PURDUE UNIVERSITY

Kokomo Engineering Technology (ET)
Concentration in Technology Integration   Catalog Term: _____   PUID: _____

ET-BS Suggested Arrangement of Courses
For Catalog Terms beginning in Fall 2020
Major Code: ENGT   Program Code: PITLI-ET-BS

Fall 1st Year	CR	GR	Sem	Fulfilled by	Spring 1st Year	CR	GR	Sem	Fulfilled by
CGT 11000 – Technical Graphic Communications	3				TLI 11200 Foundation of Organizational Leadership	3			
ENGT 18000 – Engineering Technology Foundations	3				MA 16010 Applied Calculus I (Prereq: MA 15800 with grade of C- or better or ALEKS score 75)	3			
ENGT 18100 – Engineering Technology Applications	1				MET 14300 – Materials & Processes I OR MET 14400 Materials & Processes II	3			
MA 15800* - Precalculus – Functions & Trigonometry (Prereq ALEKS score 60)	3				MET 11100 Applied Statics (Prereqs: MA 15800 and MET 16200)	3			
IET 11100 Introduction to Manufacturing & Supply Chain	3				Written Communication Foundation Selective* + (SCLA 10100)	3			
TECH 12000 Design Thinking in Tech.*	3								
TOTAL CREDIT HOURS	**16**				**TOTAL CREDIT HOURS**	**15**			

Fall 2nd Year	CR	GR	Sem	Fulfilled by	Spring 2nd Year	CR	GR	Sem	Fulfilled by
Programming Selective	3				COM 11400 Fundamental of Speech Communication* (SCLA 10200)	3			
ECET Selective	3				ECET Selective	3			
Technical Selective	3				Computer-Aided Design Selective	3			
PHYS 22000 General Physics*	4				ECON 21000 – Principles of Economics	3			
Humanities Foundation Selective*	3				Technical Selective	3			
TOTAL CREDIT HOURS	**16**				**TOTAL CREDIT HOURS**	**15**			

Fall 3rd Year	CR	GR	Sem	Fulfilled by	Spring 3rd Year	CR	GR	Sem	Fulfilled by
MET 24500 – Manufacturing Systems	3				Technical Selective	3			
ENGL 42100 Technical Writing (Prereq: ENGL 10600)	3				Advanced Oral Communication Selective +	3			
Technical/Management Selective	3				Global/Professional Selective	3			
TLI 31600 or IT 34200 Statistical Quality Control (Prereq: MA 15800)	3				Lab Science Foundation Selective*	4			
Technical Selective	3				Technical Selective (30000- 40000 level)	3			
TOTAL CREDIT HOURS	**15**				**TOTAL CREDIT HOURS**	**16**			

Fall 4th Year	CR	GR	Sem	Fulfilled by	Spring 4th Year	CR	GR	Sem	Fulfilled by
Senior Capstone Project Selective I	3				Senior Capstone Project Selective II	3			
IET 33400 Economic Analysis for Tech Systems or IT 45000 Production Cost Analysis (Prereq: Math/Stat Selective)	3				Technical Selective (30000- 40000 level)	3			
Technical Selective (30000- 40000 level)	3				Free Elective	3			
Technical Selective (30000- 40000 level)	3				Free Elective	3			
Humanities/Liberal Arts Elective +	3								
TOTAL CREDIT HOURS	**15**				**TOTAL CREDIT HOURS**	**12**			

*Fulfills University Core Requirement

+ Denotes Cornerstone Certificate course option

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.

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

5. Complete a Professional Requirement. ☐   Complete an Intercultural Requirement. ☐

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

** *Updated 06/03/20*

WRITTEN COMMUNICATION SELECTIVE +
ENGL 10600 First-Year Composition
ENGL 10800 Accelerated First Year Composition
SCLA 10100 Transformative Texts, Critical Thinking & Comm I: Antiquity to Modernity

PROGRAMMING SELECTIVES

CNIT 10500 Introduction to C Programming	**CNIT 15501 Introduction to Software Development Concepts**
CNIT 17500 Visual Programming	MET 16400 Computing in Engineering Technology

ECET SELECTIVES
Select one two-course sequence from the table below.

ECET 22400 Electronic Systems	AND	**ECET 30201 Introduction to Industrial Controls (P: ECET 17700 or ECET 22400)**
ECET 22400 Electronic Systems	AND	ECET 38501 (formerly ECET 38500) Intro to Automotive Electronics (P: ECET 22400 or 22700)
ECET 22400 Electronic Systems	AND	**ECET 27700 AC and Power Electronics (P: ECET 17700 or ECET 22400)**
ECET 17700 DAQ & Systems Control (P: ENGT 18000 & 18100)	AND	**ECET 17900 Intro to Digital Systems (P: ENGT 18000, ENGT 18100 & CNIT 10500)**

COMPUTER-AIDED DESIGN SELECTIVES
CGT 22600 Introduction to Constraint-based Modeling
MET 10200 Production Design and Specifications

TECHNICAL /MANAGEMENT SELECTIVES
Any Management (MGMT) course at the 200-level or higher
TECH 32000 Technology and the Organization
TLI 15200 Business Principles in Org Leadership
TLI 21300 Project Management
IET 21400 Intro to Supply Chain Systems
TLI 25300 Principles of Technology Strategy
TLI 25400 Leading Change in Technology Organizations
TLI 31400 Leading Innovation in Org
IET 43530 Operations Plan & MGMT (P: Math/Stat selective)
IET 41400 Financial Analysis for Tech (P: TLI 33400 or IT 45000 min 'C' or MGMT 20010 min 'C')
Approved Study Abroad

GLOBAL/PROFESSIONAL SELECTIVES
ECET 38001 Global/Professional Issues in Electrical Engineering Technology
TECH 33000 Technology and the Global Society
TLI 35600 Global Technology Leadership
Approved Study Abroad

ADVANCED ORAL COMMUNICATION SELECTIVE
COM 32000 Small Group Communications
COM 30300 Intercultural Communication OR COM 31400 Adv. Presentational Speaking

TECHNICAL 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 (P: CGT 22600)
CGT 32600 Graphics Standards for Product Definition (P: CGT 22600)
ECET 30201 Introduction to Industrial Controls (P: ECET 17700 or ECET 22400)
ECET 32100 Introduction to Nanotechnology (P: ECET 22700)
ECET 32700 Instrumentation and DAQ Design (P: Physics I and MA 16010)
ECET 38501 Intro to Automotive Electronics (P: ECET 27700 or ECET 22400) or ECET 38502 Intro to Automotive Electronics Lab
TLI 23500 Introduction to Lean and Sustainable Systems

TLI 31400 Leading Innovation in Organizations
TLI 31500 New Product Development (P: TLI 11200) or TECH 22000 Design Technology For People
IET 33520 Human Factors for Technology Systems
IET 33400 Economic Factors for Technology Systems (P: MA 15800 or STAT 30100 or Math-K 310) or IT 45000 Prod Cost Analysis
IET 33610 Risk Analysis & Assessment or IT 38500 Industrial Ergonomics
IET 33620 Total Production Maintenance (P: TLI 31600 or IT 34200 or STAT 301, & Physics I) or IT 38100 Total Productive Main
IET 41400 Financial Analysis for Tech Systems (P:TLI 33400 or IT 45000 or MGMT 20010) or IT 43200 Financial Transaction Distrib
IET 43530 Operations Planning and Management (P: MA 15800) or IT 44200 Production Planning
IET 43540 Facilities Planning (P: MET 14300 or 14400, and TLI 43530) or IT 48300 Facilities Design Lean Manufacturing
IET 43640 Lean Six Sigma (P:TLI 31600 or IT 34200) or IT 44600 Six Sigma Quality
TLI 45700 Technology Policy & Law
MET 30200 CAD in the Enterprise (P: MET 10200 and MET 24500)
MET 32000 Applied Thermodynamics (P: MET 22000 and MA 16010)
MET 38200 Controls & Instrumentation (P: MET 28400 and MA 16010)
MET 34600 Adv. Materials in Manufacturing (P: MET 24500, CHM 11100, and MET 21100)
MET 42100 Air Conditioning & Refrigeration (P: MET 32000 or MET 33000)
MET 43200 Hydraulic Motion Control (P: MET 23000 or MET 33000)
MET 43600 Pneumatic Motion Control (P: MET 23000 or MET 33000)
MET 45100 Manufacturing Quality Control (P: STAT 30100 or Math-K 310)
MFET 30000 Applications of Automation in Manufacturing (P: MET 24500 and ECET 22400)
MFET 34400 Automated Manufacturing Processes (P: MET 24500)
MFET 34800 Advanced Industrial Robotics (P: MFET 24800 and ECET 33700)
MFET 37400 Manufacturing Integration I (P: MET 28400)

HUMANITIES FOUNDATION SELECTIVE
See approved UCC Humanities list at: http://www.purdue.edu/provost/initiatives/curriculum/course.html

HUMANITIES/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)

LAB SCIENCE SELECTIVES
See approved UCC Science list: http://www.purdue.edu/provost/initiatives/curriculum/course.html

FREE ELECTIVES
Any non-remedial course offered for credit at the University not already required/being used on the Plan of Study.

SENIOR PROJECT CAPSTONE SELECTIVES
Select one two-course sequence from the table below.

Senior Capstone Project Selective I		Senior Capstone Project Selective II
ECET 43000 – Product/Project Management (Prerequisite: ECET 38001 & 9-12 cr. hrs. of coursework in technical focus area)	And	**ECET 46000 – Project Design & Development**
MET 40100 – Capstone Projects I (Prerequisites: MET 10200, MET 23000, MET 28400, MET 346000)	And	MET40200 – Capstone Projects II
MFET 48000 – Project Plan Integration (P: MFET 37400)		MFET 48100 Integration Manufacturing Systems (PL MFET 48000)
ECET 43000 –Product/Project Management (Prerequisite: ECET 38001 and 9-12 cr. hrs. of coursework in technical focus area)	And	MET 40200 – Capstone Projects II
ENGT 40500 – Entrepreneurial Capstone I (for entrepreneurial minor senior students only)	And	ENGT 40600 – Entrepreneurial Capstone II (for entrepreneurial minor senior students only)
ECET 43100 – International Capstone Plan	And	ECET 46100 International Capstone Project Execution
TECH 39900 Special Topics in Technology III	And	TECH 49900 Special Topics in Technology IV