Selective (choose from STAT 30100 or STAT 22500) - Credit Hours: 3.00
- Advanced Theater Sound Selective (choose from THTR 36300, THTR 56300, THTR 56900, or THTR 59700) - Credit Hours: 3.00
- Free Elective - Creidt 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

Program Requirements

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

Fall 1st Year

- ECET 12000 - Gateway To Electrical Engineering Technology

- 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 *

15 Credits

Spring 1st Year

- ECET 17700 - Data Acquisition And Systems Control
- ECET 17900 - Introduction To Digital Systems
- COM 11400 - Fundamentals Of Speech Communication *
- MA 16021 - Applied Calculus II And Differential Equations *
- PHYS 21800 - General Physics *

16 Credits

Fall 2nd Year

- ECET 22700 - DC And Pulse Electronics
- ECET 22900 - Concurrent Digital Systems
- ECET 27300 - Modern Energy Systems
- PHYS 21900 - General Physics II *
- ECET 22000 - Professional Career Development
- THTR 16300 - Introduction To Sound Design And Technology

16 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 - Analog Signal Processing AAS
- ECET Selective - Credit Hours: 3.00
- MET 49000 - Special Topics In MET

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

- THTR 25300 - Survey Of Audio Production or
- THTR 26300 - Introduction To Sound Studios

15 Credits

Spring 3rd Year

- ECET 27900 - Embedded Digital Systems
- ECET 38001 - Global Professional Issues In Engineering Technology
- ECET 38800 - Analog IC Applications

- IET 45100 - Monetary Analysis For Industrial Decisions or
- IT 45000 - Production Cost Analysis

- THTR 36800 - Theatre Production II or
- DANC 36800 - Dance Sound Design

- Communications Selective - Credit Hours: 3.00

16 Credits

Fall 4th Year

- ECET 43000 - Electrical And Electronic Product And Program Management
- ECET 33900 - Digital Signal Processing AAS
- THTR 35300 - Theater Audio Techniques I
- Business Selective - Credit Hours: 3.00 **
- General Education Selective - Credit Hours: 3.00 **

15 Credits

Spring 4th Year

- ECET 46000 - Project Design And Development
- ECET 42800 - Audio Electronics-Selected Topics
- Free Elective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00

12 Credits

Notes

*Fulfills University Core Curriculum requirement. [AAS]Advanced Analysis Selective: may be taken in either the Fall or Spring semester, depending on course selected.

** University Core Curriculum Human Cultures Behavioral/Social Science may be selected to satisfy either the Business Selective or a General Education Selective requirement.

1. 120 semester credits and a 2.0 Graduation GPA are required for the Bachelor of Science degree.
2. Students must earn a "D-" or better in all courses.
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. ECET 43000, ECET 46000 and 12 hours of ECET Selectives must be taken at the Purdue University location conferring the degree.
5. 32 credit hours of 300-level or higher courses must be completed at Purdue University.

For Supplemental Information click here.

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Electrical Engineering Technology, BS

About the Program

Purdue Polytechnic Institute

The electrical engineering principles you will learn can be applied in a wide range of careers, including biomedical, green energy, transportation, communications, entertainment and manufacturing. Our graduates have played a part in scientific advancements in a variety of industries. They have impacted lives and improved everyday uses of technology and learn to work with microcontrollers, Field Programmable Gate Arrays (FPGA), Digital Signal Processors (DSP), embedded Systems-On-a-Chip (SOC), embedded workstations, and distributed computing platforms and more.

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

The electrical engineering technology degree is program is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org.

This program is also offered at the Purdue College of Technology statewide locations in Kokomo, New Albany, and South Bend.

Electrical Engineering Technology Website

Summary of Program Requirements

The Summary of Program Requirements for Electrical Engineering Technology is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TECET-BS
EETC
120-cr for graduation
"D-" or better required in all major courses

Departmental/Program Major Courses (120 credits)

Required Major Courses (34 credits)

- ECET 12000 - Gateway To Electrical Engineering Technology
- ECET 17700 - Data Acquisition And Systems Control
- ECET 17900 - Introduction To Digital Systems
- ECET 22000 - Professional Career Development
- ECET 22700 - DC And Pulse Electronics
- ECET 22900 - Concurrent Digital Systems

- ECET 27000 - Electronics Prototype Development And Construction
- ECET 27300 - Modern Energy Systems
- ECET 27400 - Wireless Communications
- ECET 38001 - Global Professional Issues In Engineering Technology
- ECET 43000 - Electrical And Electronic Product And Program Management
- ECET 46000 - Project Design And Development

ECET Selectives (18 credits)

Select six of the following courses by category

- ECET Selectives - Credit Hours: 12.00

ECET Sophomore Selective

choose from

- ECET 27700 - AC And Power Electronics or
- ECET 27900 - Embedded Digital Systems

ECET Advanced Analysis Selective

choose from

- ECET 33500 - Computer Architecture And Performance Evaluation
- ECET 33700 - Analog Signal Processing
- ECET 33900 - Digital Signal Processing

Other Departmental/Program Course Requirements (68 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 16021 - Applied Calculus II And Differential Equations
- 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)
- 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 4 additional technical courses, two of which can be ECET Selectives) - Credit Hours 12.00
- Free Elective - Credit Hours: 3.00

English Composition Selective (3 credits)

(satisfies Written Communication for core)

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

Industrial Economics Selective (3 credits)

choose from

- IET 45100 - Monetary Analysis For Industrial Decisions or
- IT 45000 - Production Cost Analysis

Statistics Selective (3 credtis)

choose from

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

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

Program Requirements

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

Fall 1st Year

- ECET 12000 - Gateway To Electrical Engineering Technology

- 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 *

15 Credits

Spring 1st Year

- ECET 17700 - Data Acquisition And Systems Control
- ECET 17900 - Introduction To Digital Systems
- COM 11400 - Fundamentals Of Speech Communication *
- MA 16021 - Applied Calculus II And Differential Equations *
- PHYS 21800 - General Physics *

16 Credits

Fall 2nd Year

- ECET 22000 - Professional Career Development
- ECET 22700 - DC And Pulse Electronics
- ECET 22900 - Concurrent Digital Systems
- ECET 27300 - Modern Energy Systems
- PHYS 21900 - General Physics II *

14 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 - Analog Signal Processing or
- ECET 33900 - Digital Signal Processing or
- ECET Selective - Credit Hours: 3.00

- ECET Selective - Credit Hours: 3.00

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

- Communication Selective - Credit Hours: 3.00
- Business Selective - Credit Hours: 3.00 **

15 Credits

Spring 3rd Year

- ECET 33500 - Computer Architecture And Performance Evaluation or
- ECET Selective - Credit Hours: 3.00

- ECET 38001 - Global Professional Issues In Engineering Technology

- IET 45100 - Monetary Analysis For Industrial Decisions or
- IT 45000 - Production Cost Analysis

- General Education Selective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- ECET 43000 - Electrical And Electronic Product And Program Management
- 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

- ECET 46000 - Project Design And Development
- ECET Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- General Education Selective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00

15 Credits

Note

*Fulfills University Core Curriculum requirement. [AAS]Advanced Analysis Selective: may be taken in either the Fall or Spring semester, depending on course selected.

** University Core Curriculum Human Cultures Behavioral/Social Science may be selected to satisfy either the Business Selective or a General Education Selective requirement.

1. 120 semester credits and a 2.0 Graduation GPA are required for the Bachelor of Science degree.
2. Students must earn a "D-" or better in all courses.
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. ECET 43000, ECET 46000 and 12 hours of ECET Selectives must be taken at the Purdue University location conferring the degree.
5. 32 credit hours of 300-level or higher courses must be completed at Purdue University.

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Manufacturing Engineering Technology, Automation and Systems Integration Concentration, 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.

Special Features

- Learn in a hands-on environment with a 1,400-square-foot, fully functional, automated manufacturing laboratory
- Focus on applying and implementing technology, in a hands-on approach, to solve real-world problems.
- Explore a wide range of career options in product improvement, industrial processes, or plant operations
- Utilize the Polytechnic learning environment to become a career-ready graduate

ATTN: MFET students enrolled before Fall 2014

Current manufacturing engineering technology (MFET) students can use the same resources listed on this page. MFET plans of study remain active for those students already enrolled at Purdue.

Summary of Program Requirements

The Summary of Program Requirements for Manufacturing Engineering Technology-Automation and System Integration Concentration is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TMFET-BS
ASET
120-cr for graduation
"D-" or better required in all major courses

Departmental/Program Major Courses (120 credits)

Required Major Courses (32 credits)

- MET 10200 - Production Design And Specifications
- MET 11100 - Applied Statics
- MET 11300 - Mechanics Applications
- MET 14400 - Materials And Processes II (MET Gateway Course)
- MET 16200 - Computational Analysis Tools In MET
- MET 23000 - Fluid Power
- MET 24500 - Manufacturing Systems
- MET 28400 - Introduction To Industrial Controls
- MFET 24800 - Automated Manufacturing III
- MFET 34400 - Automated Manufacturing Processes
- MFET 37400 - Manufacturing Integration I
- Continuous Control Selective - Credit Hours: 3.00

ASET courses - (24 credits)

- ECET 33700 - Analog Signal Processing
- Manufacturing Selective - Credit Hours: 3.00
- MET 14300 - Materials And Processes I
- MFET 48000 - Project Planning For Integration
- MFET 48100 - Integration Of Manufacturing Systems
- Manufacturing/Controls/Graphics Selective - Credit Hours: 3.00
- CNIT 17500 - Visual Programming

- CNIT or CS Selective (CNIT 10500, CS 15800, or CS 15900) - Credit Hours: 3.00

Other Departmental/Program Course Requirements (63 credits)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- COM 32000 - Small Group Communication
- ENGL 42100 - Technical Writing

- IET 45100 - Monetary Analysis For Industrial Decisions or
- TLI 33400 - Economic Analysis For Technology Systems

- MA 15800 - Precalculus- Functions And Trigonometry
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16021 - Applied Calculus II And Differential Equations
- 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)
- 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 satisfies Human Cultures: Behavioral Sciences for core) - Credit Hours: 3.00
- Humanities/Social Science Elective - Credit Hours: 3.00
- Technical Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 4.00

PHYS Selective - choose from (4 credits)

(satisfies Science for core)

- PHYS 21800 - General Physics
- PHYS 22000 - General Physics
- PHYS 17200 - Modern Mechanics

CGT Selective - choose from (2 credits)

- CGT 11000 - Technical Graphics Communications
- CGT 16300 - Graphical Communication And Spatial Analysis
- IT 10500 - Industrial Technology Introduction To Design

Statistics/Quality Selective - choose between (3 credits)

- STAT 30100 - Elementary Statistical Methods
- IT 34200 - Introduction To Statistical Quality

University Core Requirements

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

Program Requirements

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

Fall 1st Year

- MET 14400 - Materials And Processes II
- Freshman Composition Selective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00
- MA 15800 - Precalculus- Functions And Trigonometry
- TECH 12000 - Design Thinking In Technology *

15 Credits

Spring 1st Year

- CHM 11100 - General Chemistry
- Humanities Foundation Selective - Credit Hours: 3.00 *
- COM 11400 - Fundamentals Of Speech Communication *
- MA 16010 - Applied Calculus I *
- MET 14300 - Materials And Processes I
- MET 16200 - Computational Analysis Tools In MET

16 Credits

Fall 2nd Year

- MA 16021 - Applied Calculus II And Differential Equations
- MET 11100 - Applied Statics
- ECET 22400 - Electronic Systems
- Behavioral/Social Science Foundation Selective - Credit Hours: 3.00 *
- Computer Graphics Selective - Credit Hours: 2.00

14 Credits

Spring 2nd Year

- MET 10200 - Production Design And Specifications
- MET 11300 - Mechanics Applications
- MET 24500 - Manufacturing Systems
- MET 28400 - Introduction To Industrial Controls
- Physics Selective - Credit Hours: 4.00
- CNIT 17500 - Visual Programming

17 Credits

Fall 3rd Year

- MET 23000 - Fluid Power
- MFET 34400 - Automated Manufacturing Processes
- MFET 37400 - Manufacturing Integration I
- MFET 24800 - Automated Manufacturing III
- Science Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- ECET 33700 - Analog Signal Processing
- ENGL 42100 - Technical Writing
- 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

- Continuous Controls Selective - Credit Hours: 3.00
- Manufacturing/Controls/Graphics Selective - Credit Hours: 3.00
- MFET 48000 - Project Planning For Integration

- IET 45100 - Monetary Analysis For Industrial Decisions or
- TLI 33400 - Economic Analysis For Technology Systems

- ECET 38001 - Global Professional Issues In Engineering Technology

15 Credits

Spring 4th Year

- MFET 48100 - Integration Of Manufacturing Systems
- COM 32000 - Small Group Communication
- Humanities/Social Science Elective - Credit Hours: 3.00
- Technical Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 1.00

13 Credits

Note

*Fulfills University core.

1. 120 semester credits and a 2.0 Graduation GPA are required for the Bachelor of Science degree.
2. Students must earn a "D-" or better in all courses.
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.

For a complete list of MFET Supplemental Information click here.

Degree Requirements

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

Degree Works is knowledge source for specific requirements and completion.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Manufacturing Engineering Technology, Mechatronics Concentration, 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.

Special Features

- Learn in a hands-on environment with a 1,400-square-foot, fully functional, automated manufacturing laboratory
- Focus on applying and implementing technology, in a hands-on approach, to solve real-world problems.
- Explore a wide range of career options in product improvement, industrial processes, or plant operations
- Utilize the Polytechnic learning environment to become a career-ready graduate

ATTN: MFET students enrolled before Fall 2014

Current manufacturing engineering technology (MFET) students can use the same resources listed on this page. MFET plans of study remain active for those students already enrolled at Purdue.

Summary of Program Requirements

The Summary of Program Requirements for Manufacturing Engineering Technology-Mechatronics Concentration is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TMFET-BS
MHET
120-cr for graduation
"D-" or better required in all major courses

Departmental/Program Major Courses (120 credits)

Required Major Courses (32 credits)

- MET 10200 - Production Design And Specifications
- MET 11100 - Applied Statics
- MET 11300 - Mechanics Applications
- MET 14400 - Materials And Processes II (MET Gateway Course)
- MET 16200 - Computational Analysis Tools In MET
- MET 23000 - Fluid Power
- MET 24500 - Manufacturing Systems
- MET 28400 - Introduction To Industrial Controls
- MET 38200 - Controls And Instrumentation For Automation

- MFET 34400 - Automated Manufacturing Processes
- MFET 37400 - Manufacturing Integration I
- Manufacturing Selective - Credit Hours: 3.00

Mechatronics Concentration Courses - (24 credits)

- Mechatronics Selective - Credit Hours: 3.00
- Controls Elective - Credit Hours: 3.00
- ECET 27900 - Embedded Digital Systems
- ECET 32700 - Instrumentation And Data Acquisition Design
- ECET 33700 - Analog Signal Processing
- ECET 43000 - Electrical And Electronic Product And Program Management
- ECET 46000 - Project Design And Development
- CNIT 10500 - Introduction To C Programming

Other Departmental/Program Course Requirements (78 credits)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- COM 32000 - Small Group Communication
- ENGL 42100 - Technical Writing

- IET 45100 - Monetary Analysis For Industrial Decisions or
- TLI 33400 - Economic Analysis For Technology Systems

- MA 15800 - Precalculus- Functions And Trigonometry
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16021 - Applied Calculus II And Differential Equations
- 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)
- 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
- Technical Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 4.00

PHYS Selective - choose from (4 credits)

(satisfies Science for core)

- PHYS 21800 - General Physics
- PHYS 22000 - General Physics

- PHYS 17200 - Modern Mechanics

CGT Selective - Choose from (2 credits)

- CGT 11000 - Technical Graphics Communications or
- CGT 16300 - Graphical Communication And Spatial Analysis or
- IT 10500 - Industrial Technology Introduction To Design

Statistics/Quality Selective - choose between

- STAT 30100 - Elementary Statistical Methods or
- IT 34200 - Introduction To Statistical Quality

University Core Requirements

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

Program Requirements

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

Fall 1st Year

- MET 14400 - Materials And Processes II
- MA 15800 - Precalculus- Functions And Trigonometry *
- Freshman Composition Selective - Credit Hours: 3.00 *
- TECH 12000 - Design Thinking In Technology *
- Free elective - Credit Hours: 3.00

15 Credits

Spring 1st Year

- CHM 11100 - General Chemistry *
- MA 16010 - Applied Calculus I
- COM 11400 - Fundamentals Of Speech Communication *
- Humanities Foundation Selective - Credit Hours: 3.00 *

- ECET 22400 - Electronic Systems
- MET 16200 - Computational Analysis Tools In MET

16 Credits

Fall 2nd Year

- Behavioral/Social Science Foundation Elective - Credit Hours: 3.00 *
- MET 11100 - Applied Statics
- MA 16021 - Applied Calculus II And Differential Equations
- MET 28400 - Introduction To Industrial Controls
- Computer Graphics Selective - Credit Hours: 2.00

14 Credits

Spring 2nd Year

- MET 10200 - Production Design And Specifications
- MET 11300 - Mechanics Applications
- MET 24500 - Manufacturing Systems
- CNIT 10500 - Introduction To C Programming
- ECET 32700 - Instrumentation And Data Acquisition Design
- Physics Selective - Credit Hours: 4.00 *

17 Credits

Fall 3rd Year

- ECET 33700 - Analog Signal Processing
- MET 23000 - Fluid Power
- MFET 34400 - Automated Manufacturing Processes
- MFET 37400 - Manufacturing Integration I
- Science Selective - Credit Hours: 3.00 *

15 Credits

Spring 3rd Year

- ECET 27900 - Embedded Digital Systems
- ECET 38001 - Global Professional Issues In Engineering Technology
- Manufacturing Selective - Credit Hours: 3.00
- ENGL 42100 - Technical Writing
- Statistics or Quality Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- ECET 43000 - Electrical And Electronic Product And Program Management
- MET 38200 - Controls And Instrumentation For Automation
- Mechatronics Selective - Credit Hours: 3.00
- Controls Selective - Credit Hours: 3.00

- IET 45100 - Monetary Analysis For Industrial Decisions or
- TLI 33400 - Economic Analysis For Technology Systems

15 Credits

Spring 4th Year

- ECET 46000 - Project Design And Development
- Technical Selective - Credit Hours: 3.00
- Humanities/Social Science Elective - Credit Hours: 3.00
- COM 32000 - Small Group Communication
- Free Elective - Credit Hours: 1.00

13 Credits

Note

*Fulfills University core.

1. 120 semester credits and a 2.0 Graduation GPA are required for the Bachelor of Science degree.
2. Students must earn a "D-" or better in all courses.
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.

Degree Requirements

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

Degree Works is knowledge source for specific requirements and completion.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Manufacturing Engineering Technology, Robotics Concentration, 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.

Special Features

- Learn in a hands-on environment with a 1,400-square-foot, fully functional, automated manufacturing laboratory
- Focus on applying and implementing technology, in a hands-on approach, to solve real-world problems.
- Explore a wide range of career options in product improvement, industrial processes, or plant operations
- Utilize the Polytechnic learning environment to become a career-ready graduate

ATTN: MFET students enrolled before Fall 2014

Current manufacturing engineering technology (MFET) students can use the same resources listed on this page. MFET plans of study remain active for those students already enrolled at Purdue.

Summary of Program Requirements

The Summary of Program Requirements for Manufacturing Engineering Technology-Robotics Concentration is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TMFET-BS
ROET
120-cr for graduation
"D-" or better required in all major courses

Departmental/Program Major Courses (120 credits)

Required Major Courses (32 credits)

- MET 10200 - Production Design And Specifications
- MET 11100 - Applied Statics
- MET 11300 - Mechanics Applications
- MET 14400 - Materials And Processes II (MET Gateway Course)
- MET 16200 - Computational Analysis Tools In MET
- MET 23000 - Fluid Power
- MET 24500 - Manufacturing Systems
- MFET 24800 - Automated Manufacturing III
- MET 28400 - Introduction To Industrial Controls
- MFET 34400 - Automated Manufacturing Processes
- MFET 34800 - Industrial Robotics And Motion Control
- MFET 37400 - Manufacturing Integration I

Robotics Concentration Courses- (24 credits)

- Mechatronics/Controls Selective - Credit Hours: 3.00
- Manufacturing Selective - Credit Hours: 3.00
- Manufacturing/Controls Selective - Credit Hours: 3.00
- ECET 32700 - Instrumentation And Data Acquisition Design
- ECET 33700 - Analog Signal Processing
- ECET 43000 - Electrical And Electronic Product And Program Management
- ECET 46000 - Project Design And Development
- CNIT 10500 - Introduction To C Programming

Other Departmental/Program Course Requirements (63 credits)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- COM 32000 - Small Group Communication
- ENGL 42100 - Technical Writing

- IET 45100 - Monetary Analysis For Industrial Decisions or
- TLI 33400 - Economic Analysis For Technology Systems

- MA 15800 - Precalculus- Functions And Trigonometry
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16021 - Applied Calculus II And Differential Equations
- 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)
- Science Selective - Credit Hours: 3.00
- English 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
- Free Elective - Credit Hours: 4.00

PHYS Selective - choose from (4 credits)

(satisfies Science for core)

- PHYS 21800 - General Physics
- PHYS 22000 - General Physics
- PHYS 17200 - Modern Mechanics

CGT Selective - choose from (2 credits)

- CGT 11000 - Technical Graphics Communications
- CGT 16300 - Graphical Communication And Spatial Analysis

Statistics/Quality Selective - choose between (3 credits)

- STAT 30100 - Elementary Statistical Methods
- IT 34200 - Introduction To Statistical Quality

University Core Requirements

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

Program Requirements

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

Fall 1st Year

- MET 14400 - Materials And Processes II
- MA 15800 - Precalculus- Functions And Trigonometry *
- TECH 12000 - Design Thinking In Technology *
- Freshman Composition Selective - Credit Hours: 3.00 *
- Free elective - Credit Hours: 3.00

15 Credits

Spring 1st Year

- CHM 11100 - General Chemistry
- ECET 22400 - Electronic Systems
- MA 16010 - Applied Calculus I *
- MET 16200 - Computational Analysis Tools In MET
- COM 11400 - Fundamentals Of Speech Communication *
- Humanities Foundation Selective - Credit Hours: 3.00 *

16 Credits

Fall 2nd Year

- MET 28400 - Introduction To Industrial Controls
- MET 11100 - Applied Statics
- MA 16021 - Applied Calculus II And Differential Equations
- Behavioral/Social Science Foundation Selective - Credit Hours: 3.00 *
- Computer Graphics Selective - Credit Hours: 2.00

14 Credits

Spring 2nd Year

- MET 10200 - Production Design And Specifications
- MET 11300 - Mechanics Applications
- MET 24500 - Manufacturing Systems
- MET 28400 - Introduction To Industrial Controls
- CNIT 10500 - Introduction To C Programming
- Physics Selective - Credit Hours: 4.00

17 Credits

Fall 3rd Year

- ECET 32700 - Instrumentation And Data Acquisition Design
- MET 23000 - Fluid Power
- MFET 34400 - Automated Manufacturing Processes
- MFET 37400 - Manufacturing Integration I
- Science Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- Manufacturing Selective - Credit Hours: 3.00

- ECET 38001 - Global Professional Issues In Engineering Technology
- ECET 33700 - Analog Signal Processing
- ENGL 42100 - Technical Writing
- Statistics or Quality Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- ECET 43000 - Electrical And Electronic Product And Program Management
- MFET 34800 - Industrial Robotics And Motion Control

- IET 45100 - Monetary Analysis For Industrial Decisions or
- TLI 33400 - Economic Analysis For Technology Systems

- Mechatronics/Controls Selective - Credit Hours: 3.00
- COM 32000 - Small Group Communication

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

13 Credits

Note

*Fulfills University core.

120 semester credits and a 2.0 Graduation GPA are required for the Bachelor of Science degree.

1. Students must earn a "D-" or better in all courses.
2. Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.
3. ECET 43000, ECET 46000 and 12 hours of ECET Selectives must be taken at the Purdue University location conferring the degree.
4. 32 credit hours of 300-level or higher courses must be completed at Purdue University.

For a complete list click here.

Degree Requirements

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

Degree Works is knowledge source for specific requirements and completion.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Expired Course

Any course without a link to its description is one that has been expired. However, this course could fulfill the degree requirement historically.

Mechanical Engineering Technology, BS

About the Program

A degree in mechanical engineering technology will prepare you for a broad range of positions throughout technology enterprises. You will learn how to manage people, processes, machines, and production resources. You'll combine classroom learning with hands-on laboratory experience to understand how to solve mechanical problems and gain insights into the manufacturing production and design processes.

Graduates of this program are prepared for careers in emerging fields such as energy, material, technology development, product improvement, industrial processes, and operations. Students in this program can apply to participate in five-year combined bachelor's/master's degree program in mechanical engineering technology.

The MET bachelor's degree is also offered by Purdue College of Technology statewide locations in Columbus, New Albany, and South Bend; associate degrees are offered in Kokomo and Richmond.

Mechanical Engineering Technology Website

Summary of Program Requirements

The Summary of Program Requirements for Mechanical Engineering Technology is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TMET-BS
METC
120-cr for graduation
"D-" or better required in all major courses

Departmental/Program Major Courses (120 credits)

Required Major Courses (44 credits)

- MET 10200 - Production Design And Specifications
- MET 11100 - Applied Statics
- MET 14300 - Materials And Processes I
- MET 14400 - Materials And Processes II (MET Gateway Course)
- MET 16200 - Computational Analysis Tools In MET
- MET 21100 - Applied Strength Of Materials
- MET 21300 - Dynamics
- MET 21400 - Machine Elements
- 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 - (12 credits)

- MET Elective or approved Focus Area elective - Credit Hours: 6.00
- MET Capstone Selective - Credit Hours: 3.00
- Technical Selective or approved Focus Area Selective - Credit Hours: 3.00

Other Departmental/Program Course Requirements (64 credits)

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- COM 32000 - Small Group Communication
- ENGL 42100 - Technical Writing

- IET 45100 - Monetary Analysis For Industrial Decisions or
- TLI 33400 - Economic Analysis For Technology Systems

- MA 15800 - Precalculus- Functions And Trigonometry
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16021 - Applied Calculus II And Differential Equations
- 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)
- 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
- TECH/MGMT Selective - Credit Hours: 3.00

English Composition Selective - Choose from (3 credits)

(satisfies Written Communication for core)

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

Economics/Finance Selective - choose from (3 credits)

- ECON 21000 - Principles Of Economics
- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics
- CSR 34200 - Personal Finance
- MGMT 45500 - Legal Background For Business I

CGT Selective - choose from (2 credits)

- CGT 11000 - Technical Graphics Communications
- CGT 16300 - Graphical Communication And Spatial Analysis

Programming Selective - choose from (3 credits)

- CNIT 10500 - Introduction To C Programming
- CNIT 17500 - Visual Programming
- CS 15800 - C Programming
- CS 15900 - Programming Applications For Engineers

University Core Requirements

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

- Written Communication

Program Requirements

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

Fall 1st Year

- CGT 11000 - Technical Graphics Communications CGT Selective or
- CGT 16300 - Graphical Communication And Spatial Analysis CGT Selective

- COM 11400 - Fundamentals Of Speech Communication *
- MA 15800 - Precalculus- Functions And Trigonometry
- MET 14400 - Materials And Processes II (MET Gateway Course)
- MET 16200 - Computational Analysis Tools In MET
- TECH 12000 - Design Thinking In Technology *

15 Credits

Spring 1st Year

- MA 16010 - Applied Calculus I
- MET 11100 - Applied Statics
- MET 14300 - Materials And Processes I
- PHYS 22000 - General Physics
- Freshman Composition Selective - Credit Hours: 3.00

16 Credits

Fall 2nd Year

- ECET 22400 - Electronic Systems
- MA 16021 - Applied Calculus II And Differential Equations
- MET 21100 - Applied Strength Of Materials
- PHYS 22100 - General Physics *

14 Credits

Spring 2nd Year

- MET 21300 - Dynamics
- MET 22000 - Heat And Power
- MET 23000 - Fluid Power
- MET 28400 - Introduction To Industrial Controls
- Humanities Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- CHM 11100 - General Chemistry
- MET 10200 - Production Design And Specifications
- MET 21400 - Machine Elements
- MET 24500 - Manufacturing Systems
- Programming Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

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

15 Credits

Fall 4th Year

- IET 45100 - Monetary Analysis For Industrial Decisions or
- TLI 33400 - Economic Analysis For Technology Systems

- MET Elective or approved Focus Area elective - Credit Hours: 3.00
- MET 31300 - Applied Fluid Mechanics
- TECH/MGMT Selective - Credit Hours: 3.00
- ENGL 42100 - Technical Writing

15 Credits

Spring 4th Year

- MET Capstone Selective - 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

15 Credits

Note

1. 120 semester credits and a 2.0 Graduation GPA are required for the Bachelor of Science degree.

2. Students must earn a "D-" or better in all courses.

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.

Degree Requirements

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

Degree Works is knowledge source for specific requirements and completion.

MET Supplemental Information

All prerequisites must be met.

For a complete list click here.

CGT Selective

- CGT 11000 - Technical Graphics Communications
- CGT 16300 - Graphical Communication And Spatial Analysis

Technical Selective

- A 300-400 level ENGR, ECET, MFET, CS or elective IET course
- A CHM, MA, PHYS or STAT course beyond what is required
- Any MET elective course
- ANSC 23000 - Physiology Of Domestic Animals
- AT 27200 - Introduction To Composite Technology
- AT 27800 - Nondestructive Testing For Aircraft
- AT 47800 - Advanced Nondestructive Testing
- BCHM 22100 - Analytical Biochemistry
- BCM 23000 - Mechanical And Electrical Systems
- BCM 31500 - Mechanical Construction Estimating
- BCM 38000 - Concrete Construction
- BIOL 20300 - Human Anatomy And Physiology
- BIOL 22100 - Introduction To Microbiology
- CGT 22600 - Introduction To Constraint-Based Modeling

- CHM 11200 - General Chemistry or
- CHM 11600 - General Chemistry

- CHM 22300 Principles of Biochemistry
- CHM 48100 - Environmental Chemistry
- CE 35000 - Introduction To Environmental And Ecological Engineering

- CE 35500 - Engineering Environmental Sustainability
- CNIT 10500 - Introduction To C Programming
- FNR 41800 - Properties Of Wood Related To Manufacturing
- FNR 42500 - Secondary Wood Products Manufacturing
- FS 22200 Safety of Foods
- HSCI 31200 - Radiation Science Fundamentals
- IE 47700 Work Methods and Measurement
- IE 57700 - Human Factors In Engineering
- IT 10400 - Industrial Organization
- IT 33000 - Industrial Sales And Sales Management
- IT 34500 - Automatic Identification And Data Capture
- IT 35100 - Advanced Industrial Safety And Health Management
- IT 43400 - Global Transportation And Logistics Management
- MA 26100 - Multivariate Calculus

MET Elective

- MET 30200 - CAD In The Enterprise (Spring Only)
- MET 31100 - Experimental Strength Of Materials (Fall only)
- MET 31700 - Machine Diagnostics (Spring Only)
- MET 33400 - Advanced Fluid Power (Spring Only)
- MET 34900 - Stringed Instrument Design And Manufacture
- MET 38200 - Controls And Instrumentation For Automation (Spring Only)
- MET 40000 - Mechanical Design
- MET 41100 - Introduction To The Finite Element Method (Spring Only)
- MET 42100 - Air Conditioning And Refrigeration (Fall only)
- MET 42600 - Internal Combustion Engines (Fall only)
- MET 43200 - Hydraulic Motion Control Systems (Spring Only)
- MET 43600 - Pneumatic Motion Control Systems (Fall only)
- MET 44301 - Joining Processes
- MET 45100 - Manufacturing Quality Control (Fall only)
- MET 48600 - Fundamentals Of Motorsports
- MET 42400 - Green Processes And Sustainability
- MET 49000 - Special Topics In MET Multidisciplinary Capstone I (Fall only)
- MET 49000 - Special Topics In MET Multidisciplinary Capstone II (Spring Only)

MET Capstone Selective

- MET 33400 - Advanced Fluid Power (Spring Only)
- MET 40000 - Mechanical Design
- MET 42100 - Air Conditioning And Refrigeration (Fall only)
- MET 43200 - Hydraulic Motion Control Systems (Spring only)
- MET 43600 - Pneumatic Motion Control Systems (Fall only)
- MET 49000 - Special Topics In MET Multidisciplinary Capstone I (Fall only)
- MET 49000 - Special Topics In MET Multidisciplinary Capstone II (Spring Only)

Freshman Composition

- ENGL 10600 - First-Year Composition

Humanities Foundational Selective

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

Behavioral/Social Science Foundational Selective

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

Economics/Finance Selective

- CSR 34200 - Personal Finance
- ECON 21000 - Principles Of Economics
- ECON 25100 - Microeconomics
- ECON 25200 - Macroeconomics
- MGMT 45500 - Legal Background For Business I

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Expired Course

Any course without a link to its description is one that has been expired. However, this course could fulfill the degree requirement historically.

Minor

Electrical Engineering Technology Minor

15 Credit Hours

EETC

Effective: Fall 2015

Availability: The EET minor can be attached to any Purdue University major that will accommodate or allow it. It is not available for students earning degrees in Electrical Engineering Technology and Audio Engineering Technology.

GENERAL REQUIREMENTS:

- 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.

Required courses for the EET Minor

- ECET 17700 - Data Acquisition And Systems Control or
- ECET 22400 - Electronic Systems

  Approved substitution:
- 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 - Introduction To Industrial Controls

Additional requirements

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

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

Contact an advisor

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.

This program teaches the basics of most technology and engineering concepts, and it enables you to teach these concepts to middle school or high school students. Concepts include engineering design, prototyping, architecture and construction, robotics and automation. Learn to teach through service learning to help students tackle global challenges. You will also receive a Project Lead The Way pre-engineering teaching certificate. Because this is a high-demand field, all of our graduates in recent years have found teaching jobs or other employment that utilizes their leadership and technology backgrounds.

Contact Dr. Kelley, Dr. Mentzer, Dr. Daugherty or Dr. Asunda for more information about the Engineering/Technology Teacher Education degree program.

Special Features

- Learn in a program that routinely is among the best in the nation, including number one four times in eight years (as listed by the Association for Career and Technical Education)
- Integrate Project Lead The Way (PLTW) competencies into your program
- Expand your career options by becoming certified to teach PLTW courses in secondary education

- Teach and learn in the Purdue Polytechnic Institute's state-of-the-art laboratories and the DEPCO, LLC Engineering/Technology Education Laboratory, which is designed to emulate a contemporary middle-level environment
- Benefit from expert faculty who hold doctoral degrees and teaching credentials
- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Engineering Technology Teacher Education is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TTLI-ETTE-BS/Major: TCED 201610
120 Credits for graduation

Departmental/Program Major Courses (24 credits)

- TLI 16100 - Prototyping In Engineering/Technology Education
- TLI 26200 - Foundations Of Integrated STEM Education
- TLI 26500 - Teaching The TE Of STEM
- TLI 36100 - Engineering And Technology Education Instructional Planning And Evaluation
- TLI 36700 - Teaching Design And Innovation I
- TLI 46000 - Teaching Design And Innovation II
- TLI 46100 - Engineering/Technology Teacher Lab Planning
- TLI 46200 - Methods Of Teaching Engineering/Technology Education

Other Departmental /Program Course Requirements (80 credits)

- MA 15300 - Algebra And Trigonometry I (satisfies Quantitative Reasoning for core)
- MA 15400 - Algebra And Trigonometry II
- Lab Science Foundation Selective [1] (satisfies Science for core) (See Supplemental Information) - Credit Hours: 3.00
- Science Selective [2] (See Supplemental Information) - Credit Hours: 3.00
- PHYS 21800 - General Physics (satisfies Science for core)
- TECH 12000 - Design Thinking In Technology (satisfies Science, Technology & Society Selective and Information Literacy for core)
- Humanities Selective [4] (satisfies Human Cultures Humanities for core) (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
- CGT 11000 - Technical Graphics Communications

- ECET 22400 - Electronic Systems
- EDCI 20500 - Exploring Teaching As A Career
- EDCI 27000 - Introduction To Educational Technology And Computing
- EDCI 28500 - Multiculturalism And Education (satisfies Human Culture Behavioral/Social Science for core)
- EDCI 30900 - Reading In Middle And Secondary Schools: Methods And Problems
- EDST 20010 - Educational Policies And Laws
- EDPS 23500 - Learning And Motivation
- EDPS 26500 - The Inclusive Classroom
- EDCI 49808 Supervised Teaching - Credit Hours: 16.00

Electives

Technical Electives [6] (12 credits) and Free Electives [8] (4 credits) (See Supplemental Information)

University Core Requirements

(http://www.purdue.edu/provost/initiatives/curriculum/course.html)

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science - EDCI 28500 - Multiculturalism And Education
- Information Literacy - TECH 12000 - Design Thinking In Technology
- Science #1 - PHYS 21800 - General Physics
- Science #2
- Science, Technology & Society Selective - TECH 12000 - Design Thinking In Technology

- Written Communication - ENGL 10600 - First-Year Composition or
- Written Communication - ENGL 10800 - Accelerated First-Year Composition

- Oral Communication - COM 11400 - Fundamentals Of Speech Communication
- Quantitative Reasoning - MA 15300 - Algebra And Trigonometry I

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 - Algebra And Trigonometry I *
- 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 15400 - Algebra And Trigonometry II
- 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

13 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 [8] - Credit Hours: 3.00
- Free Elective [8] - Credit Hours: 1.00

15 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 49808 - Credit Hours: 16.00 •

16 Credits

Note

*Fulfills University Core

1. 120 credits listed above are required for the ETTE Bachelor of Science degree.
2. ● 3.0 Professional Education GPA required for Bachelor of Science degree, with at least a C- or higher.
3. ♦ 2.5 Core GPA required for Bachelor of Science degree.
4. 2.0 Graduation GPA required for Bachelor of Science degree.
5. Students must fulfill all Teacher Education Requirements [6]. (See Supplemental Information)
6. 32 credits of upper division courses (30000 level or higher) must be taken at Purdue University, West Lafayette.
7. ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, I AND IF).

See below for all supplemental Information

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

ETTE Supplemental Information

All prerequisites must be met

Lab Science Foundation Selective (3 credits)

[1] Must be a lab from the approved UCC Science list: http://www.purdue.edu/provost/initiatives/curriculum/course.html

- ASTR 26300 - Descriptive Astronomy: The Solar System

- ASTR 26400 - Descriptive Astronomy: Stars And Galaxies
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II
- BIOL 12100 - Biology I: Diversity, Ecology, And Behavior
- BIOL 13100 - Biology II: Development, Structure, And Function Of Organisms
- BIOL 13500 - First year Biology Laboratory
- BIOL 14600 - Introduction To Biology
- BIOL 20300 - Human Anatomy And Physiology
- BIOL 20400 - Human Anatomy And Physiology
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry
- CHM 11200 - General Chemistry
- CHM 11500 - General Chemistry
- CHM 11600 - General Chemistry
- CHM 12500 - Introduction To Chemistry I
- CHM 12600 - Introduction To Chemistry II
- CHM 13600 - General Chemistry Honors
- CHM 20000 - Fundamentals Of Chemistry
- EAPS 10900 - The Dynamic Earth
- EAPS 11100 - Physical Geology
- EAPS 11200 - Earth Through Time
- EAPS 24300 - Earth Materials I
- EAPS 24400 - Earth Materials II
- HORT 10100 - Fundamentals Of Horticulture
- PHYS 17200 - Modern Mechanics
- PHYS 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

Science Foundation Selective (3 credits)

[2] Any BIOL, CHM, EAPS, PHYS, or UCC Science course not already required/being used on the plan of study

Written Communication Foundation Selective (minimum 3 credits)

[3] Written Communication Foundation Selective

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

Humanities Foundational Selective (3 credits)

[4] See approved UCC Humanities list at: http://www.purdue.edu/provost/initiatives/curriculum/course.html

Advanced Communication Selective (6 credits)

[5] 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
- ENGL 30400 - Advanced Composition
- ENGL 30600 - Introduction To Professional Writing
- ENGL 42000 - Business Writing
- ENGL 42100 - Technical Writing

Technical Elective (12 credits)

[6] Any non-required College of Technology or Engineering (ENGR) course

Teacher Education Requirements

[7] Teacher Education Requirements

1. Basic Skills Competency Tests Assessment
2. Engineering and Technology Education Content Tests (http://www.in.nesinc.com/TestView.aspx?f=HTML_FRAG/IN018_TestPage.html)
3. **GATE A:** Admission to Teacher Education Program (TEP)
   EDCI 20500, EDCI 28500, EDPS 23500, EDPS 26500 (Blocks 1 and 2)
4. **GATE B:** Retention
   TLI 46100, TLI 46200 (Block 3)
5. **Criminal History Background Check:** A current Criminal Background Check must be on file in the Office of Field Experiences (OFE).
6. **Student Self-Disclosure Statement:** The Student Self-Disclosure Statement is submitted to OFE at the start of a Foundational course in which you complete a course-related field experience placement, EDCI 20500 or EDPS 23500 or EDPS 26500. For additional information please visit http://www.teach.purdue.edu/current_st/criminalbackgroundcheck.html.

Free Elective (12 credits)

[8] Any non-remedial course offered for credit at the University not already required/being used on the plan of study

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Expired Course

Any course without a link to its description is one that has been expired. However, this course could fulfill the degree requirement historically.

Industrial Engineering Technology, BS

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.

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.

Special Features

- Broaden your scope of expertise with classes from several Purdue Polytechnic departments
- Take advantage of real-world and global experiences with internships and international opportunities
- Gain real-world experience with courses in facility design and total productive maintenance
- Benefit from faculty experience in industrial careers
- Study abroad in Munich or other destinations without delaying your graduation date.
- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Industrial Engineering Technology is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TTLI-IET-BS/Major: TIET 201610
120 Credits for graduation

Technology Leadership & Innovation Core (27 credits)

- TLI 11100 - Gateway To Technology Leadership And Innovation or
- IT 10400 - Industrial Organization

- TLI 11200 - Foundations Of Organizational Leadership or
- OLS 25200 - Human Relations In Organizations

- TLI 21300 - Project Management or
- TECH 32000 - Technology And The Organization

- TLI 21400 - Introduction To Supply Chain Management Technology or
- IT 23000 - Industrial Supply Chain Management

- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics or
- IT 34500 - Automatic Identification And Data Capture

- TLI 31400 - Leading Innovation In Organizations
- TLI 31500 - Innovative Product Development And Testing

- TLI 31600 - Statistical Quality Control or
- IT 34200 - Introduction To Statistical Quality

- TLI 41400 - Financial Analysis For Technology Systems or
- IT 43200 - Financial Transactions In Distribution

Industrial Engineering Technology Core (39 credits)

- TLI 23500 - Introduction To Lean And Sustainable Systems or
- IT 21400 - Introduction To Lean Manufacturing

- TLI 33400 - Economic Analysis For Technology Systems or
- IT 45000 - Production Cost Analysis

- TLI 33520 - Human Factors For Technology Systems or
- IT 28100 - Industrial Safety or
- IT 35100 - Advanced Industrial Safety And Health Management

- TLI 33610 - Risk Analysis And Assessment or
- IT 38500 - Industrial Ergonomics

- TLI 33620 - Total Productive Maintenance or
- IT 38100 - Total Productive Maintenance

- TLI 43530 - Operations Planning And Management or
- IT 44200 - Production Planning

- TLI 43540 - Facilities Planning And Material Handling
- IT 48300 - Facility Design For Lean Manufacturing

- TLI 43640 - Lean Six Sigma or
- IT 44600 - Six Sigma Quality

- TLI 45700 - Technology Policy And Law or

- OLS 34600 - Critical Thinking And Ethics

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

- TLI Selective[7] (See Supplemental Information) - Credit Hours: 3.00
- TLI Selective[7] (See Supplemental Information) - Credit Hours: 3.00
- Capstone Selective[10] (See Supplemental Information) - Credit Hours: 3.00
- Globalization Portfolio[11] - Credit Hours: 0.00

Foundational Course Requirements (25 credits)

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

- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning for core) or
- MA 15300 - Algebra And Trigonometry I (satisfies Quantitative Reasoning for core) or
- MA 15400 - Algebra And Trigonometry II (satisfies Quantitative Reasoning for core)

- PSY 12000 - Elementary Psychology (satisfies Human Cultures Behavioral/Social Science for core) or
- SOC 10000 - Introductory Sociology (satisfies Human Cultures Behavioral/Social Science for core)

- TECH 12000 - Design Thinking In Technology (satisfies Science, Technology & Society and Information Literacy for core)
- Humanities Selective[1] (satisfies Human Cultures Humanities for core) (See Supplemental Information) - Credit Hours: 3.00
- Science Selective[2] (satisfies Science for core) (See Supplemental Information) - Credit Hours: 3.00
- Written Communication Selective[3] (satisfies Written Communication for core) (See Supplemental Information) - Credit Hours: 3.00

- PHYS 21800 - General Physics (satisfies Science for core) (See Supplemental Information) or
- PHYS 22000 - General Physics (satisfies Science for core) (See Supplemental Information)

General Education (12 credits)

- ECON 21000 - Principles Of Economics or
- AGEC 21700 - Economics or
- ECON 25100 - Microeconomics or
- ECON 25200 - Macroeconomics

- Mathematics/Statistics Selective[4] (See Supplemental Information) - Credit Hours: 3.00
- History of Science and Technology Selective[5] (See Supplemental Information) - Credit Hours: 3.00
- Advanced Communication Selective[6] (See Supplemental Information) - Credit Hours: 3.00

Technical Elective (9credits) and Free Electives (8 credits)

Technical Elective[8] (9credits) and Free Electives[9] (8 credits) (See Supplemental Information)

University Core Requirements

(http://www.purdue.edu/provost/initiatives/curriculum/course.html)

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science - PSY 12000/SOC 10000
- Information Literacy - TECH 12000
- Science #1 - PHYS 21800
- Science #2
- Science, Technology & Society Selective - TECH 12000
- Written Communication - ENGL 10600/ENGL 10800
- Oral Communication - COM 11400
- Quantitative Reasoning - MA 15800/MA 15300

Program Requirements

Fall 1st Year

- TLI 11100 - Gateway To Technology Leadership And Innovation
- MA 15800 - Precalculus- Functions And Trigonometry *
- TECH 12000 - Design Thinking In Technology *
- COM 11400 - Fundamentals Of Speech Communication *
  Humanities Selective[1] - Credit Hours: 3.00 *

15 Credits

Spring 1st Year

- TLI 11200 - Foundations Of Organizational Leadership
- Mathematics/Statistics Selective[4] - Credit Hours: 3.00
- Written Communication Selective[3] - Creidt Hours: 3.00 - 4.00 *

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

- PHYS 21800 - General Physics *

16/17 Credits

Fall 2nd Year

- ECON 21000 - Principles Of Economics
- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 21300 - Project Management
- TLI 23500 - Introduction To Lean And Sustainable Systems
- Science Selective[2] - Credit Hours: 3.00 *

15 Credits

Spring 2nd Year

- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics

- PSY 12000 - Elementary Psychology * or
- SOC 10000 - Introductory Sociology *

- Technical Elective[9] - Credit Hours: 3.00
- History of Science & Tech Selective[5] - Credit Hours: 3.00
- TLI Selective[7] - Credit Hours: 3.00

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[7] - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- TLI 31500 - Innovative Product Development And Testing
- TLI 33610 - Risk Analysis And Assessment
- TLI 33620 - Total Productive Maintenance
- TLI 43640 - Lean Six Sigma
- TLI 43530 - Operations Planning And Management

15 Credits

Fall 4th Year

- TLI 41400 - Financial Analysis For Technology Systems
- TLI 45700 - Technology Policy And Law
- TLI 43540 - Facilities Planning And Material Handling
- Advanced Communication Selective[6] - Credit Hours: 3.00
- Free Elective[9] - Credit Hours: 3.00
- Free Elective[9] - Credit Hours: 1.00

16 Credits

Spring 4th Year

- Capstone Selective[10] - Credit Hours: 3.00
- Technical Elective[8] - Credit Hours: 3.00
- Technical Elective[8] - Credit Hours: 3.00
- Free Elective[9] - Credit Hours: 3.00
- Free Elective[9] - Credit Hours: 1.00
- Globalization Portfolio[11] - Credit Hours: 0.00

13 Credits

Notes

*Fulfills University Core
1) 120 credits listed above are required for the IET Bachelor of Science degree.
2) 2.0 Graduation GPA required for Bachelor of Science degree.
3) 32 credits of upper division courses (30000 level or higher) must be taken at Purdue University, West Lafayette.
4) ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, I AND IF).

See here for all supplemental information

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

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

Summary of Program Requirements

The Summary of Program Requirements for Organizational Leadership is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TTLI-OLS-BS/Major: OLSV 201610
120 Credits for graduation

Technology Leadership & Innovation Core (27 credits)

- TLI 11100 - Gateway To Technology Leadership And Innovation or
- OLS 25200 - Human Relations In Organizations or
- IT 10400 - Industrial Organization

- TLI 11200 - Foundations Of Organizational Leadership or
- OLS 28400 - Leadership Principles

- TLI 21300 - Project Management or
- TECH 32000 - Technology And The Organization or
- OLS 45000 - Project Management For Organizational And Human Resource Development

- TLI 21400 - Introduction To Supply Chain Management Technology or
- IT 23000 - Industrial Supply Chain Management

- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics or
- IT 34500 - Automatic Identification And Data Capture

- TLI 31400 - Leading Innovation In Organizations
- TLI 31500 - Innovative Product Development And Testing

- TLI 31600 - Statistical Quality Control or
- IT 34200 - Introduction To Statistical Quality

- TLI 41400 - Financial Analysis For Technology Systems or
- IT 43200 - Financial Transactions In Distribution

Organizational Leadership Core (33 Credits)

- TLI 25300 - Principles Of Technology Strategy

- TLI 25400 - Leading Change In Technology Organizations or
- OLS 38600 - Leadership For Organizational Change And Innovation

- TLI 33400 - Economic Analysis For Technology Systems or
- MGMT 20010 - Business Accounting or
- MGMT 20000 - Introductory Accounting or
- IT 45000 - Production Cost Analysis

- TLI 33610 - Risk Analysis And Assessment or
- IT 38500 - Industrial Ergonomics

- TLI 35600 - Global Technology Leadership or
- OLS 45600 - Leadership In A Global Environment or
- TECH 33000 - Technology And The Global Society

- TLI 43640 - Lean Six Sigma or
- IT 44600 - Six Sigma Quality

- TLI 45700 - Technology Policy And Law or
- OLS 34600 - Critical Thinking And Ethics

- TLI 45800 - Leadership For Competitive Advantage or
- OLS 48400 - Leadership Strategies For Quality And Productivity

- TLI Selective [8] (See Supplemental Informtaion) - Credit Hours: 3.00
- Leadership Experiential Selective [10] (See Supplemental Informtaion) - Credit Hours: 3.00
- Capstone Selective [12] (See Supplemental Informtaion) - Credit Hours: 3.00
- Globalization Portfolio [13] - Credit Hours: 0.00

Technology Leadership Focus (15 credits)

- Technology Focus Selective [9] (See Supplemental Information) - Credit Hours: 3.00
- Technology Focus Selective [9] (See Supplemental Information) - Credit Hours: 3.00
- Technology Focus Selective [9] (See Supplemental Information) - Credit Hours: 3.00
- Technology Focus Selective [9] (See Supplemental Information) - Credit Hours: 3.00
- TLI 45900 - Technology Focus Seminar

Foundational Course Requirements (24 credits)

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

- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning for core) or
- MA 15300 - Algebra And Trigonometry I (satisfies Quantitative Reasoning for core) and
- MA 15400 - Algebra And Trigonometry II (satisfies Quantitative Reasoning for core)

- PSY 12000 - Elementary Psychology (satisfies Human Cultures Behavioral/Social Science for core) or

- SOC 10000 - Introductory Sociology (satisfies Human Cultures Behavioral/Social Science for core)

- TECH 12000 - Design Thinking In Technology (satisfies Science, Technology & Society and Information Literacy for core)
- Humanities Selective [1] (satisfies Human Cultures Humanities for core) (See Supplemental Information) - Credit Hours: 3.00
- Science Selective [3] (satisfies Science for core) (See Supplemental Information) - Credit Hours: 3.00
- Lab Science Selective [2] (satisfies Science for core) (See Supplemental Information) - Credit Hours: 3.00
- Written Communication Selective [4] (satisfies Written Communication for core) (See Supplemental Information) - Credit Hours: 3.00

General Education (12 credits)

- ECON 21000 - Principles Of Economics or
- AGEC 21700 - Economics or
- ECON 25100 - Microeconomics or
- ECON 25200 - Macroeconomics

- Mathematics/Statistics Selective [5] See Supplemental Information) - Credit Hours: 3.00
- History of Science and Technology Selective [6] (See Supplemental Information) - Credit Hours: 3.00
- Advanced Communication Selective [7] (See Supplemental Information) - Credit Hours: 3.00

Free Electives (9 credits)

Free Electives [11] (9 credits) (See Supplemental Information)

University Core Requirements

(http://www.purdue.edu/provost/initiatives/curriculum/course.html)

- Human Cultures Humanities

- Human Cultures Behavioral/Social Science - PSY 12000 - Elementary Psychology or
- Human Cultures Behavioral/Social Science - SOC 10000 - Introductory Sociology

- Information Literacy - TECH 12000 - Design Thinking In Technology
- Science #1
- Science #2
- Science, Technology & Society Selective - TECH 12000 - Design Thinking In Technology

- Written Communication - ENGL 10600 - First-Year Composition or
- Written Communication - ENGL 10800 - Accelerated First-Year Composition

- Oral Communication - COM 11400 - Fundamentals Of Speech Communication
- Quantitative Reasoning - MA 15800 - Precalculus- Functions And Trigonometry

Program Requirements

Fall 1st Year

- COM 11400 - Fundamentals Of Speech Communication *
- MA 15800 - Precalculus- Functions And Trigonometry *
- TECH 12000 - Design Thinking In Technology *
- TLI 11100 - Gateway To Technology Leadership And Innovation
- Humanities Selective [1] - Credit Hours: 3.00 *

15 Credits

Spring 1st Year

- TLI 11200 - Foundations Of Organizational Leadership
- Mathematics/Statistics Selective [5] - Credit Hours: 3.00
- Written Communication Selective [4] - Credit Hours: 3.00/4.00 *
- Lab Science Selective [2] - Credit Hours: 3.00 *
- Technology Focus Selective [9] - Credit Hours: 3.00

15/16 Credits

Fall 2nd Year

- PSY 12000 - Elementary Psychology * or
- SOC 10000 - Introductory Sociology *

- ECON 21000 - Principles Of Economics
- TLI 21300 - Project Management
- TLI 21400 - Introduction To Supply Chain Management Technology
- TLI 25300 - Principles Of Technology Strategy

15 Credits

Spring 2nd Year

- TLI 25400 - Leading Change In Technology Organizations
- History of Science & Tech Selective [6] - Credit Hours: 3.00
- Science Selective [3] - Credit Hours: 3.00 *
- Technology Focus Selective [9] - Credit Hours: 3.00
- Free Elective [11] - Credit Hours: 3.00

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
- TLI 33400 - Economic Analysis For Technology Systems
- Technology Focus Selective [9] - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- TLI 31500 - Innovative Product Development And Testing
- TLI 33610 - Risk Analysis And Assessment
- TLI 35600 - Global Technology Leadership
- Technology Focus Selective [9] - Credit Hours: 3.00
- TLI Selective [8] - Credit Hours: 3.00

15 Credits

Fall 4th Year

- TLI 41400 - Financial Analysis For Technology Systems
- TLI 45700 - Technology Policy And Law
- TLI 45800 - Leadership For Competitive Advantage
- Advanced Communication Selective [7] - Credit Hours: 3.00
- Leadership Experiential Selective [10] - Credit Hours: 2.00

14 Credits

Spring 4th Year

- TLI 43640 - Lean Six Sigma
- TLI 45900 - Technology Focus Seminar
- Capstone Selective [12] - Credit Hours: 3.00
- Leadership Experiential Selective [10] - Credit Hours: 1.00
- Free Elective [11] - Credit Hours: 3.00
- Free Elective [11] - Credit Hours: 3.00
- Globalization Portfolio [13] - Credit Hours: 0.00

16 Credits

Note

*Fulfills University Core

1) 120 credits listed above are required for the OLSV Bachelor of Science degree.

2) 2.0 Graduation GPA required for Bachelor of Science degree.

3) 32 credits of upper division courses (30000 level or higher) must be taken at Purdue University, West Lafayette.

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

Click here for all supplemental Information

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

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.

Courses provide a systems approach where you can understand how each area of the supply chain interacts with and relies on the rest. They will help you prepare for a career that requires skills in business analysis, communication and teamwork, technological know-how, data processing, and leadership.

Special Features

- Gain a broad education in several technical and management areas
- Be ready for Six Sigma certification as part of embedded industry certificate preparation
- Work with and learn from professors who are at the forefront of supply chain management expertise
- Take advantage of the highly active student organization with industry support for competitions, travel to conferences, internships and international travel opportunities
- Study abroad in Munich or other destinations without delaying your graduation date

- Utilize the Polytechnic learning environment to become a career-ready graduate

Summary of Program Requirements

The Summary of Program Requirements for Supply Chain Management Technology is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

TTLI-IET-BS/Major: TSCM 201610
120 Credits for graduation

Technology Leadership & Innovation Core (27 credits)

- TLI 11100 - Gateway To Technology Leadership And Innovation or
- IT 10400 - Industrial Organization

- TLI 11200 - Foundations Of Organizational Leadership or
- OLS 25200 - Human Relations In Organizations

- TLI 21300 - Project Management or
- TECH 32000 - Technology And The Organization

- TLI 21400 - Introduction To Supply Chain Management Technology or
- IT 23000 - Industrial Supply Chain Management

- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics or
- IT 34500 - Automatic Identification And Data Capture

- TLI 31400 - Leading Innovation In Organizations
- TLI 31500 - Innovative Product Development And Testing

- TLI 31600 - Statistical Quality Control or
- IT 34200 - Introduction To Statistical Quality

- TLI 41400 - Financial Analysis For Technology Systems or
- IT 43200 - Financial Transactions In Distribution

Supply Chain Management Technology Core (39 credits)

- TLI 23500 - Introduction To Lean And Sustainable Systems or
- IT 21400 - Introduction To Lean Manufacturing

- TLI 34200 - Warehouse And Inventory Management or

- IT 33200 - Purchasing, Inventory, And Warehouse Management

- TLI 34250 - Purchasing And Contract Management

- TLI 34300 - Technical And Service Selling or
- IT 33000 - Industrial Sales And Sales Management

- TLI 34350 - Business To Business Sales Management

- TLI 43530 - Operations Planning And Management or
- IT 44200 - Production Planning

- TLI 43640 - Lean Six Sigma or
- IT 44600 - Six Sigma Quality

- TLI 44275 - Global Transportation And Logistics Management or
- IT 43400 - Global Transportation And Logistics Management

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

- MGMT 20010 - Business Accounting or
- MGMT 20000 - Introductory Accounting

- MGMT 32300 - Principles Of Marketing
- TLI Selective[8] (See Supplemental Information) - Credit Hours: 3.00
- Capstone Selective[12] - Credit Hours: 3.00
- Globalization Portfolio[11] - Credit Hours: 0.00

Foundational Course Requirements (24 credits)

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

- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning for core) or
- MA 15300 - Algebra And Trigonometry I (satisfies Quantitative Reasoning for core) or
- MA 15400 - Algebra And Trigonometry II (satisfies Quantitative Reasoning for core)

- PSY 12000 - Elementary Psychology (satisfies Human Cultures Behavioral/Social Science for core) or
- SOC 10000 - Introductory Sociology (satisfies Human Cultures Behavioral/Social Science for core)

- TECH 12000 - Design Thinking In Technology (satisfies Science, Technology & Society and Information Literacy for core)
- Humanities Selective[1] (satisfies Human Cultures Humanities for core) (See Supplemental Information) - Credit Hours: 3.00
- Science Selective[3] (satisfies Science for core) (See Supplemental Information) - Credit Hours: 3.00
- Lab Science Selective[2] (satisfies Science for core) (See Supplemental Information) - Credit Hours: 3.00
- Written Communication Selective[4] (satisfies Written Communication for core) (See Supplemental Information) - Credit Hours: 3.00

General Education (12 credits)

- ECON 21000 - Principles Of Economics or
- AGEC 21700 - Economics or
- ECON 25100 - Microeconomics or
- ECON 25200 - Macroeconomics

- Mathematics/Statistics Selective[5] See Supplemental Information) - Credit Hours: 3.00
- History of Science and Technology Selective[6] (See Supplemental Information) - Credit Hours: 3.00
- Advanced Communication Selective[7] (See Supplemental Information) - Credit Hours: 3.00

Free Electives (9 credits) and Technical Elective (9 credits)

Free Electives[9] (9 credits) and Technical Elective[10] (9 credits) (See Supplemental Information)

University Core Requirements

(http://www.purdue.edu/provost/initiatives/curriculum/course.html)

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science - PSY 12000/SOC 10000
- Information Literacy - TECH 12000
- Science #1
- Science #2
- Science, Technology & Society Selective - TECH 12000
- Written Communication - ENGL 10600 or ENGL 10800
- Oral Communication - COM 11400
- Quantitative Reasoning - MA 15800/MA 15300

Program Requirements

Fall 1st Year

- TLI 11100 - Gateway To Technology Leadership And Innovation
- MA 15800 - Precalculus- Functions And Trigonometry *
- TECH 12000 - Design Thinking In Technology *
- COM 11400 - Fundamentals Of Speech Communication *
- Humanities Selective[1] - Credit Hours: 3.00 *

15 Credits

Spring 1st Year

- TLI 11200 - Foundations Of Organizational Leadership
- TLI 21400 - Introduction To Supply Chain Management Technology

- PSY 12000 - Elementary Psychology * or
- SOC 10000 - Introductory Sociology *

- Written Communication Selective[4] - Credit Hours: 3.00 - 4.00 *
- Lab Science Selective[2] - Credit Hours: 3.00 *

15/16 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[5] - Credit Hours: 3.00
- Science Selective[3] - Credit Hours: 3.00 *

15 Credits

Spring 2nd Year

- ECON 21000 - Principles Of Economics
- MGMT 20010 - Business Accounting
- Technical Elective[10] - Credit Hours: 3.00
- History of Science and Tech Selective[6] - Credit Hours: 3.00
- TLI Selective[8] - Credit Hours: 3.00

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[7] - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- TLI 31500 - Innovative Product Development And Testing
- 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 41400 - Financial Analysis For Technology Systems
- TLI 34350 - Business To Business Sales Management
- TLI 43640 - Lean Six Sigma
- TLI 44275 - Global Transportation And Logistics Management
- Free Elective[9] - Credit Hours: 3.00

15 Credits

Spring 4th Year

- Capstone Selective[12] - Credit Hours: 3.00
- Technical Elective[10] - Credit Hours: 3.00
- Technical Elective[10] - Credit Hours: 3.00
- Free Elective[9] - Credit Hours: 3.00
- Free Elective[9] - Credit Hours: 3.00
- Globalization Portfolio[11] - Credit Hours: 0.00

15 Credits

Notes

*Fulfills University Core
1) 120 credits listed above are required for the TSCM Bachelor of Science degree.
2) 2.0 Graduation GPA required for Bachelor of Science degree.
3) 32 credits of upper division courses (30000 level or higher) must be taken at Purdue University, West Lafayette.
4) ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, I AND IF).

See here for all supplemental Information

Degree Requirements

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

myPurdue Plan is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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.

Minor

Aerospace Studies Minor

Minor Code: AEST
(effective Spring 2015, 201520)
Total Hours: 14 credits

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

Requirements for the Minor

A. The following courses are required (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

Total Hours (14 credits)

AFT 30000 level courses may be taken in the same semester as AFT 40000 level courses (requires a waiver from AFROTC HQs)

Biometrics Minor

TBIO

Effective Fall 2015

Required Courses

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

- STAT 30100 - Elementary Statistical Methods

- IT 34500 - Automatic Identification And Data Capture or

- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics

- IT 54000 - Biometric Performance And Usability Analysis
- IT 54500 - Biometrics Technology And Applications
- TLI 49800 - Undergraduate Research In Technology Leadership And Innovation

Biotechnology Minor

Department of Technology Leadership & Innovation

Minor Code: BTCH

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.

Required Courses

- BIOL 11200 - Fundamentals Of Biology
- BIOL 11300 - Fundamentals Of Biology
- IT 22600 - Biotechnology Laboratory I
- IT 22700 - Biotechnology Laboratory II
- BIOL 23000 - Biology Of The Living Cell
- BIOL 24100 - Biology IV: Genetics And Molecular Biology
- TLI 52100 - Drug Development
- CNIT 22700 - Introduction To Bioinformatics
- IT 34200 - Introduction To Statistical Quality

Note

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

Acceptable substitutions:
BIOL 11200 can be substituted by BIOL 12100, BIOL 11000
BIOL 11300 can be substituted by BIOL 13100, BIOL 11100
BIOL 24100 can be substituted by AGR 32000
IT 34200 can be substituted by STAT 35000, STAT 503, STAT 22500 or STAT 30100

Expired Course

Any course without a link to its description is one that has been expired. However, this course could fulfill the degree requirement historically.

Miltary Science and Leadership Minor

Minor Code: MILT
(Effective Spring 2015, 201520)
Total Hours: 15 credits

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

Requirements for the Minor

Required Courses:

- MSL 30100 - Leadership And Problem Solving *
- MSL 30200 - Leadership And Ethics *
- MSL 40100 - Leadership And Management *
- MSL 40200 - Officership *

Note

MSL 49000 - Directed Studies In Military Science - May be substituted for any above class with approval of Department Head.

Select One (1) of the following courses:

(another may be substituted with approval of Department Head)

- 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
- HIST 54500 - Middle East in the Twentieth Century - Credit Hours: 3.00
- PHIL 23100 - Religions Of The West
- POL 23100 - Introduction To United States Foreign Policy
- POL 23700 - Modern Weapons And International Relations
- POL 43700 - Military Affairs - Credit Hours: 3.00
- POL 43900 - United States Foreign Policy Making

Total Hours (15 credits)

Expired Course

Any course without a link to its description is one that has been expired. However, this course could fulfill the degree requirement historically.

Naval Science Minor

Minor Code: NAVL
(effective Spring 2015, 201520)
Total Hours: 13 credits

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

Requirements for the Minor

Required Courses:

- 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

Select One (1) of the following courses:

- 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

Organizational Leadership Minor

Department of Technology Leadership & Innovation

Minor Code: OLSV

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.

Before Spring 2016 - Required Courses:

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

- OLS 25200 - Human Relations In Organizations
- OLS 27400 - Applied Leadership
- OLS 28400 - Leadership Principles
- OLS 38600 - Leadership For Organizational Change And Innovation

After Fall 2015, Spring 2016, 201620 Required Courses:

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

- TLI 11200 - Foundations Of Organizational Leadership or
- OLS 25200 - Human Relations In Organizations

- TLI 11100 - Gateway To Technology Leadership And Innovation or
- 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

Supply Chain Management Technology Minor

Department of Technology Leadership & Innovation

Minor Code: TSCM

(IT courses effective Spring 2015, 201520)

(TLI courses effective Spring 2016, 201620)

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:

- IT 21400 - Introduction To Lean Manufacturing or
- TLI 23500 - Introduction To Lean And Sustainable Systems

- IT 23000 - Industrial Supply Chain Management or
- TLI 21400 - Introduction To Supply Chain Management Technology

- IT 33000 - Industrial Sales And Sales Management or
- TLI 34300 - Technical And Service Selling

- IT 33200 - Purchasing, Inventory, And Warehouse Management or
- TLI 34200 - Warehouse And Inventory Management or
- TLI 34250 - Purchasing And Contract Management

- IT 34500 - Automatic Identification And Data Capture or
- TLI 31300 - Technology Innovation And Integration: Bar Codes To Biometrics

Note

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