Automation and Systems Integration Engineering Technololgy (ASET)

Purdue Polytechnic Institute

School of Engineering Technology

Advising Worksheet

Disclaimer: The Purdue West Lafayette catalog is considered the source for academic and programmatic requirements for students entering programs during the corresponding Fall, Spring, and Summer semesters. The Advising Worksheet assists students in the development of an individualized 8-semester plan. Students are encouraged to use this worksheet and MyPurduePlan* (the online degree auditing tool) as they work with their academic advisor toward the completion of all their degree requirements.

Notification: Each student is ultimately responsible for knowing, monitoring, and completing all degree requirements.

An undergraduate degree in the Purdue Polytechnic Institute requires completion of the following degree requirements.

University Degree Requireme	ents							
Minimum 2.0 Cumulative	Minimum 120 Crec	lits that	32 Residency Credits (30000-level					
GPA	fulfill degree requi	rements	and above) at a Purdue University					
			Campus					
University Core Curriculum *	*							
https://www.purdue.edu/provost/stude	ents/s-initiatives/curriculum	/courses.html						
 Human Cultures: Behav 	vioral/Social Science	-	ntitative Reasoning					
 Human Cultures: Human 	nities	• Scie						
 Information Literacy 			nce, Technology & Society Selective					
 Oral Communication 		• Writ	tten Communication					
Civics Literacy Proficiency								
https://www.purdue.edu/provost/abou	t/provostInitiatives/civics/							
Required Major Program Cou	urses (see following p	pages)						
Departmental specific requirement								
 Students must earn a "D-" 	" or better in all courses.							
 Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts. 								
Minimum 2.0 cumulative	GPA							
Pass/No Pass option								
• MFET majors do not allow P/NP grading for any classes that are used to meet degree requirements, all degree requirements must be taken for a grade. Electives may be taken P/NP.								
Non-course/Non-credit Reau	Non-course/Non-credit Requirements							
Complete a Professional F		plete an Intercult	ural Requirement.					

* This audit is not your academic transcript and it is not official notification of completion of degree or certificate requirements.

** University Core Curriculum Outcomes may be met through completions of the Purdue Polytechnic Institute curriculum. Students should Consult with their academic advisors and MyPurdue Plan for course selections.



Polytechnic Institute

School of Engineering Technology – Automation and Systems Integration Engineering Technology (ASET) Fall 2024

Updated:

Name:

PUID:

Email:

Advisor:

Suggested Arrangement of Courses

Minors:

Fall 1 st Year	CR	Prerequisite	Status	Fulfilled by	Spring 1 st Year	CR	Prerequisite	Status	Fulfilled by
Materials and Processes Selective	3				TECH 12000 Design Thinking in Tech.	3			
MA 16010 Applied Calculus I	3	ALEKS score of 75			MA 16020 Applied Calculus II	3	MA 16010 with a grade of C- or better		
ENGT 18200 Gateway to Eng Tech	4	ALEKS 60, SAT 570, ACT 24, or MA 15300 or higher			MET 11100 Applied Statics	3	ENGT 18200		
Freshman Composition Selective	3				Materials and Processes Selective	3			
CNIT 10500 Introduction to C Programming	3				Humanities Foundation Selective	3			
Total Credit Hours	16				Total Credit Hours	15			

Fall 2nd Year	CR	Prerequisite	Status	Fulfilled by	Spring 2nd Year	CR	Prerequisite	Status	Fulfilled by
Behavioral/Social Science Foundation Selective* +	3				Free elective	1			
Freshman Speech Selective* +	3				MET 10200 Production Specifications	3	CGT Selective and ENGT 18200		
MET 11300 Mechanics Applications	1	MET 11100			MET 24500 Manufacturing Systems	3	(MET 14300 or MET 14400) and Computer Graphics Selective		
ECET 22400 Electronics Systems	3	ALEKS 60 or MA 16010			MET 28400 Intro to Industrial Controls	3	ECET 22400		
Computer Graphics Selective	2				Dhurics Soloctivo	4			
CHM 11100 General Chemistry*	3				Physics Selective				
Total Credit Hours	15				Total Credit Hours	14			

Fall 3rd Year	CR	Prerequisite	Status	Fulfilled by	Spring 3rd Year	CR	Prerequisite	Status	Fulfilled by
MET 23000 Fluid Power 3	з	(MET 11100 or PHYS sel.)			MFET 37400 Mfg Integration I	R	MET 28400		
	5	and MA 16010				5			
MFET 34400 Automated Mfg Processes	2	MET 24500			MFET 24800 Industrial Robot Prog and	3	CNIT 17500 or CNIT 10500		
	5				Арр	,	CIVIT 17500 01 CIVIT 10500		
Technical Writing Selective +	3				ECET 33700 Analog Signal Processing	3	ECET 22400 + MA 16020		
Statistics or Quality Selective	3				Manufacturing Selective	3			
Science Selective*	3				CNIT or CS Selective	3			
Total Credit Hours	15				Total Credit Hours	15			

Fall 4th Year	CR	Prerequisite	Status	Fulfilled by	Spring 4th Year	CR	Prerequisite	Status	Fulfilled by
Capstone Selective I	3	MFET 37400			Capstone Selective II	з	Capstone Selective I		
Manufacturing/Controls/Graphics Selective	3				Communication Selective	3			
Continuous Controls Selective	3				Humanities/Social Science Elective 200+	3			
IET 33400 Economic Analysis for Technology Systems	3				Technical Elective	3			
Global/Professional Selective	3				Free Elective	3			
Total Credit Hours	15				Total Credit Hours	15			

120 semester credits and a 2.0 Graduation GPA are required for the Bachelor of Science degree. 1.

Students must earn a "D-" or better in all courses unless otherwise noted. Free electives may be taken P/NP. 2.

Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts. 3.

32 credit hours of 300-level or higher courses must be completed at Purdue University. 4.

Professional Requirement. 5a.

Intercultural Requirement. 5b.

5c. Civics Literacy Requirement.



***** The student is ultimately responsible for knowing and completing all degree requirements.

myPurduePlan is knowledge source for specific requirements and completion

Created 05/17/2024 - SH

Updated 04/11/2024 (effective Fall 2024)





2024-2025 AUTOMATION AND SYSTEMS INTERGRATION ENGINEERING TECHNOLOGY SUPPLEMENTAL INFORMATION All prerequisites must be met.

FRESHMAN COMPOSITION SELECTIVE ENGL 10600 First-Year Composition ENGL 10800 Accelerated First-Year Composition

FRESHMAN SPEECH SELECTIVE COM 11400 Fundamentals Of Speech Communication

COMMUNICATION SELECTIVE COM 31500 Speech Communication Of Technical Information+ COM 32000 Small Group Communication

TECHNICAL WRITING SELECTIVE ENGL 42000 Business Writing ENGL 42100 Technical Writing+

MATERIALS AND PROCESSES SELECTIVE MET 14300 Materials & Processes I

COMPUTER GRAPHICS SELECTIVE

MFET 10301 Geometric Modeling Applications CGT 11000 Technical Graphics Communications

GRAPHICS SELECTIVE

MFET 11301 Product Data Management CGT 22600 Introduction to Constraint-Based Modeling

CNIT or CS SELECTIVE

CNIT 15500 Introduction to Object-Oriented Programming CNIT 15501 Introduction to Software Development Concepts CNIT 16100 Introduction To Programming And Data Management For Smart Manufacturing SCLA 10100 Transformative Text, Critical Thinking and Communication I: Antiquity to Modernity+

SCLA 10200 Transformative Texts, Critical Thinking And Communication II: Modern World+

COM 41500 Discussion Of Technical Problems+ EDPS 31500 Collaborative Leadership: Interpersonal Skills

ENGL 42400 Writing For High Technology Industries+

MET 14400 Materials & Processes II

MFET 16300 Graphical Communication and Spatial Analysis ENGT 10500 Intro to Engineering Design

MET 30200 CAD in the Enterprise

CNIT 17500 Visual Programming MET 16400 Computing In Engineering Technology CS 15900 C Programming

TECHNICAL ELECTIVE

All Polytechnic Institute courses at the 30000 level or above (excluding MFET 30000) that are not required for the major. Polytechnic Institute courses (AT 30000-49900, CGT 30000-499000, CM 30000-49900, CNIT 30000-49900, ECET 30000-49900, ENGT 30000-49900, IET 30000-49900, MET 30000-49900, MFET 30000-49900, OLS 30000-49900, TECH 30000-49900, TLI 30000-49900, AFT 30000-49900, MSL 30000-49900, NS 30000-49900)

Plus:	
ECET 27900 Embedded Digital Systems	MGMT 45500 Legal Background For Business I
FNR 30110 Sustainable Wood Products Manufacturing	
STATISTICS OR QUALITY SELECTIVE	
STAT 30100 Elementary Statistical Methods	IET 31600 Statistical Quality Control
PHYSICS SELECTIVE	
PHYS 22000 General Physics	PHYS 17200 Modern Mechanics
SCIENCE SELECTIVE	
BIOL 11000 Fundamentals of Biology I	CHM 11600 General Chemistry
BIOL 20300 Human Anatomy and Physiology	PHYS 22100 General Physics
CHM 11200 General Chemistry II	PHYS 24100 Electricity and Optics

CONTINUOUS CONTROL SELECTIVE

ECET 37201 Continuous Control Electronics

MET 43200 Hydraulic Motion Control Systems MET 43600 Pneumatic Motion Control Systems MET 48200 Mechatronics

CONTROLS SELECTIVE

ECET 27400 Wireless Communications ECET 32700 Instrumentation And Data Acquisition Design ECET 35901 Computer Based Data Acquisition Applications ECET 36900 Applied Computer Vision For Sensing And Automation ECET 37201 Continuous Control Electronics IET 31300 Tech Innov & Integration: AIDC MET 33400 Advanced Fluid Power

MANUFACTURING SELECTIVE

AT 27200 Intro to Composite Technology AT 30802 Aircraft Materials Processes AT 47200 Advanced Composite Technology ECET 27000 Electronics Prototype Development And Construction IET 33520 Human Factors For Technology Systems IET 33620 Total Productive Maintenance IET 34200 Warehouse And Inventory Management IET 43640 Lean Six Sigma IET 44275 Global Transportation And Logistics Management MET 30200 CAD in the Enterprise MET 34900 Stringed Instrument Design and Manufacture MET 38200 Controls and Instrumentation for Automation MET 45100 Manufacturing Quality Systems MFET 20301 Model Based Definition

SENIOR CAPSTONE SELECTIVE I

ENGT 48000 Engineering Technology Capstone I

SENIOR CAPSTONE SELECTIVE II ENGT 48100 Engineering Technology Capstone II

GLOBAL/PROFESSIONAL SELECTIVE

COM 30300 Intercultural Communication EDPS 31500 Collaborative Leadership: Interpersonal Skills EDPS 31600 Collaborative Leadership: Cross-CulturalSettings **OLS 34600 Critical Thinking And Ethics** OLS 38600 Leadership For Organizational Change

MFET 29200 Projects in Automation, Robotics and Mechatronics MFET 39200 Advanced Projects in Automation, Robotics and Mechatronics

MET 38200 Controls and Instrumentation for Automation MET 43200 Hydraulic Motion Control Systems MET 43600 Pneumatic Motion Control Systems MFET 29200 Projects In Automation, Robotics And Mechatronics MFET 39200 Advanced Projects In Automation, Robotics And Mechatronics

MFET 21301 Simulation and Visualization Applications MFET 23000 Industrial Internet Of Things, Networks, And Systems I MFET 25000 Smart Manufacturing Cloud Computing Applications MFET 29200 Projects In Automation, Robotics And Mechatronics MFET 30301 Digital Manufacturing MFET 31301 The Business of Managing Digital Product Data MFET 34800 Industrial Robotics and Motion Control MFET 39200 Advanced Projects In Automation, Robotics And Mechatronics MFET 41000 Introduction To Additive Manufacturing MFET 44200 Programming Robots With ROS MFET 49900 (Technology, Innovation and Culture in Bavaria (Study Abroad))

ENGT 40500 Entrepreneurial Capstone I

ENGT 40600 Entrepreneurial Capstone II

PSY 33500 Stereotyping And Prejudice TECH 32000 Technology And The Organization TECH 33000 Technology And The Global Society TLI 21300 Project Management

HUMANITIES FOUNDATION SELECTIVE: see http://www.purdue.edu/provost/initiatives/curriculum/course.html

BEHAVIORAL/SOCIAL SCIENCE FOUNDATION SELECTIVE: see http://www.purdue.edu/provost/initiatives/curriculum/course.html

HUMANITIES/SOCIAL SCIENCE ELECTIVE: any 2xxxx course or higher in PSY, SOC, HIST, ECON, ENGL Lit, POL, PHIL, REL, ANTH, a foreign language, AD 22600, AD 22700, AD 25100, AD 25500, AD 30701, AD 31100, AD 31200, MUS 25000, MUS 37600, MUS 37800, MUS 38100, MUS 38200

FREE ELECTIVE: Any non-remedial course

+ Denotes a Cornerstone Certificate course.



Updated 4/11/2024



2024-2025 Professional Requirement

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.

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

Table 1: Approved Professional Experiences

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

Intercultural Requirement

All students must complete the School of Engineering Technology (Polytechnic) Growth Plan for Global Awareness and Intercultural Competency at the Developmental Level (see below). Students who are interested in further developing their Global Awareness and Intercultural Competency are encouraged to complete the requirement at the Emerging Level or the Proficient Level (see advisor for more information).

Polytechnic Growth Plans for Global Awareness & Intercultural Competency

2024-2025



Step 1: Complete the Pre-test Intercultural Development Inventory Assessments (1st year)

Step 2: Complete one (1) of the following global experiences: *

- Participate in A Purdue University international capstone, collaborative project, or
- Participate in an international internship (international location), 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 (4th year)

NOTE FOR TRANSFER/CODO STUDENTS: Transfer and CODO students with less than 75 credit hours remaining to completed their Polytechnic Plan of Study are exempt from Step 1 (taking the IDI Pretest).

*Global experiences must take place during the time of enrollment in Polytechnic to complete Step 2. Experiences 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.

AAS 27100 Introduction To African American Studies AAS 35900 Black Women Writers AAS 37100 The African American Experience AAS 37300 Issues In African American Studies AAS 37500 The Black Family AAS 47300 Blacks In Hollywood Film AGEC 53200 World Food Problems AGR 20100 Communicating Across Culture AMST 10100 America And The World ANTH 20300 Biological Bases Of Human Social Behavior ANTH 20500 Human Cultural Diversity ANTH 21000 Technology And Culture ANTH 21200 Culture, Food And Health ANTH 23000 Gender Across Cultures ANTH 28200 Introduction To LGBTQ Studies ANTH 32700 Environment And Culture ANTH 34000 Global Perspectives On Health ANTH 34100 Culture And Personality ANTH 35800 African Cultures ANTH 36800 Sociolinguistic Study Of African American English ANTH 37000 Ethnicity And Culture ANTH 37300 Anthropology Of Religion ANTH 37800 Archaeology And Cultural Anthropology Of Mesoamerica (Mexico, Belize And Guatemala) ANTH 37900 Native American Cultures ANTH 40400 Comparative Social Organization ARAB 23900 Arab Women Writers ARAB 28000 Arabic Culture ARAB 28100 Introduction To Islamic Civilization And Culture ARAB 33400 North African Literature And Culture ASAM 24000 Introduction To Asian American Studies ASAM 34000 Contemporary Issues In Asian American Studies ASL 28000 American Deaf Community: Language, Culture, And Society AT 23300 Ethics And Aviation CDIS 23900 Introduction To Disability Studies CGT 28500 Cross Cultural Game Development CHNS 28000 Topics in Chinese Civilization and Culture CHNS 28100 Introduction To Chinese Food Culture CHNS 33000 Introduction To Chinese Cinema CM 33200 Architectural Design, Construction Techniques And Society CMPL 23700 Our Common Bond: Languages And Cultures In A Global Context CNIT 32000 Policy, Regulation, And Globalization In Information Technology COM 22400 Communicating In The Global Workplace

COM 30300 Intercultural Communication COM 32000 Small Group Communication COM 32800 Diversity At Work: A Rhetorical Approach COM 37200 Communication In Relationships COM 37600 Communication And Gender COM 38100 Gender And Feminist Studies In Communication COM 41200 Theories Of Human Interaction COM 41600 United States Politics And The Media COM 42300 Leadership, Communication And Organizations COM 46400 American Political Communication COM 52700 Introduction To Cultural Studies In Communication COM 57400 Organizational Communication CSR 34400 Fundamentals Of Negotiations CSR 52400 International Health ECET 38001 Global Professional Issues In Engineering Technology EDPS 21200 Collaboration And Family Engagement To Support Students With Disabilities EDPS 23500 Learning And Motivation EDPS 26500 The Inclusive Classroom EDPS 31500 Collaborative Leadership: Interpersonal Skills EDPS 31600 Collaborative Leadership: Cross-Cultural Settings EDST 51200 Foundations Of Educational Policy ENGL 21800 Figures Of Myth And Legends II: Heroes And Villains ENGL 22500 Literature, Inequality, And Injustice ENGL 22800 Language And Social Identity ENGL 22900 Creole Languages And Cultures ENGL 25700 Literature Of Black America ENGL 28000 Games, Narrative, Culture ENGL 33000 Games And Diversity ENGL 35200 Native American Literature ENGL 35400 Asian American Literature ENGL 35800 Black Drama ENGL 35900 Black Women Writers ENGL 36000 Gender And Literature ENGL 36600 Postcolonial Literatures ENGL 43900 Topics In Disability Studies ENGL 46600 Cultural Encounters ENGR 31000 Engineering In Global Context ENTR 47000 Women And Leadership FNR 48800 Global Environmental Issues GSIA 10100 Global Awareness GSLA 30100 Theories Of Global Studies HDFS 20100 Introduction To Family Processes HDFS 22500 Human Development Across Cultures

2024-2025

HDFS 28000 Diversity In Individual And Family Life HEBR 38000 Israel And The Modern World: Cinema, Literature, History And Politics HEBR 38500 The Holocaust In Modern Hebrew Literature HIST 10500 Survey Of Global History HIST 19500 The Historian's Craft: Historical Research And Film HIST 21000 The Making Of Modern Africa HIST 21100 The Global Field: World Soccer And Global History HIST 30000 Eve Of Destruction: Global Crises And World Organization In The 20th Century HIST 31205 The Arab-Israeli Conflict HIST 31405 Science, Technology, Engineering And Mathematics (STEM) And Gender HIST 31505 American Beauty HIST 31905 Christianity In The Global Age HIST 32900 History Of Women In Modern Europe HIST 33400 Science And Society In Western Civilization II HIST 33805 History Of Human Rights HIST 34505 Arabs in American Eyes HIST 35000 Science And Society In The Twentieth Century World HIST 35700 History Of Southern Africa Since 1400 HIST 35900 Gender In East Asian History HIST 36000 Gender In Middle East History HIST 36600 Hispanic Heritage Of The United States HIST 37100 Society, Culture, And Rock And Roll HIST 37700 History And Culture Of Native America HIST 38105 American Indians And Film HIST 38605 Land Of The Indians: Native Americans In Indiana HIST 38700 History of the Space Age HIST 39800 The Afro-American Since 1865 HIST 46900 Black Civil Rights Movement HIST 47005 Women And Health In America HIST 47700 Native American Women's History HIST 48800 History Of Sexual Regulation In The United States HIST 49400 Science And Society In American Civilization HK 57600 Diversity And Health ITAL 28000 Italian Culture And Civilization ITAL 28100 The Italian Renaissance And Its Scientific And Cultural Impact On Western Civilization JPNS 28000 Introduction To Modern Japanese Civilization LALS 25000 Introduction To Latin American And Latino Studies LALS 26000 U.S.Latino Culture LC 23300 Love, Sex, And Gender In Western European Literature LC 23700 Our Common Bond: Languages And Cultures In A Global Context LC 36800 Sociolinguistic Study Of African American English LING 36800 Sociolinguistic Study Of African American English LING 57600 Latin American Indigenous Languages And Cultures MET 52700 Technology From A Global Perspective MGMT 33100 Development And Impact of Equal Employment Law MUS 37600 World Music NUTR 53200 World Food Problems OBHR 54100 Leading Management Of Diversity And Inclusion In Organizations PHIL 11400 Global Moral Issues

PHIL 20700 Ethics For Technology, Engineering, And Design

PHIL 22500 Philosophy And Gender PHIL 23000 Religions Of The East PHIL 23100 Religions Of The West PHIL 24000 Social And Political Philosophy PHIL 24200 Philosophy, Culture, And The African American Experience POL 13000 Introduction To International Relations POL 14100 Governments Of The World POL 22200 Women, Politics, And Public Policy POL 23100 Introduction To United States Foreign Policy POL 23500 International Relations Among Rich And Poor Nations POL 32600 Black Political Participation In America POL 32700 Global Green Politics POL 33500 China And The Challenges Of Globalization POL 36000 Women And The Law POL 41300 The Human Basis Of Politics POL 42300 International Environmental Policy POL 43300 International Organization POL 43801 International Human Rights PSY 23900 The Psychology Of Women PSY 24400 Introduction To Human Sexuality PSY 33700 Social Cognition PTGS 33000 Brazilian, Portuguese, And African Cinema PUBH 22500 Contemporary Women's Health PUBH 51100 International Health **REL 23000 Religions Of The East REL 23100 Religions Of The West** RUSS 33000 Russian And East European Cinema RUSS 38000 Russian Culture And Civilization I RUSS 38100 Russian Culture And Civilization II SOC 10000 Introductory Sociology SOC 22000 Social Problems SOC 26700 Religion In The Modern World SOC 31000 Race And Ethnicity SOC 33800 Global Social Movements SOC 33900 Introduction To The Sociology Of Developing Nations SOC 35200 Drugs, Culture, And Society SOC 35600 Hate And Violence SOC 36700 Religion In America SOC 36900 Religion And Chinese Society SOC 41100 Social Inequality SOC 42900 Sociology Of Protest SOC 51400 Racial And Cultural Minorities SYS 30000 It's A Complex World - Addressing Global Challenges TECH 33000 Technology And The Global Society TLI 11200 Foundations Of Organizational Leadership TLI 35600 Global Technology Leadership WGSS 28000 Women's, Gender, And Sexuality Studies: An Introduction WGSS 28200 Introduction To LGBT Studies WGSS 38000 Gender And Multiculturalism WGSS 38100 Women Of Color In The United States WGSS 38300 Women And Work Any foreign language 20000 or higher (20100, 20200, 30100, 30200, 40100, 40200 Any Purdue approved Study Abroad with a minimum of 3 credit hours that

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includes reflective learning assignments.