

Technology Leadership & Innovation Core (27 credits)

- _____ (3) TLI 11100 Introduction to Manufacturing and Supply Chain Systems *(or IT 10400 Industrial Organizations)*
- _____ (3) TLI 11200 Foundations of Organizational Leadership *(or OLS 25200 Human Behavior in Organizations)*
- _____ (3) TLI 21300 Project Management *(or TECH 32000 Technology & the Organization)*
- _____ (3) TLI 21400 Introduction to Supply Chain Management Technology *(or IT 23000 Industrial Supply Chain Mgmt)*
- _____ (3) TLI 31300 Technology Innovation & Integration: Bar Codes to Biometrics *(or IT 34500 Auto ID & Data Capture)*
- _____ (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 Intro to Statistical Quality)*
- _____ (3) TLI 41400 Financial Analysis for Technology Systems *(or IT 43200 Financial Transaction in Distribution)*

Industrial Engineering Technology (39 credits)

- _____ (3) TLI 23500 Introduction to Lean & Sustainable System *(or IT 21400 Intro to Lean Manufacturing)*
- _____ (3) TLI 33400 Economic Analysis for Technology System *(or IT 45000 Production Cost Analysis)*
- _____ (3) TLI 33520 Human Factors for Technology System *(or IT 28100 Industrial Safety/IT 35100 Adv. Industrial Safety)*
- _____ (3) TLI 33620 Total Productive Maintenance *(or IT 38100 Total Productive Maintenance)*
- _____ (3) TLI 43530 Operations Planning & Management *(or IT 44200 Production Planning)*
- _____ (3) TLI 43640 Lean Six Sigma *(or IT 44600 Six Sigma Quality)*
- _____ (3) TLI 45700 Technology Policy & Law *(or OLS 34600 Critical Thinking & Ethics)*
- _____ (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) ¹TLI Selective
- _____ (0) ²Internship Experience
- _____ (0) ³Globalization Experience

Foundational Course Requirements (25 credits)

- _____ (3) MA 15555 Quantitative Reasoning or **MA 15800 PreCalculus** *(satisfies Quantitative Reasoning for core)*
- _____ (4) PHYS 21800 General Physics or PHYS 22000 **(*PHYS-P 201)** *(satisfies Science for core)*
- _____ (3) TECH 12000 Design Thinking in Technology *(satisfies Science, Technology, & Society and Information Literacy for core)*
- _____ (3) ⁴Behavioral/Social Science Selective *(satisfies Human Cultures: Behavioral/Social Science for core)*
- _____ (3) ⁵Humanities Selective *(satisfies Human Cultures: Humanities for core)*
- _____ (3) ⁶Science Selective *(satisfies Science for core)*
- _____ (3) ⁷Oral Communication Selective **(*SPCH-S 121)** *(satisfies Oral Communication for core)*
- _____ (3) ⁸Written Communication Selective **(*ENG-W 131)** *(satisfies Written Communication for core)*

General Education (12 credits)

- _____ (3) ECON 21000 Principles of Economics or AGEC 21700 or ECON 25100 **(*ECON-E 103)** or ECON 25200 **(*ECON-E 104)**
- _____ (3) ⁹Mathematics/Statistics Selective
- _____ (3) ¹⁰History of Science and Technology Selective – **(TLI 29900)**
- _____ (3) ¹¹Advanced Communication Selective

¹²Technical Electives (8 credits) and ¹³Free Electives (9 credits)

_____ (TE) _____ (TE) _____ (TE 2 cr) _____
 _____ (FE) _____ (FE) _____ (FE) _____ ***Apply any excess Science cr here.**

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-W 131)
Information Literacy	<input type="checkbox"/>	TECH 12000	Oral Communication	<input type="checkbox"/>	(*SPCH-S 121)
Science Selective	<input type="checkbox"/>	PHYS 21800 (*PHYS-P 201)	Quantitative Reasoning	<input type="checkbox"/>	MA 15800
Science Selective	<input type="checkbox"/>	_____			

***Denotes Richmond Location Course Offering**

Revised 5/1/2017 (Effective Fall 2017)

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

Industrial Engineering Technology

Suggested Arrangement of Courses:

Credits	Fall 1st Year	Prerequisite	Credits	Spring 1st Year	Prerequisite
3	TLI 11100 Intro to Manufacturing & Supply Chain Systems		3	TLI 11200 Foundation of Org Leadership	
3	MA 15555 Quantitative Reasoning or MA 15800 PreCalculus*	ALEKS 60%	3	TLI 23500 Intro to Lean & Sustainable Systems	
3	TECH 12000 Design Thinking in Technology*		3	[⁵ Humanities Selective*]	
3	MET 14300 or MET 14400 Materials & Process I or II		3	*ENG-W 131 (IUE) [⁸ Written Communication Selective*]	
3	CGT 11000 Technical Graphic Communication		3	[⁴ Behavioral/Social Science Selective*]	
15			15		

Credits	Fall 2nd Year	Prerequisite	Credits	Spring 2nd Year	Prerequisite
3	TLI 21300 Project Management		3	TLI 29900 Technology & Culture through History [¹⁰ History of Science & Tech Selective]	
3	TLI 21400 Intro to Supply Chain	TLI 11100	3	[⁹ Mathematics/Statistics Selective]	
3	*SPCH-S 121 (IUE) [⁷ Oral Communication Selective*]		3	ECON 21000 Principles of Economics *ECON-E 103 (IUE) or *ECON-E 104 (IUE)	
4	PHYS 21800 General Physics I* *PHYS-P 201, 5 cr, (IUE)	MA 15800	3	[⁶ Science Selective*]	
3	MET 24500 Manufacturing Systems	MET 14300 or MET 14400, and CGT 11000	3	[¹³ Free Elective] *Apply any excess Science credits here.	
16			15		

Credits	Fall 3rd Year	Prerequisite	Credits	Spring 3rd Year	Prerequisite
3	TLI 31300 Tech Innovations: Biometrics		3	[¹² Technical Elective]	
3	TLI 31400 Leading Innovation in Org		3	TLI 31500 Innovative Product Dev & Test or TECH 22000 Designing Tech for People	TLI 11200
3	TLI 31600 Statistical Quality Control	Math/Stat selective	3	TLI 43640 Lean Six Sigma	TLI 31600
3	TLI 33400 Economic Analysis for Tech Systems	Math/Stat selective	3	TLI 33620 Total Productive Maintenance	PHYS 21800 & TLI 316000 or STAT 30100
3	TLI 33520 Human Factor for Tech Systems		3	TLI 43530 Operations Plan & MGMT	Math/Stat selective
15			15		

Credits	Fall 4th Year	Prerequisite	Credits	Spring 4th Year	Prerequisite
3	TLI 48390 IET Capstone I	MET 24500 and TLI 43530	3	TLI 48395 IET Capstone II	TLI 48390 min 'C'
3	TLI 41400 Financial Analysis for Technology Systems	TLI 33400 min 'C' or MGMT 20010 min 'C'	3	[¹ TLI Selective]	
3	TLI 45700 Technology Policy & Law		3	[¹² Technical Elective]	
3	[¹³ Free Elective]		2	[¹² Technical Elective]	
3	[¹³ Free Elective]		3	[¹¹ Advanced Communication Selective]	
0	[² Internship Experience]		0	[³ Globalization Experience]	
15			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 the Purdue Location conferring the degree.
- 4) ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, I AND IF).

See next page for all supplemental information.

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

IET Supplemental Information

All prerequisites must be met

Bold indicates courses offered at Richmond Location.

See Student Services Coordinator for course availability.

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

¹TLI SELECTIVE: (3 Credits)

Any TLI course not already required.

ENTR 20000 Intro to Entrepreneurship and Innovation

ENTR 31000 Marketing & Mgmt for New Ventures

ENTR 48000 Entrepreneurship Capstone

²INTERNSHIP 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

³GLOBALIZATION EXPERIENCE: (0 credits)

Minimum requirements:

1. Complete Intercultural Development Inventory (IDI) Pre and Post Tests
2. Complete Beliefs, Events, and Values Inventory (BEVI) Pre and Post Tests
3. Complete an Intercultural Knowledge and Effectiveness (IKE) component
4. Complete TLI-Approved Global Course, Faculty-Led Study Abroad, International Internship, or International Capstone/Collaborative Project

TLI-Approved Global Courses:

Applies to any student	For students who are not within the demographic of the course
ANSC 381 Leadership for a Diverse workplace ANTH 20500 Human cultural Diversity *ANTH-A 104, *ANTH-E 300 ANTH 21200 Culture, Food and Health ANTH 23000 Gender Across Cultures ANTH 34000 Global Perspectives on Health AT 22300 Human Factors for Flight Crews CGT 17208 Human Centered Design & Development Studio COM 22400 Communicating in the Global Workplace COM 32000 Small Group Communication COM 41200 Theories of Human interaction ECET 38001 Global Professional Issues in ET ENGL 41400 Literature & Culture EDPS 31600 Collaborative Leadership: Cross-cultural Stgs HIST 19500: Historical Research & Film! HIST 33805 History of Human Rights HTM 37000 Sustainable Tourism and Responsible Travel HTM 37200: Global Tourism Geography PHIL 43500 Philosophy of Mind POL 23500 Rich and Poor Nations POL 42900 Variable Title: It's a Complex World SOC 10000 Intro to Sociology *SOC-S 100 SOC 33900 Introduction to Sociology of Developing Nations TECH 33000 Technology and the Global Society WGSS 38000 Gender and Multiculturalism	AAS 27100 Intro to African American Studies ANTH 37900 Native American Cultures *ANTH-E 320 ASAM 24000 Intro to Asian American Studies ARAB 28000 Arabic culture COM 38000 Sociolinguistic Study of African American English HDFS 28000 Diversity in Individual and Family Life HIST 36600 Hispanic Heritage of the USA HIST 37600 History of Indiana HIST 37700 History & Culture of Native America HIST 46900 Black Civil Rights Movement HIST 47900 Amer. Represent. of Middle East & North Africa HIST 49900 History of Sexual Regulation in the United States POL 22200 Women, Politics & Public Policy *POLS-Y 324 POL 32600 Black Political Participation in America *POLS-Y 206 POL 36000 Women and the Law SOC 31000 Racial and Ethnic Diversity *SOC-S 335 WGSS 28200 Intro to LGBT Studies WGSS 38300 Women and Work

⁴BEHAVIORAL/SOCIAL SCIENCE AND HUMANITIES SELECTIVE: (3 credits)

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

***ANTH-A 104, *ANTH-E 320**
***ECON-E 103, *ECON-E 104**
***ENG-G 205**

***POLS-Y 103, *POLS-Y 109, *POLS-Y 324**
***PSY-P 103, *PSY-P 216**

***SOC-S 100**
***SPCH-S 122**

IET Supplemental Information

All prerequisites must be met

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

5HUMAN CULTURES: HUMANITIES CORE: (3 credits)

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

***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**

6SCIENCE SELECTIVE: (3 credits)

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

***BIOL-L 101 + *BIOL-L 102**

***CHEM-C 105 + *CHEM-C 125**

***CHEM-C 106 + *CHEM-C 126**

***PHYS-P 202**

7ORAL COMMUNICATION SELECTIVE: (3 credits)

COM 11400 Fundamentals of Speech Comm.

***SPCH-S 121**

SCLA 10200 Transform Texts, Critical Thinking & Comm II: Modern World

8WRITTEN COMMUNICATION SELECTIVE: (3 credits)

ENGL 10600 First-Year Composition

***ENG-W 131**

ENGL 10800 Accelerated First-Year Composition

SCLA 10100 Trans Texts, Critical Thinking & Comm I: Antiquity to Modernity

9MATHEMATICS/STATISTICS SELECTIVE: (3 credits)

MA 16010 Applied Calculus I

MA 16100 Plane Analytic Geometry & Calculus I

***MATH-M 215**

MA 16200 Plane Analytic Geometry & Calculus II

***MATH-M 216**

MA 16500 Analytic Geometry & Calculus I

MA 16600 Analytic Geometry & Calculus II

STAT 22500 Intro Probability Models

STAT 22500 Intro Probability Models

STAT 30100 Elementary Statistics Methods

***MATH-K 300**

10HISTORY OF SCIENCE AND TECHNOLOGY SELECTIVE: (3 credits)

HIST 30305 Kitchens Cooking & Food Mod Amer

HIST 31405 Tech & Gender in American History

HIST 31505 American Beauty

HIST 33000 Hist of Brit Empire & Com, 1783-1960

HIST 33400 Sci & Society in West Civ II

HIST 35000 Sci & Society In 20th Century World

HIST 38001 History of United States Agriculture

HIST 38400 History of Aviation

HIST 38700 History of The Space Age

HIST 49400 Science & Society American Civ

POL 42900 Contemporary Political Problems

TLI 29900 Tech & Culture through History

11ADVANCED COMMUNICATION SELECTIVE: (3 credits)

COM 31400 Advanced Presentational Speaking

COM 31500 Speech Comm of Tech Information

COM 31800 Principles of Persuasion

COM 32000 Small Group Communication

COM 32400 Introduction to Org Communication

COM 32500 Interviewing: Principles & Practice

COM 41500 Discussion of Technical Problems

COM 43500 Comm & Emerging Technologies

ENGL 30400 Advanced Composition

***ENG-W 350**

ENGL 30600 Intro to Professional Writing

ENGL 41900 Multimedia Writing

ENGL 42000 Business Writing

ENGL 42100 Technical Writing

ENGL 42400 Writing for High Tech Industries

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

12TECHNICAL ELECTIVE: (8 credits)

Any non-required **Purdue Polytechnic** or Engineering (ENGR or EPCS) course not already required on the plan of study.

13FREE ELECTIVES: (9 credits)

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