



**Bachelor of Science in Mechanical Engineering (MENG)**

**First Year**

**Fall Semester**

Code	Title	Credits	Prerequisites	Corequisites
CHEM200	General Chemistry	3	ENGL101 - CHEM160	
MATH225	Linear Algebra with Applications	3	ENGL051 - MATH161	
MENG225	Engineering Drawing & CAD	3		
PHYS220	Physics for Engineers	3	PHYS161 - ENGL101 - PHYS160	MATH210
ENGL201	Composition and Research Skills	3	ENGL151	
MATH210	Calculus II	3	MATH161 - MATH160	
Total		18		

**Spring Semester**

Code	Title	Credits	Prerequisites	Corequisites
MENG250	Statics	3	MATH161 - MATH160 - PHYS161 - PHYS160 - ENGL051	MATH210
EENG250	Electric Circuits I	3	PHYS161 - PHYS160 - MATH161 - MATH160 - ENGL051	MATH210
ENGL251	Communication Skills	3	ENGL201	
CSCI250	Introduction to Programming	3		ENGL101 - CSCI250L
CSCI250L	Introduction to Programming Lab	1		ENGL101 - CSCI250
MATH220	Calculus III	3	MATH210	
MATH270	Ordinary Differential Equations	3	MATH210	MATH225
Total		19		

**Second Year**

**Fall Semester**

Code	Title	Credits	Prerequisites	Corequisites
MENG320L	Engineering Thermodynamics I Lab	1		CHEM200 - MENG320
MENG300	Dynamics	3	ENGL051 - ENGL101 - MENG250	PHYS220 - MATH220
MENG310	Engineering Material Science	3	MENG250	CHEM200
MENG320	Engineering Thermodynamics I	3	MENG250	CHEM200 - MENG320L
MATH310	Probability & Statistics for Scientists & Engineers	3	MATH210 - ENGL201	
ENGG300	Engineering Economics	3	ENGL201 - MATH225 - MATH220	
CULT200	Introduction to Arab - Islamic Civilization	3		
Total		19		

**Spring Semester**

Code	Title	Credits	Prerequisites	Corequisites
EENG370	Industrial Electronics	3	EENG250	EENG370L
EENG370L	Industrial Electronics Lab	1		EENG370
MENG360	Mechanics of Materials I	3	MENG310	MENG360L
MENG370	Fluid Mechanics I	3	MENG300	MATH375 - MENG370L
MATH375	Numerical Methods for Scientists & Engineers	3	ENGL051 - MATH270 - MATH225	

MENG370L	Fluid Mechanics I Lab	1	MENG300	MENG370
MENG360L	Mechanics Of Materials I Lab	1	MENG310	MENG360
	Elective	3		
Total		18		

### Third Year

#### Fall Semester

Code	Title	Credits	Prerequisites	Corequisites
MENG420	Heat Transfer	3	MENG370 - MENG320	MENG420L
MENG420L	Heat Transfer Lab	1	MENG320	MENG420
MENG430	Mechanical Vibrations I	3	MENG300 - MATH270	MENG410 - MATH310 - MENG430L
MENG410	Mechanics of Materials II	3	MENG360	
ARAB200	Arabic Language and Literature	3		
MENG430L	Mechanical Vibrations I Lab	1	CSCI250	MENG430
EENG435	Control Systems	3	PHYS220 - MENG250 - MATH270 - MATH225 - MATH310 - EENG370	
Total		17		

#### Spring Semester

Code	Title	Credits	Prerequisites	Corequisites
MENG495	Senior Project	3	ENGG300 - ENGL251 - MENG430 - MENG420 - MENG410 - MENG225	ENGG450
EENG492	Electric Machines For Mechanical Engineers	3	PHYS220 - EENG370	MENG430 - EENG492L
EENG492L	Electric Machines For Mechanical Engineers Lab	1		EENG492
ENGG450	Engineering Ethics and Professional Practice	3	ENGL251	ENGG300
MENG450L	Mechanical Systems I Lab	1	MENG300 - MENG225	MENG450
MENG470	Internal Combustion Engines	3	MENG420	
MENG450	Mechanical Systems I	3	MENG300	MENG430 - MENG450L
Total		17		