



Associate of Engineering (AEng) Software Engineering

The curriculum in the Associate Degree in Engineering (AEng) in Software Engineering Technology is designed for those who intend to launch a career in the testing, installation, and maintenance of computer software modules and systems. Coursework in the program is practice-oriented and prepares students to work in a variety of computer intensive environments that involve engineering support: technical organizations, small or large businesses, manufacturing companies, and data-directed services. The breadth of training in hardware, software, troubleshooting equipment, and other computer tools will enable the graduate to work in a variety of roles in such environments as software technician, computer systems technician, data applications or computer technician, or as a test and integration assistant. The graduate of this curriculum will be a software engineering technician versed in mathematics, physics, computer science, software development, and business fundamentals.

Failure to maintain an overall GPA of at least a 2.00 in all coursework is sufficient cause for being dropped from the program.

GENERAL EDUCATION (34 crs)

Area I Communications (9 crs)

ENG	111	English Composition I (3)
ENG	116	Technical Writing (3)
SPCH	130	Public Speaking (3)

Area II Mathematics (11 crs)

MATH	145	Introduction to Probability and Statistics (3)
MATH	162	Calculus I (4)
MATH	163	Calculus II (4)

Area III Laboratory Sciences (8 crs)

PHYS	215/L	Engineering Physics I with Lab (4)
PHYS	216/L	Engineering Physics II with Lab (4)

Area IV Social/Behavioral Sciences (3 crs)

ECON	201	Microeconomics (3)
------	-----	--------------------

Area V Humanities and Fine Arts (3 crs)

PHIL	220	Ethics(3)
------	-----	-----------

HEALTH, PHYSICAL EDUCATION & RECREATION (1 cr) [not part of GECC]

Elective (1)

PROGRAM REQUIREMENTS (30 crs)

Business (3 crs)

Elective in ENGR 4XX or BA (3)

Computer Science (17 crs)

CS	152/L	Computer Programming I (4)
CS	201	Math Foundations of CS (3)
CS	238/L	Computer Logic Design (4)
CS	241	Data Organization (3)
CS	251	Intermediate Programming (3)

Information Technology (10 crs)

IT	105/L	Microcomputer Systems (4)
IT	130	Networking Fundamentals (3)
Elective in IT 2XX, 3XX or 4XX (3)		

TOTAL CREDITS 65

Associates in Eng. Software Engineering				
General Ed.	Course	Title	Hrs	Pre-req
Communications				
9 hours				
	ENG 111	English Composition	3	ENG 109
	ENG 116	Technical Writing	3	ENG 111
	SPCH 130	Public Speaking	3	ENG 109
Humanities				
3 hours	PHIL 220	Ethics	3	ENG 109
Mathematics				
11 hours				
	MATH 145	Introduction to Prob/Stat	3	MATH 130 or Exam
	MATH 162	Calculus I	4	MATH 160 or (MATH 150 and 155)
	MATH 163	Calculus II	4	MATH 162
Lab Science				
8 hours				
	PHYS 215/	Eng. Physics I/L	4	
	PHYS 216/	Eng. Physics II/L	4	
Soc/Behavioral Sci				
3 hours				
	ECON 201	Microeconomics	3	ENG 109
Gen. Ed. HRS		34		
Health, PE, Rec				
1 hours		Elective	1	
PHYS Ed		1		
Major				
Business				
3 hours	Elective	ENGR 4XX or BA	3	
Comp Sci				
17 hours				
	CS152L	Computer Programming I	4	
	CS201	Math Foundations of CS	3	CS152L
	CS238L	Computer Logic Design	4	PHYS 216L and MATH 163
	CS241	Data Organization	3	CS152L
	CS251	Intermediate Programming	3	CS152L
Information Tech				
10 hours				
	IT105L	Microcomputer Systems I/L	4	ENG 109
	IT130	Networking Fundamentals	3	CS152L
	Elective	IT 2XX, 3XX or 4XX	3	
Major Total		30		

Grand Total	65
--------------------	-----------

Associate of Eng. Program Software Engineering

1	2	3	4
English Composition I (Eng 109N or Exam) →	Technical Writing		Public Speaking (Eng 109N)
Calculus I (Math (150 and 155) or 160) →	Calculus II		
	Eng. Physics I/L	Eng. Physics II/L	Comp. Log. Design
Introd. Prob and Statis. (Math 130)	Microcomp. Syst. 109N	Network. FundamEthics	Ethics(Eng 109N)
Microeconomics (Eng 109N or Exam)		Intermediate Program	
HPR Elective	Comp Prog	DataOrganization	Elective (IT, CS)
			Elective ENGR/BA
		Math Found of CS	

Educational Planning Form (Semester)

Name _____ Date _____
Major _____ Student ID _____

Fall Semester	Spring Semester	Summer
Total Units	Total Units	Total Units
Fall Semester	Spring Semester	Summer
Total Units	Total Units	Total Units
Fall Semester	Spring Semester	Summer
Total Units	Total Units	Total Units

Advisor's Signature _____

Student Signature _____

Notes and Remedials
Math 130
Intermediate Algebra
Math 155

Trigonometry
Math 160
College Algebra and Trigonometry
Eng 109N
Basic English II