

Technology Leadership & Innovation Core (27 credits)

- _____ (3) TLI 11100 Introduction to Manufacturing and Supply Chain Systems *or IT 10400*
- _____ (3) TLI 11200 Foundations of Organizational Leadership *or OLS 25200*
- _____ (3) TLI 21300 Project Management *or TECH 32000*
- _____ (3) TLI 21400 Introduction to Supply Chain Management Technology *or IT 23000*
- _____ (3) TLI 31300 Technology Innovation & Integration: Bar Codes to Biometrics *or IT 34500*
- _____ (3) TLI 31400 Leading Innovation in Organizations
- _____ (3) TLI 31500 New Product Development *or TLI 36700 Design & Innovation I*
- _____ (3) TLI 31600 Statistical Quality Control *or IT 34200*
- _____ (3) TLI 41400 Financial Analysis for Technology Systems *or IT 43200*

Industrial Engineering Technology (39 credits)

- _____ (3) TLI 23500 Introduction to Lean & Sustainable System *or IT 21400*
- _____ (3) TLI 33400 Economic Analysis for Technology System *or IT 45000*
- _____ (3) TLI 33520 Human Factors for Technology System *or IT 28100/IT 35100*
- _____ (3) TLI 33620 Total Productive Maintenance *or IT 38100*
- _____ (3) TLI 43530 Operations Planning & Management *or IT 44200*
- _____ (3) TLI 43640 Lean Six Sigma *or IT 44600*
- _____ (3) TLI 45700 Technology Policy & Law *or OLS 34600*
- _____ (3) MET 14300 Materials & Processes I *or MET 14400 Materials & Processes II*
- _____ (3) MET 24500 Manufacturing Systems
- _____ (3) CGT 11000 Technical Graphics Communication
- _____ (3) TLI 48390 IET Capstone I
- _____ (3) TLI 48395 IET Capstone II
- _____ (3) TLI Selective⁸ (See Supplemental Information)
- _____ (0) Internship Experience¹⁰
- _____ (0) Globalization Experience¹¹

Foundational Course Requirements (25 credits)

- _____ (3) MA 15555 Quantitative Reasoning *or* **MA 15800 Precalculus** *or* ***(MATH 15300 + MATH 15400)** (satisfies Quantitative Reasoning for core)
- _____ (4) ***PHYS 21800 General Physics** *or* PHYS 22000 (satisfies Science for core) (See Supplemental Information)
- _____ (3) TECH 12000 Design Thinking in Technology (satisfies Information Literacy and Science, Technology, Society for core)
- _____ (3) Behavioral/Social Science (satisfies Human Cultures Behavioral/Social Science for core)
- _____ (3) Humanities Selective¹ (satisfies Human Cultures Humanities for core) (See Supplemental Information)
- _____ (3) Science Selective² (satisfies Science for core) (See Supplemental Information)
- _____ (3) Communication Selective³ **COM 11400 Fundamental of Speech Communication** (satisfies Oral Communication for core)
- _____ (3) Written Communication Selective⁴ ***(ENG W131)** (satisfies Written Communication for core) (See Supplemental Information)

General Education (12 credits)

- _____ (3) ECON 21000 Principles of Economics *or* AGEC 21700 *or* ECON 25100 *or* ECON 25200 ***(ECON E201 or ECON E202)**
- _____ (3) Mathematics/Statistics Selective⁵ (See Supplemental Information)
- _____ (3) History of Science and Technology Selective⁶ (See Supplemental Information)
- _____ (3) Advanced Communication Selective⁷ (See Supplemental Information)

Technical Electives⁹ (8 credits) and Free Electives¹⁰ (9 credits)

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|------------------|------------------|----------------------|
| _____ (FE) _____ | _____ (FE) _____ | _____ (FE) _____ |
| _____ (TE) _____ | _____ (TE) _____ | _____ (TE 2cr) _____ |

University Core Requirements (<http://www.purdue.edu/provost/initiatives/curriculum/course.html>)

Human Cultures Humanities	<input type="checkbox"/>	_____	Science, Technology & Society Selective	<input type="checkbox"/>	TECH 12000
Human Cultures Behavioral/Social Science	<input type="checkbox"/>	_____	Written Communication	<input type="checkbox"/>	ENG W131
Information Literacy	<input type="checkbox"/>	TECH 12000	Oral Communication	<input type="checkbox"/>	COM 11400
Science Selective	<input type="checkbox"/>	PHYS 21800	Quantitative Reasoning	<input type="checkbox"/>	MA 15800
Science Selective	<input type="checkbox"/>	_____			

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

***Bold** denotes Columbus location course offering

For Catalog Terms beginning in **Fall 2018**
Major Code: TIET Program Code: PI-TLI-IET-BS

Fall 1 st Year	CR	GR	Fulfilled by	Spring 1 st Year	CR	GR	Fulfilled by
TLI 11100 Intro to Manufacturing & Supply Chain Systems	3			TLI 11200 Foundation of Org Leadership	3		
MA 15555 Quantitative Reasoning or MA 15800 Precalculus* or MATH 15300 + MATH 15400	3			Mathematics/Statistics Selective ⁵	3		
TECH 12000 Design Thinking in Tech*	3			Humanities Selective* ¹	3		
Oral Communication Selective * ³ COM 11400 Fund of Speech Comm	3			MET 14300 or MET 14400 Materials & Process I or II	3		
CGT 11000 Technical Graphic Comm	3			Written Communication Selective* ⁴ ENG W131 Reading, Writing, & Inquiry I	3		
TOTAL CREDIT HOURS	15			TOTAL CREDIT HOURS	15		

Fall 2 nd Year	CR	GR	Fulfilled by	Spring 2 nd Year	CR	GR	Fulfilled by
Free Elective ¹⁰	3			Science Selective* ²	3		
TLI 21400 Intro to Supply Chain	3			TLI 31600 Statistical Quality Control Pre-req: Math/Stat Selective	3		
TLI 23500 Intro to Lean & Sustainable Systems	3			Behavioral/Social Science Selective* ¹	3		
PHYS 21800 General Physics I	4			TLI 21300 Project Management	3		
TLI 33520 Human Factor for Tech Systems	3			History of Science & Tech Selective ⁶	3		
TOTAL CREDIT HOURS	16			TOTAL CREDIT HOURS	15		

Fall 3 rd Year	CR	GR	Fulfilled by	Spring 3 rd Year	CR	GR	Fulfilled by
TLI 31400 Leading Innovation in Org	3			TLI 31500 Innovative Product Dev & Test or TLI 36700 Design & Innovation I Pre-Req: TLI 11200 or TLI 31500	3		
MET 24500 Manufacturing Systems Pre-req: MET 143 or MET 144 and CGT 11000	3			TLI 33620 Total Productive Maintenance Pre-req: PHYS 218 & TLI 316 or STAT 301	3		
TLI 33400 Economic Analysis for Tech Systems Pre-Req: Math/Stat Selective	3			TLI 43530 Operations Plan & MGMT Pre-req: Math/Stat Selective	3		
TLI 31300 Tech Innovations: Biometrics	3			TLI 43640 Lean Six Sigma Pre-req: TLI 31600	3		
TLI Selective ⁸	3			Technical Elective ⁹	3		
TOTAL CREDIT HOURS	15			TOTAL CREDIT HOURS	15		

Fall 4 th Year	CR	GR	Fulfilled by	Spring 4 th Year	CR	GR	Fulfilled by
TLI 41400 Financial Analysis for Tech Systems Pre-req: TLI 33400 min 'C' or MGMT 20010 min 'C'	3			TLI 48395 IET Capstone II Pre-req: TLI 48390 min 'C'	3		
TLI 45700 Technology Policy & Law	3			Technical Elective ⁹	3		
Advanced Communication Selective ⁷	3			Technical Elective ⁹	2		
Free Elective ¹⁰	3			Free Elective ¹⁰	3		
TLI 48390 IET Capstone I Pre-req: MET 24500 and TLI 43530	3			ECON 21000 Principles of Economics ECON E201 or ECON E202	3		
Internship Experience ¹¹	0			Globalization Experience ¹²	0		
TOTAL CREDIT HOURS	15			TOTAL CREDIT HOURS	14		

*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).
- 5) Bold denotes Columbus location course offering.

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

2018 IET Supplemental Information

All prerequisites must be met

Bold Indicates courses offered at Columbus location.
***Indicates** IUPUC course for Columbus location only.
See Student Services Coordinator for course availability.

¹Behavioral/Social Science and Humanities Selectives (3 credits each)

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

²Science Selective (3 credits)

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

³Oral Communication Selective

COM 11400 Fundamentals of Speech Comm	SCLA 10200 Transformative Texts, Critical Thinking & Communication II: Modern World	*COMM R110 Fund. Speech Comm
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⁴Written Communication Selective (minimum 3 credits)

ENGL 10600 First-Year Composition	SCLA 10100 Transformative Texts, Critical Thinking & Comm I: Antiquity To Modernity	*ENG W131 Reading, Writing, & Inquiry I
ENGL 10800 Accelerated First-Year Composition		ENGL 10100 English Composition I

⁵Mathematics/Statistics Selective (3 credits)

MA 16010 Applied Calculus I	MA 16200 Plane Analytic Geometry & Calculus II	STAT 22500 Intro Probability Models
MA 16020 Applied Calculus II	*MA 16500 Analytic Geometry & Calculus I	STAT 30100 Elementary Statistics Methods
MA 16100 Plane Analytic Geometry & Calculus I	*MA 16600 Analytic Geometry & Calculus II	<i>(recommended)</i>

⁶History of Science and Technology Selective (3 credits)

*HIST H106 American History II (IUPUC)		
HIST 15200 US Since 1877	HIST 33000 History Of The Brit Empire & Commonwealth, 1783 To 1960	HIST 38400 History Of Aviation
HIST 30305 Kitchens Cooking & Food Mod Amer	HIST 33400 Sci & Society In West Civ II	HIST 38700 History Of The Space Age
HIST 31405 Tech & Gender In American History	HIST 35000 Sci & Society In 20 th Century World	HIST 49400 Science & Society American Civ
HIST 31505 American Beauty	HIST 38001 History Of United States Agriculture	POL 42900 Contemporary Political Problems
		TLI 29900 Technology & Culture through History

⁷Advanced Communication Selective (3 credits)

COM 31400 Advanced Presentational Speaking	COM 43500 Comm And Emerging Technologies	ENGL 30400 Advanced Composition
COM 31500 Speech Comm Of Tech Information	*COMM R321 Persuasion	ENGL 30600 Intro To Professional Writing
COM 31800 Principles Of Persuasion	*COMM C322 Advanced Interpersonal Communication	ENGL 41900 Multimedia Writing
COM 32000 Small Group Communication	*COMM C325 Interviewing Principles & Practices	ENGL 42000 Business Writing
COM 32400 Introduction To Org Communication	*COMM 380 Organization Communication	ENGL 42100 Technical Writing
COM 32500 Interviewing: Principles And Practice		ENGL 42400 Writing For High Tech Industries
COM 41500 Discussion Of Technical Problems		*ENG W231 Professional Writing Skills

⁸TLI Selective (3 Credits)

Any TLI course not already required	ENR 20000 Intro to Entrepreneurship and Innovation	ENR 31000 Marketing and Management for New Ventures
		ENR 48000 Entrepreneurship Capstone

<u>⁹Technical Elective (8 credits)</u>
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Any non-required Purdue Polytechnic or Engineering (ENGR) course not already required on the plan of study

<u>¹⁰Free Electives (9 credits)</u>

Any non-remedial course offered for credit at the University not already required/being used on the plan of study

11 Internship Experience (0 credits)

Students will complete the IET Internship Experience Badge in one of the following ways:

- Complete an IET-related internship (min 160 hours)
- Complete an industry cooperative experience
- Employment during the academic year related to IET
- Complete an industry-based, undergraduate research experience
- Student-proposed alternative: must be commensurate with the expectations of the IET internship experience

12 Intercultural Requirement (0 credits)

<i>Polytechnic minimum global requirement</i>	
Step 1:	_____ Complete the Pre-test Intercultural Development Inventory Assessments (1 st year)
Step 2	_____ Complete one (1) of the following global experiences:* <ul style="list-style-type: none">○ Participate in a Purdue University international capstone, collaborative project, or○ Participate in an international internship (international location), or○ Participate in Faculty-led Study Abroad program, or○ Participate in a full semester abroad program, or○ Complete 3 credit hours from the Polytechnic list of recommended Global/ Cultural courses.
Step 3:	_____ Complete the Post-test Intercultural Development Inventory Assessments (4 th year)
NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to complete their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pre-test). * Global experiences must take place during the time of enrollment in the Polytechnic to complete Step 2. Experiences that have taken place prior to a student's initial enrollment will not serve to complete Step 2. Intercultural competencies gained on experiences prior to Polytechnic enrollment will be captured as baseline data on a student's IDI.	

Visit purdue.edu/Columbus > Graduation Requirements for Polytechnic list of recommended Global/Cultural courses.