

Industrial Engineering Technology

Suggested Arrangement of Courses:

Cr	Fall 1st Year	Prerequisite	Gr.	Cr	Spring 1st Year	Prerequisite	Gr.
3	ENGT 18000 Engineering Technology Foundations			3	TLI 11200 Foundation of Org Leadership		
1	ENGT 18100 Engineering Technology Applications			4	PHYS 22000 General Physics I		
3	TECH 12000 Design Thinking in Technology *			3	Behavioral/Social Science Selective		
3	Oral Communication Selective			3	Materials & Processes Selective		
3	Mathematics Selective			3	Written Communication Selective		
3	Humanities Selective						
16				16			

Cr	Fall 2nd Year	Prerequisite	Gr.	Cr	Spring 2nd Year	Prerequisite	Gr.
3	TLI 21300 Project Management			3	TLI 31600 Statistical Quality Control	Math/Stat selective	
3	TLI 21400 Intro to Supply Chain Management Technology			3	MET 24500 Manufacturing Systems	MET 14300 or MET 14400 and CGT 11000	
3	Computer Programming Selective			3	ECET 22400 Electronics Systems	MA 16010	
3	Lab Science Selective			3	ECON 21000 Principles of Economics		
2	Technical Graphics Selective			3	History of Science & Tech Selective		
14				15			

Cr	Fall 3rd Year	Prerequisite	Gr.	Cr	Spring 3rd Year	Prerequisite	Gr.
3	STAT 30100 Elementary Statistical Methods			3	TLI 33520 Human Factors for Technology Systems		
3	TLI 31300 Tech Innovations: Biometrics			3	TLI 43630 Design of Experiments		
3	TLI 33400 Economic Analysis for Tech Systems	Math/Stat selective		3	TLI 43530 Operations Plan & MGMT	Math/Stat selective	
3	Advanced Written Communication Selective			3	Manufacturing Automation Selective		
3	TLI 33620 Total Productive Maintenance	PHYS 21800 & TLI 316000 or STAT 30100		3	Advanced Oral Communication Selective		
15				15			

Cr	Fall 4th Year	Prerequisite	Gr.	Cr	Spring 4th Year	Prerequisite	Gr.
3	TLI 48390 Industrial Engineering Technology Capstone I: Problem Identification and Analysis	MET 24500 and TLI 43530		3	TLI 48395 Industrial Engineering Technology Capstone II: Project Design	TLI 48390 min 'C'	
3	TLI 43640 Lean Six Sigma	TLI 31600		3	TLI 43540 Facilities Planning and Material Handling	MET 14300 or MET 14400 and TLI 43530	
3	Technical Elective			3	Technical Elective		
3	Technical Elective			3	Free Elective		
3	Free Elective			2	Free Elective		
0	Professional Requirement			0	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 Purdue University.
- 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.

myPurdue Plan is knowledge source for specific requirements and completion

IET Supplemental Information

All prerequisites must be met

**Bold indicates courses offered at the Anderson Campus.
See Student Affairs Administrator for course availability.**

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

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

Behavioral/Social Science:

PSY 12000 Elementary Psychology

SOC 10000 Introductory Sociology

Human Cultures:

HIST 15100 American History to 1877

HIST 15200 US From 1877

MUS 25000 Music Appreciation

PHIL 11000 Intro to Philosophy

PHIL 11100 Ethics

Lab Science Selective (3 credits)

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

CHM 11100 General Chemistry

PHYS 22100 General Physics

Oral Communication Selective (3 credits)

COM 11400 Fundamentals of Speech Comm

SCLA 10200 Transformative Texts, Critical

Thinking & Communication II: Modern World

Written Communication Selective (minimum 3 credits)

ENGL 10600 First-Year Composition

SCLA 10100 Transformative Texts, Critical

ENGL 10800 Accelerated First-Year Composition

Thinking & Comm I: Antiquity To Modernity

Mathematics/Statistics Selective (3 credits)

MA 15800 Precalculus-Functions and Trig

MA 16200 Plane Analytic Geometry & Calculus II

STAT 22500 Intro Probability Models

MA 16010 Applied Calculus I

MA 16500 Analytic Geometry & Calculus I

***STAT 30100 Elementary Statistics Methods**

MA 16100 Plane Analytic Geometry & Calculus I

MA 16600 Analytic Geometry & Calculus II

(recommended)

History of Science and Technology Selective (3 credits)

HIST 30305 Kitchens Cooking & Food Mod Amer

HIST 33400 Sci & Society In West Civ II

HIST 49400 Science & Society American Civ

HIST 31405 Tech & Gender In American History

HIST 35000 Sci & Society In 20th Century World

POL 42900 Contemporary Political Problems

HIST 31505 American Beauty

HIST 38001 History Of United States Agriculture

TLI 29900

HIST 33000 History Of The Brit Empire &

HIST 38400 History Of Aviation

Commonwealth, 1783 To 1960

HIST 38700 History Of The Space Age

Advanced Oral Communication Selective (3 credits)

COM 31400 Advanced Presentational Speaking

COM 32000 Small Group Communication

COM 31500 Speech Comm of Technical Information

COM 31800 Principles of Persuasion

Advanced Written Communication Selective (3 credits)

ENGL 42000 Business Writing

ENGL 42100 Technical Writing

Computer Programming Selective (3 credits)

CNIT 10500 Intro to C Programming

CNIT 15501 Intro to Software Development Concepts

CNIT 17500 Visual Programming

Manufacturing Automation Selective (3credits)

MET 28400 Intro to Industrial Controls

MFET 30000 Applications of Automation in Manufacturing

MFET 34400 Automated Manufacturing Processes

Materials and Processes Selective (3 credits)

MET 14300 Materials and Processes I

MET 14400 Materials and Processes II

Technical Graphics Selective (2 credits)

CGT 11000 Technical Graphics Communications

CGT 16300 Graphical Communication and Spatial Analysis

IT 10500 Industrial Technology Introduction to Design

Technical Electives (9 credits)

Any Polytechnic Institute or Engineering course not already required on the plan of study

Free Electives (8 credits)

Any non-remedial course

Globalization 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 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 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 ASAM 24000 Intro to Asian American Studies ARAB 28000 Arabic culture COM 38000 Sociolinguistic Study of African American English HDF5 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 POL 32600 Black Political Participation in America POL 36000 Women and the Law SOC 31000 Racial and Ethnic Diversity WGSS 28200 Intro to LGBT Studies WGSS 38300 Women and Work PSY-P103 General Psychology SOC-S100 Introduction to Sociology SPCH-S229 Discussion and Group Methods SPCH-S223 Business and Professional Communication TLI 11200 Foundations of Tech. Leadership

Professional Requirement (0 Credits)

The SOET Professional Experience requirement is intended to document those experiences which help expose SOET students to the expectations of their professional prior to graduation. This may occur through industrial experience, technical or administrative involvement with community service, military service, et cetera. Approval has been granted for the following experiences. Additional experiences may also satisfy this graduation requirement. Requests for approval should be submitted to the SOET Curriculum Subcommittee Chair for consideration, allowing at least four academic weeks for review and response.

Table 1: Approved Professional Experiences

Approval by Experience

Automatic Any TECH Professional Practice course (co-op, intern, etc.)

Automatic MET 29900 Internship for Credit

Automatic EPICS courses, minimum of two

Advisor

Any approved internship (assuming student and/or employer provide documentation)

Advisor Military service (ROTC completion, reservist, active duty, veteran)

Faculty

Supervised undergraduate research experiences or laboratory assistantships (e.g., employed in the AEL as lab technician)

Faculty

Independent study - by petition to ensure the project meets the spirit of the requirement

Faculty

Professional society/club activities (e.g., led the Solar Racing team) - by petition

Faculty Any approved employment or industry project.

*Approval Key:

Automatic – student participation in this professional experience is already documented through existing means.

Advisor – advisor reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.

Faculty – designated committee reviews student's experience to determine if it meets the spirit of the Professional Experience requirement.