

Departmental/Program Major Courses (66 credits)

Required Department Courses (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 Teaching Design and 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)*

Required Major Courses (39 credits)

- _____ (3) CGT 11000 Technical Graphics Communication
- _____ (3) MET 14300 Materials & Processes I or MET 14400 Materials & Processes II
- _____ (3) MET 24500 Manufacturing Systems
- _____ (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) TLI 48390 IET Capstone I
- _____ (3) TLI 48395 IET Capstone II
- _____ (3) ¹TLI Selective

Other Major Requirements (0 credits)

- _____ (0) ²Internship Experience
- _____ (0) ³Globalization Experience

Other Departmental Requirements (37 credits)

Other Departmental Courses (13 credits)

- _____ (3) ECON 21000 Principles of Economics or AGECE 21700 or ECON 25100 *(*ECON-E 103)* or ECON 25200 *(*ECON-E 104)*
- _____ (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)*

Selectives (24 credits)

- _____ (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)*
- _____ (3) ⁹Mathematics/Statistics Selective
- _____ (3) ¹⁰History of Science and Technology Selective **(TLI 29900 Technology & Culture through History)**
- _____ (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 5/8/2018 (Effective Fall 2018)

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 Materials & Process I or MET 14400 Materials & Process II		3	*ENG-W 131 (IUE) [⁸ Written Communication Selective*]	
3	CGT 11000 Technical Graphics 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 New Product Development or TLI 36700 Teaching Design & Innovation I	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.
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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)

<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 Steps 1 & 3 (taking the IDI Pre & Post-tests) but must complete one option from Step 2. * 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.

TLI-Approved Global Courses:

***ANTH-A 104**

***FREN-F 200**

***POLS-Y 324**

***SOC-S 335**

***ANTH-E 300**

***FREN-F 250**

***PSY-P 103**

***SPAN-S 200**

***ANTH-E 320**

***POLS-Y 206**

***SOC-S 100**

***SPAN-S 250**

AAS	27100	Intro to African American Studies		ANTH	21200	Culture, Food and Health
AAS	37300	Issues in African American Studies		ANTH	23000	Gender Across Cultures
AGR	20100	Communicating Across Culture		ANTH	34000	Global Perspectives on Health
ANSC	38100	Leadership for a Diverse Workplace		ANTH	34100	Culture and Personality
ANTH	20300	Bio. Bases of Human Soc. Behavior		ANTH	37900	Native American Cultures
ANTH	20500	Human Cultural Diversity		ARAB	28000	Arabic Culture
ANTH	21000	Technology and Culture		ASAM	24000	Intro to Asian American Studies

IET Supplemental Information

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TLI-Approved Global Courses Continued:

AT	23300	Ethics and Aviation		HIST	49900	History of Sexual Reg. in the US
CNIT	32000	Policy, Reg, & Globalization in IT		HTM	37000	Sustainable Tourism & Resp. Travel
COM	22400	Comm. in the Global Workplace		HTM	37200	Global Tourism Geography
COM	30300	Intercultural Communication		MSL	20100	Individual Leadership Studies
COM	32000	Small Group Communication		OLS	35000	Creativity in Business & Industry
COM	37300	Self-Presentation and Social Image		PHIL	11400	Global Moral Issues
COM	38000	Soc. Study of African Amer. English		PHIL	43500	Philosophy of Mind
COM	41200	Theories of Human Interaction		POL	22200	Women, Politics, and Public Policy
COM	42300	Leadership, Communication & Orgs		POL	23500	Intl. Rels Among Rich & Poor Nats
ECET	29000	International Experience		POL	32600	Black Political Part. in America
ECET	38001	Global Professional Issues in ENGT		POL	32700	Global Green Politics
EDPS	23500	Learning and Motivation		POL	36000	Women and the Law
EDPS	30000	Student Leadership Development		POL	41300	The Human Basis of Politics
EDPS	30100	Peer Counseling Training		POL	42300	International Environmental Policy
EDPS	31500	Collab. Ldrship: Interpersonal Skills		POL	42900	Contemporary Political Problems
EDPS	31600	Collab. Ldrship: Cross-Cult. Settings		POL	43300	International Organization
EDPS	31700	Collab. Leadership: Mentoring		PSY	12000	Elementary Psychology
ENGL	41400	Studies in Literature and Culture		PSY	25000	Psychology of Adjustment
HDFS	23300	Stress & Human Health		PSY	25100	Health Psychology
HDFS	28000	Diversity in Individual & Family Life		PSY	32200	Neurosci. of Motivated Behavior
HDFS	33200	Stress & Coping in Contemp. Fam.		SOC	10000	Introductory Sociology
HEBR	38500	Holocaust in Mod. Hebrew Lit.		SOC	31000	Racial and Ethnic Diversity
HIST	19500	Historian's Craft: Hist. Rsrch. & Film		SOC	33900	Intro to Soc. of Developing Nations
HIST	30000	Eve of Des: Glob Cris Wrld Org 20th Cen		TECH	33000	Technology and the Global Society
HIST	33805	History of Human Rights		TLI	11200	Foundations of Org. Leadership
HIST	35000	Sci. & Soc. in 20th Century World		TLI	31400	Leading Innovation in Orgs.
HIST	36600	Hispanic Heritage of the US		WGSS	28200	Intro to LGBT Studies
HIST	37700	Hist. & Culture of Native America		WGSS	38000	Gender and Multiculturalism
HIST	46900	Black Civil Rights Movement		WGSS	38300	Women and Work
HIST	47900	Amer. Reps of Mid. East & N. Africa				

Any foreign language course 20100, 20200, 30100, 30200, 40100, 40200.

Any Purdue-approved Study Abroad (SA) that includes reflective learning assignments.

POLYTECHNIC STATEWIDE- ADDITIONAL GLOBALIZATION SELECTIVE COURSES THAT ARE PROVIDED BY THE HOST LOCATION OR OFFERED SPECIFICALLY AT STATEWIDE LOCATION.

***RICHMOND – OFFERED THROUGH IU EAST**

INTERNATIONAL STUDIES COURSES		*ANTH-E310	Cultures of Africa
*INTL-I220	Global Connections	*CMCL-C205	Intro to Communication and Culture
CULTURAL SYSTEMS COURSES		*CMCL-C380	Nonverbal Communication
*ANTH-E200	Social and Cultural Anthropology	*CMCL-C427	Cross-Cultural Communication

IET Supplemental Information

All prerequisites must be met

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***RICHMOND – OFFERED THROUGH IU EAST CONTINUED:**

CULTURAL SYSTEMS COURSES CONTINUED		HISTORICAL PERSPECTIVES	
*CMCL-C450	Gender and Communication	*HIST-A380	The Vietnam War
*GEOG-G110	Introduction to Human Geography	*HIST-B244	The Viking Age
*REL-R152	Jews, Christians, and Muslims	*HIST-B306	European Race, Gender, and Identity
*REL-R153	Religions of Asia	*HIST-B356	French Revolution
*REL-R160	Religion in America	*HIST-B408	European Nationalism and Identity
*REL-R171	Religion, Ethics, and Public Life	*HIST-B418	Germany: Nation and Volk
*PHIL-P200	Problems of Philosophy	*HIST-B436	Making Modern Britain
*PHIL-P371	Philosophy of Religion	*HIST-B444	The Scandinavian Model
*PHIL-P393	Biomedical Ethics	*HIST-D410	Russian Rev. and the Soviet Regime
*SOC-S217	Social Inequality	*HIST-H108	Perspectives on the World to 1800
*SOC-S313	Religion and Society	*HIST-H109	Perspectives on the World since 1800
*SPAN-S284	Women in Hispanic Culture	*HIST-H205	Ancient Civilization
CULTURAL PRODUCTIONS COURSES		*HIST-H219	Origins & Hist of the 2nd World War
*CLAS-C205	Classical Mythology	*HIST-H232	The World in the Twentieth Century
*ENG-L225	Intro. to World Masterpieces	*HIST-F341	Latin America: Conquest and Empire
*ENG-L382	Fiction of the Non-Western World		
*FINA-A101	Ancient and Medieval Art		
*FINA-A102	Renaissance through Modern Art		
*FINA-A342	Twentieth-Century Art		

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**

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

IET Supplemental Information

All prerequisites must be met

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See Student Services Coordinator for course availability.

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.