

Departmental/Program Major Courses (64 credits)

- _____ (3) **CGT 11000 Technical Graphic Communications** or CGT 11600 Geometric Modeling for Visualization & Communication
- _____ (3) ¹Computer-Aided Design Selective – (**MET 10200**)
- _____ (3) ²ECET Selective – (**ECET 17700**)
- _____ (3) ²ECET Selective – (**ECET 22400**)
- _____ (3) ENGT 18000 Engineering Technology Foundations
- _____ (1) ENGT 18100 Engineering Technology Foundations Laboratory
- _____ (3) MET 11100 Applied Statics
- _____ (3) MET 14300 Materials & Processes I or **MET 14400 Materials & Processes II**
- _____ (3) MET 24500 Manufacturing Systems
- _____ (3) ³Programming Selective
- _____ (3) TLI 11100 Introduction to Manufacturing & Supply Chain Systems
- _____ (3) TLI 11200 Foundation of Organizational Leadership
- _____ (3) TLI 31600 Statistical Quality Control
- _____ (3) TLI 33400 Economic Analysis for Tech Systems

⁴Technical Selectives 24 cr. hrs. (15 cr. hrs. must be 300/400 level)

- _____ (3) _____ (3) _____ (3) _____ (3)
- _____ (3) _____ (3) _____ (3) _____ (3)

Other Departmental /Program Course Requirements (56 credits)

- _____ (3) MA 15800 – Pre-Calculus – Functions and Trigonometry (*satisfies Quantitative Reasoning for core*)
- _____ (3) MA 16010 – Applied Calculus I
- _____ (4) ⁵Lab Science Foundation Selective (*satisfies Science for core*)
- _____ (4) PHYS 21800 General Physics (***PHYS-P 201, 5 cr**) (*satisfies Science for core*)
- _____ (3) TECH 12000 Design Thinking in Technology (*satisfies Science, Technology & Society Selective and Information Literacy for core*)
- _____ (3) ⁶Technical/Management Selective
- _____ (3) ⁷Global/Professional Selective
- _____ (1) TECH 49600 Senior Design Project Proposal
- _____ (2) TECH 49700 Senior Design Project
- _____ (3) ECON 21000 (***ECON-E 103 or *ECON-E 104**) (*satisfies Human Culture Behavioral/Social Science for core*)
- _____ (3) ⁸Humanities Foundation Selective (*satisfies Human Cultures Humanities for core*)
- _____ (3) COM 11400 Fundamentals of Speech Communication (***SPCH-S 121**) (*satisfies Oral Communication for core*)
- _____ (3) ⁹Written Communication Foundation Selective (***ENG-W 131**) (*satisfies Written Communication for core*)
- _____ (3) ¹⁰Advanced Oral Communication Selective
- _____ (3) ENGL 42100 Technical Writing
- _____ (3) ¹¹Humanities/Liberal Arts Elective
- _____ (3) ¹¹Humanities/Liberal Arts Elective

¹²Free Electives (6 cr. hrs.) (200+ Level)

- _____ (3) _____ (3) _____

* Denotes Richmond Location Course Offering

University Core Requirements

Human Cultures: Behavioral/Social Sciences	<input type="checkbox"/>	_____	Science	<input type="checkbox"/>	PHYS 21800 (*PHYS-P 201)
Human Cultures: Humanities	<input type="checkbox"/>	_____	Science	<input type="checkbox"/>	_____
Information Literacy	<input type="checkbox"/>	TECH 12000	Science, Technology & Society	<input type="checkbox"/>	TECH 12000
Oral Communication	<input type="checkbox"/>	COM 11400 (*SPCH-S 121)	Written Communication	<input type="checkbox"/>	ENGL 10600 or 10800 (*ENG-W 131)
Quantitative Reasoning	<input type="checkbox"/>	MA 15800			

**The student is ultimately responsible for knowing and completing all degree requirements.
MyPurduePlan is knowledge source for specific requirements and completion.**

Fall 1 st Year	CR	GR	Sem	Fulfilled by	Spring 1 st Year	CR	GR	Sem	Fulfilled by
MA 15800* Pre-Calculus – Functions & Trigonometry (Pre-req ALEKS score 60)	3				MA 16010 Applied Calculus I (Pre-req: MA 15800 with grade of C- or better or ALEKS score 75)	3			
ENGT 18000 Engineering Technology Foundations	3				MET 11100 Applied Statics (Pre-reqs: MA 15800 and ENGT 18000)	3			
ENGT 18100 Engineering Technology Applications	1				TLI 23500 Intro to Lean and Syst. Systems [4Technical Selective]	3			
MET 14300 Materials & Processes I or MET 14400 Materials & Processes II	3				COM 11400 Fundamental of Speech Comm* *SPCH-S 121 (IUE)	3			
CGT 11000 Technical Graphic Comm. or CGT 11600 Geom Model for Vis & Comm	3				[9Written Comm. Foundation Selective*] *ENG-W 131 (IUE)	3			
TECH 12000 Design Thinking in Tech.*	3								
TOTAL CREDIT HOURS	16				TOTAL CREDIT HOURS	15			

Fall 2 nd Year	CR	GR	Sem	Fulfilled by	Spring 2 nd Year	CR	GR	Sem	Fulfilled by
[3Programming Selective]	3				MET 10200 Production Design & Specs. (Pre-reqs: CGT 1100 and ENGT 18000) [1Computer-Aided Design Selective]	3			
PHYS 21800 General Physics* *PHYS-P 201, 5 cr. (IUE)	4				*PHYS-P 202, 5 cr. (IUE) [5Lab Science Foundation Selective*]	4			
ECET 22400 Electronic Systems (Pre-req: MA 16010) [2ECET Selective]	3				ECET 17700 DAQ and Systems Control [2ECET Selective]	3			
MET 24500 Manufacturing Systems (Pre-req: MET 14400 and CGT 110)	3				[8Humanities Foundation Selective*]	3			
TLI 11100 Intro to Mfg & Supply Chain	3				TLI 11200 Found'n of Organz'l Leadership	3			
TOTAL CREDIT HOURS	16				TOTAL CREDIT HOURS	16			

Fall 3 rd Year	CR	GR	Sem	Fulfilled by	Spring 3 rd Year	CR	GR	Sem	Fulfilled by
TLI 31600 Statistical Quality Control or IT 34200 Intro to Statistical Quality (Pre-req: MA 15800)	3				TLI 43640 Lean Six Sigma or IT 44600 Six Sigma Quality [4Technical Selective (300- 400 level)]	3			
[4Technical Selective]	3				[4Technical Selective]	3			
TECH 32000 Technology & the Organz'n [6Technical/Management Selective]	3				TECH 33000 Technology & Global Society [7Global/Professional Selective]	3			
[11Humanities/Liberal Arts Elective]	3				MET 21300 Dynamics (Pre-reqs: MA 16010 and MET 11100) [12Free Elective (200+ level)]	3			
[12Free Elective (200+ level)] (Apply excess Physics credits here)	3				ECON 21000 Principles of Economics *ECON-E 103 (IUE) or *ECON-E 104 (IUE)	3			
TOTAL CREDIT HOURS	15				TOTAL CREDIT HOURS	15			

Fall 4 th Year	CR	GR	Sem	Fulfilled by	Spring 4 th Year	CR	GR	Sem	Fulfilled by
TECH 49600 Senior Design Project	1				TECH 49700 Senior Design Project	2			
TLI 33400 Economic Anlys for Tech Sys or IT 45000 Production Cost Analysis	3				[4Technical Selective (300- 400 level)]	3			
[4Technical Selective (300- 400 level)]	3				[4Technical Selective (300- 400 level)]	3			
[4Technical Selective (300- 400 level)]	3				[11Humanities/Liberal Arts Elective]	3			
ENGL 42100 Technical Writing [Pre-req: ENGL 10600/*ENG-W 131 (IUE)]	3				COM 32000 Small Group Communication [Pre-req: COM 114/*SPCH-S 121 (IUE)] [10Adv. Oral Communication Selective]	3			
TOTAL CREDIT HOURS	13				TOTAL CREDIT HOURS	14			

*Fulfills University Core Requirement

1. 120 semester credits and a 2.0 Graduation GPA are required for the 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 the Purdue University location conferring the degree.
4. Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.

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

MyPurduePlan is knowledge source for specific requirements and completion.

ET Supplemental Information

All prerequisites must be met

Bold indicates courses offered at Richmond Location.

***Indicates IUE courses for Richmond Location only.**

See Student Services Coordinator for course availability.

¹COMPUTER-AIDED DESIGN SELECTIVES

CGT 22600 Introduction to Constraint-based Modeling

MET 10200 Production Design and Specifications

²ECET SELECTIVES

ECET 17700 DAQ and Systems Control

ECET 17900 Intro to Digital Systems

ECET 22400 Electronics Systems

³PROGRAMMING SELECTIVES

CNIT 10500 Introduction to C Programming

CNIT 15501 Intro to Software Development Concepts

CNIT 17500 Visual Programming

MET 16400 Computing in Engineering Technology

⁴TECHNICAL SELECTIVES

At least 15 credit hours must be at the 30000 level or above and at least 6 credit hours must be in the same discipline

CGT 32300 Virtual Product Integration

CGT 32600 Graphics Standards for Product Definition

ECET 30201 Introduction to Industrial Controls

ECET 32100 Introduction to Nanotechnology

ECET 38500/ECET 49900 Intro to Automotive Electronics

TLI 23500 Intro to Lean and Sustainable Systems

TLI 31400 Leading Innovation in Organizations

TLI 31500 Innovative Product Development & Testing

TLI 33520 Human Factors for Technology Systems

TLI 33610 Risk Analysis & Assessment

TLI 33620 Total Production Maintenance

TLI 41400 Financial Analysis for Technology Systems

TLI 43530 Operations Planning and Management

TLI 43540 Facilities Planning

TLI 43640 Lean Six Sigma

TLI 45700 Technology Policy & Law

MET 30200 CAD in the Enterprise

MET 38200 Controls & Instrumentation

MET 45100 Manufacturing Quality Control

MFET 30000 Applications of Automation in Manufacturing

MFET 31100 Computer-Aided Design in Manufacturing

⁵LAB SCIENCE SELECTIVES

BIOL 11000 Fundamentals of Biology I

BIOL 20300 Human Anatomy and Physiology

CHM 11200 General Chemistry II

PHYS 21900 General Physics II

PHYS 22100 General Physics

***PHYS-P 202**

PHYS 24100 Electricity and Optics

⁶TECHNICAL /MANAGEMENT SELECTIVES

MGMT 20000 Intro to Accounting

MGMT 45500 Legal Background for Business I

TECH 32000 Technology and the Organization

TLI 21300 Project Management

⁷GLOBAL/PROFESSIONAL SELECTIVES

ECET 38001 Global/Professional Issues in EET

TECH 33000 Technology and the Global Society

TLI 35600 Global Technology Leadership

⁸HUMANITIES FOUNDATIONAL SELECTIVE

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

***ENGL-L 204**

***FINA-A 101, *FINA-A 102**

***FINA-F 100, *FINA-H 100**

***FINA-S 200, *FINA-S 260**

***FREN-F 100, *FREN-F 150,**

***FREN-F 200, *FREN-F 250**

***HIST-H 105, *HIST-H 106**

***MUS-M 174, *MUS-T 101,**

***MUS-Z 393**

***PHIL-P 100, *PHIL-P 120,**

***PHIL-P 140**

***SPAN-S 100, *SPAN-S 150,**

***SPAN-S 200, *SPAN-S 250**

***THTR-T 210**

⁹WRITTEN COMMUNICATION FOUNDATION SELECTIVE

ENGL 10600 First Year Composition

ENGL 10800 Accelerated First Year Composition

***ENG-W 131**

10ADVANCED ORAL COMMUNICAITON SELECTIVE

COM 3200 Small Group Communications

COM 30300 Intercultural Communication or

COM 31400 Adv. Presentational Speaking

***300- or 400-level courses in *SPCH-S or *CMCL-C**

11HUMANITIES/LIBERAL ARTS ELECTIVES

Any course from the following disciplines: Anthropology, English, History, Philosophy, Political Science, Psychology, Religious Studies, Sociology, Theatre, Women's Studies, or Foreign Languages (except native language courses).

***ANTH-A 104, *ANTH-E 320**

***ECON-E 103, *ECON-E 104**

***ENG-G 205, *ENGL-L 204,**

***FINA-A 101, *FINA-A 102**

***FINA-F 100, *FINA-H 100**

***FINA-S 200, *FINA-S 260,**

***FREN-F 100, *FREN-F 150,**

***FREN-F 200, *FREN-F 250,**

***HIST-H 105, *HIST-H 106**

***MUS-M 174, *MUS-T 101,**

***MUS-Z 393,**

***PHIL-P 100, *PHIL-P 120,**

***PHIL-P 140**

***POLS-Y 103, *POLS-Y 109,**

***POLS-Y 324,**

***PSY-P 103, *PSY-P 216,**

***SOC-S 100,**

***SPAN-S 100, *SPAN-S 150,**

***SPAN-S 200, *SPAN-S 250,**

***SPCH-S 122,**

***THTR-T 210**

12FREE ELECTIVES

Courses from any discipline at the **20000 – 40000 level**.

***Apply excess Physics credits here.**