

Technology Leadership & Innovation Core (27 credits)

120 Credits for graduation

- _____ (3) TLI 11100 Gateway to Technology Leadership and Innovation (or IT 10400 Industrial Organization)
- _____ (3) TLI 11200 Foundations of Organizational Leadership (or OLS 25200 Human Behaviors in Organizations)
- _____ (3) TLI 21300 Project Management (or TECH 32000 Technology and the Organization)
- _____ (3) TLI 21400 Introduction to Supply Chain Management Technology (or IT 23000 Industrial Supply Chain Management)
- _____ (3) TLI 31300 Technology Innovation & Integration: Bar Codes to Biometrics (or IT 34500 Auto Identification & Data Capstone)
- _____ (3) TLI 31400 Leading Innovation in Organizations
- _____ (3) TLI 31500 Innovative Product Development and Testing
- _____ (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 Core (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/IT 35100 Industrial Safety)
- _____ (3) TLI 33610 Risk Analysis and Assessment (or IT 38500 Industrial Ergonomics)
- _____ (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 43540 Facilities Planning (or IT 48300 Facility Design for Lean Manufacturing)
- _____ (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) TLI Selective⁷ (See Supplemental Information)
- _____ (3) TLI Selective⁷ (See Supplemental Information)
- _____ (3) Capstone Selective¹⁰ (See Supplemental Information)
- _____ (0) Globalization Portfolio¹¹

Foundational Course Requirements (25 credits)

- _____ (3) COM 11400 Fundamentals of Speech Communication (*SPCH-S 121) (satisfies Oral Communication for core)
- _____ (3) MA 15800 PreCalculus (satisfies Quantitative Reasoning for core)
- _____ (3) PSY 12000 Elementary Psychology (*PSY-P 103) or SOC 10000 Introductory Sociology (*SOC-S 100) (satisfies Human Cultures Behavioral/Social Science for core)
- _____ (3) TECH 12000 Design Thinking in Technology (satisfies Science, Technology & Society and Information Literacy for core)
- _____ (3) Humanities Selective¹ (satisfies Human Cultures Humanities for core) (See Supplemental Information)
- _____ (3) Science Selective² (satisfies Science for core) (See Supplemental Information)
- _____ (4) PHYS 21800 General Physics or PHYS 22000 General Physics (*PHYS-P 201, 5 cr.) (satisfies Science for core) (See Supplemental Information)
- _____ (3) Written Communication Selective³ (*ENG-W 131) (satisfies Written Communication for core) (See Supplemental Information)

General Education (12 credits)

- _____ (3) ECON 21000 Principles of Economics or AGEC 21700 Economics or ECON 25100 Microeconomics (*ECON-E 103) or ECON 25200 Macroeconomics (*ECON-E 104)
- _____ (3) Mathematics/Statistics Selective⁴ (See Supplemental Information)
- _____ (3) History of Science and Technology Selective⁵ (See Supplemental Information)
- _____ (3) Advanced Communication Selective⁶ (See Supplemental Information)

Technical Elective⁸ (9credits) and Free Electives⁹ (8 credits) (See Supplemental Information)

- _____ (FE) _____ (FE) _____ (FE) _____
- _____ (TE) _____ (TE) _____ (TE) _____

***Denotes Richmond Campus Course Offering**

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

Human Cultures Humanities	<input type="checkbox"/>	PSY 12000/SOC 10000	Science, Technology & Society Selective	<input type="checkbox"/>	TECH 12000
Human Cultures Behavioral/Social Science	<input type="checkbox"/>	(*PSY-P 103/*SOC-S 100)	Written Communication	<input type="checkbox"/>	ENGL 10600/10800
Information Literacy	<input type="checkbox"/>	TECH 12000	Oral Communication	<input type="checkbox"/>	COM 11400 (*SPCH-S 121)
Science Selective	<input type="checkbox"/>	PHYS 21800 (*PHYS-P 201)	Quantitative Reasoning	<input type="checkbox"/>	MA 15800/15300
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

Industrial Engineering Technology

Suggested Arrangement of Courses:

Credits	Fall 1st Year	Prerequisite	Credits	Spring 1st Year	Prerequisite
3	TLI 11100 Gateway to TLI		3	TLI 11200 Foundation of Org Leadership	
3	MA 15800*		3	Mathematics/Statistics Selective ⁴	
3	TECH 12000*		3	Written Communication Selective* ³ *ENG-W 131 (IUE)	
3	COM 11400* SPCH-S 121 (IUE)		3	MET 14300 or MET 14400	
3	Humanities Selective* ¹		3	ECON 21000 *ECON-E 103 (IUE) or *ECON-E 104 (IUE)	
15			15		

Credits	Fall 2nd Year	Prerequisite	Credits	Spring 2nd Year	Prerequisite
4	PHYS 21800* *PHYS-P 201 (IUE, 5 cr.)		3	PSY 12000 or SOC 10000* *PSY-P 103 (IUE) or *SOC-S 100 (IUE)	
3	TLI 21400 Intro to Supply Chain		3	Technical Elective ⁹	
3	TLI 21300 Project Management		3	History of Science & Tech Selective ⁵	
3	TLI 23500 Intro to Lean & Sustainable Systems		3	TLI Selective ⁷	
3	Science Selective* ²		3	TLI Selective ⁷	
16			15		

Credits	Fall 3rd Year	Prerequisite	Credits	Spring 3rd Year	Prerequisite
3	TLI 31400 Leading Innovation in Org		3	TLI 31500 Innovative Product Dev & Test	
3	TLI 31600 Statistical Quality Control	Math/Stat selective	3	TLI 33610 Risk Analysis & Assessment	TLI 31600 or STAT 30100
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 43640 Lean Six Sigma	TLI 23500 & TLI 31600
3	TLI 31300 Tech Innovations: Biometrics		3	TLI 43530 Operations Plan & MGMT	Math/Stat selective
15			15		

Credits	Fall 4th Year	Prerequisite	Credits	Spring 4th Year	Prerequisite
3	TLI 41400 Financial Analysis for Technology Systems	TLI 33400 min 'C' or MGMT 20010 min 'C'	3	Capstone Selective ¹⁰	
3	TLI 45700 Technology Policy & Law		3	Technical Elective ⁸	
3	TLI 43540 Facilities Plan & Materials Handling	MET 14300 or MET 14400 and TLI 43530	3	Technical Elective ⁸	
3	Advanced Communication Selective ⁶		3	Free Elective ⁹	
3	Free Elective ⁹		2	Free Elective ⁹	
			0	Globalization Portfolio ¹¹	
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.

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IET Supplemental Information

All prerequisites must be met

Bold indicates courses offered at Richmond Campus.

See Student Services Coordinator for course availability.

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

¹Humanities Foundational Selective (3 credits)

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

***ENGL-L 204** ***FREN-F 200, *FREN-F 250** ***SPAN-S 100, *SPAN-S 150,**
***FINA-A 101, *FINA-A 102,** ***HIST-H 105, *HIST-H 106** ***SPAN-S 200, *SPAN-S 250**
***FINA-F 100, *FINA-H 100, *FINA-S 200** ***MUS-M 174, *MUS-T 101, *MUS-Z 393** ***THTR-T 210**
***FREN-F 100, *FREN-F 150,** ***PHIL-P 100, *PHIL-P 120, *PHIL-P 140**

²Science Selective (3 credits)

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

***BIOL-L 100, *BIOL-L 101 + *BIOL-L 102** ***GEOL-G 111**
***CHEM-C 125 + *CHEM-C 105, *CHEM-C 126 + *CHEM-C 106** ***PHYS-P 202**

³Written Communication Foundation Selective (minimum 3 credits)

ENGL 10600 First-Year Composition ENGL 10800 Accelerated First-Year Composition ***ENG-W 131**

⁴Mathematics/Statistics Selective (3 credits)

MA 16010 Applied Calculus I ***MATH-M 216** ***STAT 30100 Elementary Statistics Methods**
(recommended)
MA 16100 Plane Analytic Geometry & Calculus I MA 16500 Analytic Geometry & Calculus I ***MATH-K 300**
***MATH-M 215** MA 16600 Analytic Geometry & Calculus II
MA 16200 Plane Analytic Geometry & Calculus II STAT 22500 Intro Probability Models

⁵History of Science and Technology Selective (3 credits)

HIST 33300 Science & Tech in Western Civ. I HIST 38001 History of United States Agriculture HIST 49400 Science & Tech in American Civ
HIST 33400 Science & Tech in Western Civ. II HIST 38400 History of Aviation **TLI 29900 Technology & Culture through History**
HIST 35000 Science & Tech in the 20th Cent Wrld HIST 38700 History of the Space Age

⁶Advanced Communication Selective (3 credits)

COM 31400 Advanced Presentational Speaking COM 32500 Interviewing Principles and Practice ENGL 42000 Business Writing
COM 31500 Speech Comm. of Technical Info COM 41500 Discussion of Technical Problems **ENGL 42100 Technical Writing**
COM 31800 Principles of Persuasion ENGL 30400 Advanced Composition ***300 or 400-level courses in**
COM 32000 Small Group Communication ***ENG-W 350** ***SPCH-S or *CMCL-C**
COM 32400 Intro to Organizational Comm. ENGL 30600 Intro Professional Writing

⁷TLI Selective (6 Credits)

Any TLI course not already required ENTR 20000 Intro to Entrepreneurship and ENTR 31000 Mktg & Mgmt for New Ventures
Innovation ENTR 48000 Entrepreneurship Capstone

⁸Technical Elective (9 credits)

Any non-required Purdue Polytechnic course not already required on the plan of study

⁹Free Electives (8 credits)

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

¹⁰Capstone Selective (3 credits)

TLI 48390 Tech Syst Capstone I – Design and TLI 48395 Tech Syst Capstone II – Eval
TLI 48800 TLI Capstone

¹¹Globalization Portfolio (0 credits)