



**Bachelor of Science in Computer Engineering (CENG)**

**First Year**

**Fall Semester**

Code	Title	Credits	Prerequisites	Corequisites
MATH225	Linear Algebra with Applications	3	ENGL051 - MATH161	
PHYS220	Physics for Engineers	3	PHYS161 - ENGL101 - PHYS160	MATH210
CULT200	Introduction to Arab - Islamic Civilization	3		
MATH210	Calculus II	3	MATH161 - MATH160	
ENGG200	Introduction to Engineering	3		
ENGL201	Composition and Research Skills	3	ENGL151	
Total		18		

**Spring Semester**

Code	Title	Credits	Prerequisites	Corequisites
EENG250	Electric Circuits I	3	PHYS161 - PHYS160 - MATH161 - MATH160 - ENGL051	ENGG200 - MATH210
CENG250	Digital Logic I	3		EENG250
MATH270	Ordinary Differential Equations	3	MATH210	MATH225
ENGL251	Communication Skills	3	ENGL201	
CSCI250L	Introduction to Programming Lab	1		ENGL101 - CSCI250
MATH220	Calculus III	3	MATH210	
CSCI250	Introduction to Programming	3		ENGL101 - CSCI250L
Total		19		

**Second Year**

**Fall Semester**

Code	Title	Credits	Prerequisites	Corequisites
CSCI300	Intermediate Programming with Objects	3	CSCI250L - CSCI250	
EENG300	Electric Circuits II	3	EENG250	EENG301L
ENGG300	Engineering Economics	3	ENGL201 - MATH225 - MATH220	
MATH310	Probability & Statistics for Scientists & Engineers	3	MATH210 - ENGL201	
CENG335	Digital Logic II	3	CSCI250 - CENG250	
CENG325	Software Applications and Design	3		CSCI300
EENG301L	Electric Circuits Lab	1	EENG250	EENG300
Total		19		

**Spring Semester**

Code	Title	Credits	Prerequisites	Corequisites
ARAB200	Arabic Language and Literature	3		
EENG350L	Electronic Circuits I Lab	1	EENG300 - EENG250 - EENG301L	EENG350
CENG352L	Digital Logic Circuits Lab	1	EENG301L	
CENG380	Microprocessors and Microcontrollers	3	EENG250 - CSCI250	CENG352L
EENG385	Signals and Systems	3	MATH225 - EENG300	MATH310 - MATH270
CENG375	Introduction to Database Systems	3	CSCI300	
EENG350	Electronic Circuits I	3	EENG300 - EENG250	EENG350L

Total	17	
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### Third Year

#### Fall Semester

Code	Title	Credits	Prerequisites	Corequisites
CENG430L	Linux Lab	1	CENG325	
	Elective	3		
EENG447	Analog Communication Systems	3	MATH310 - EENG385	EENG467L
CENG435	Mobile Application Development	3	CSCI300 - CENG375	
CENG415	Communication Networks	3	CSCI250 - CSCI300	
CENG400L	Microcontroller Applications Lab	1	CENG380	
CENG420	Web Programming and Technologies	3	CSCI300 - CENG375	
CENG400	Computer Organization and Design	3	CENG380	
Total		20		

#### Spring Semester

Code	Title	Credits	Prerequisites	Corequisites
CENG450L	Scripting Languages Lab	1	CENG430L	
	Elective	3		
	Elective	3		
CENG455L	Communication Networks Lab	1	CENG415	
CENG495	Senior Project	3	EENG447 - CENG435 - CENG415 - CENG380 - CENG375	
EENG467L	Analog Communication Systems Lab	1		EENG447
ENGG450	Engineering Ethics and Professional Practice	3	ENGL251	ENGG300
Total		15		

### Major Elective Courses

Code	Title	Credits	Prerequisites	Corequisites
CENG460	Operating Systems	3	CENG380 - CSCI300	
CENG470	Data Structures and Analysis of Algorithms	3	CSCI300	