

3.2.5 Sample Plan of Study

Sample Plan of Study

Computer Engineering (CE)

Freshmen Year

Semester 1			Semester 2				
Course	Title	Cr.	Pre/ConP	Course	Title	Cr.	Pre/ConP
ENGR 131	Transforming Ideas to Innovation I (General Eng.)	2		ENGR 132	Transforming Ideas to Innovation II (General Eng.)	2	ENGR 131
MA 165	Analytic Geometry and Calculus I (Mathematics)	4	MAT 110 or MA 158 or ENG Math Placement Test	MA 166	Analytic Geometry And Calculus II (Mathematics)	4	MA 165
CHM 115	General Chemistry I (Science)	4	ConP: MA 165	PHYS 172	Modern Mechanics (Science)	4	ConP: MA 165
ENGL 100	English for Academic Studies (English Lan. & Com.)	3		CS 159	Programming Applications for Engineers (General Eng.)	3	ENGR 131
GEE	General Education Elective (refer to course catalogue)	3		ENGL 106	First-Year Composition (English Lan. & Com.)	4	ENGL 100
Semester Credits = 16				Semester Credits = 17			

Sophomore Year

Semester 3			Semester 4				
Course	Title	Cr.	Pre/ConP	Course	Title	Cr.	Pre/ConP
CE 201	Linear Circuit Analysis I (CE Core)	3	ENGR 131, MA 166 (min C-), PHYS 172; ConP: MA 261	CE 202	Linear Circuit Analysis II (CE Core)	3	CE 201 (min C), ConP: MA 266
MA 261	Multivariate Calculus (Mathematics)	4	MA 166	CE 270	Introduction to Digital System Design + Lab (CE Core)	4	ConP: CE 201
PHYS 272	Electric And Magnetic Interactions + Lab (Science)	4	PHYS 172, ConP: MA 166	MA 266	Ordinary Differential Equations (Mathematics)	3	MA 261
CE 207	Electronic Measurement Techniques Lab (CE Core)	1	ConP: CE 201	CE 255	Introduction to Electronic Analysis and Design (CE Core)	3	CE 201 (min C)
CE 200	Electrical and Computer Engineering Sophomore Seminar (CE Seminars)	0	Sophomore	CE 208	Electronic Devices and Design Laboratory (CE Core)	1	CE 207, ConP: CE 255
COM 114	Fund. of Speech Communication (English Lan. & Com.)	3	ENGL 100	GEE	General Education Elective (refer to course catalogue)	3	
Semester Credits = 15				Semester Credits = 17			

AUM reserves the right to change program content, course requirements, materials, and/or schedules as deemed necessary

Junior Year

Semester 5				Semester 6			
Course	Title	Cr.	Pre/ConP	Course	Title	Cr.	Pre/ConP
CE 301	Signals and Systems (CE Core)	3	CE 202 (min C), MA 266	CE 337	ASIC Design Laboratory (Advanced CE Selective)	2	EE 270 (min C) or CE 270 (min C)
CE 264	Advanced C Programming (CE Core)	3	CS 159 (min C-)	CE 368	Data Structures (CE Core)	3	CE 264 (min C-)
CE 362	Microprocessor Systems and Interfacing (CE Core)	4	EE 270 (min C) or CE 270 (min C), CS 159	CE 364	Software Engineering Tools Laboratory (CE Core)	1	CE 264
MA 265	Linear Algebra (Mathematics)	3	MA 166	CE 302	Probabilistic Methods in Electrical and Computer Engineering (CE Core)	3	MA 266, ConP: CE 301
GEE	General Education Elective (for ex. ENGL 421; refer to course catalogue)	3	for ENGL 421: ENGL 106	MA 369	Discrete Mathematics for Computer Engineering (Mathematics)	3	CE 270
				GEE	General Education Elective (refer to course catalogue)	3	
Semester Credits = 16				Semester Credits = 15			

Senior Year

Semester 7				Semester 8			
Course	Title	Cr.	Pre/ConP	Course	Title	Cr.	Pre/ConP
CE 400	Professional Development and Career Guidance - Graduation Project I (CE Seminars)	1	CE 200, Senior	ACES	Advanced CE Selective (CE 469 or CE 468)	4	for CE 469: CE 368, CE 437
CE 437	Computer Design and Prototyping (Advanced CE Selective)	4	CE 337, CE 362	CE 477	Digital Systems Senior Project +Lab (Senior Design)	4	CE 400 or EE 400, CE or EE Core Curriculum, Senior
CEE	CE Elective (for example: CE 462)	3	for CE 462: CE 264	CEL	Complementary Elective (for example: CE 463)	3	for CE 463: CE 264, ConP: EE 302 or CE 302
SC	Science Elective *	4		EB	Engineering Breadth* (General Eng.)	3	
GEE	General Education Elective (refer to course catalogue)	3		GEE	General Education Elective (refer to course catalogue)	3	
Semester Credits = 15				Semester Credits = 17			

Total Minimum Credits Required for Graduation = 128

CE Core Courses (32 credits): CE 201 (3credits), CE 207 (1credit), CE 202 (3 credits), CE 255 (3 credits), CE 208 (1 credit), CE 264 (3credits), CE 270 (4 credits), CE 301 (3 credits), CE 302 (3 credits), CE 362 (4 credits), CE 364 (1credit), CE 368 (3credits).

AUM reserves the right to change program content, course requirements, materials, and/or schedules as deemed necessary

AUM reserves the right to change program content, course requirements, materials, and/or schedules as deemed necessary