



The International University of Beirut
الجامعة الدولية في بيروت

Major Title: Bachelor of Engineering in Mechanical Engineering
Major Code: BEMENG
Level: underGraduate
Number Of Credits: 150
Date: 10-08-2022

Bachelor of Engineering in Mechanical Engineering (BEMENG)

First Year

Fall Semester

Code	Title	Credits	Prerequisites	Corequisites
CHEM200	General Chemistry	3	ENGL101-CHEM160	
MATH210	Calculus II	3	MATH161-MATH160	
MATH225	Linear Algebra with Applications	3	ENGL051-MATH161	
MENG225	Engineering Drawing & CAD	3		
ENGL201	Composition and Research Skills	3	ENGL151	
Total		15		

Spring Semester

Code	Title	Credits	Prerequisites	Corequisites
MENG250	Statics	3	MATH161-MATH160-PHYS161-PHYS160-ENGL051	MATH210
MATH270	Ordinary Differential Equations	3	MATH210	MATH225
ENGL251	Communication Skills	3	ENGL201	
EENG250	Electric Circuits I	3	PHYS161-PHYS160-MATH161-MATH160-ENGL051	MATH210
MATH220	Calculus III	3	MATH210	
Total		15		

Summer Semester

Code	Title	Credits	Prerequisites	Corequisites
PHYS220	Physics for Engineers	3	PHYS161-ENGL101-PHYS160	MATH210
CSCI250	Introduction to Programming	3		ENGL101-CSCI250L
CSCI250L	Introduction to Programming Lab	1		ENGL101-CSCI250
Total		7		

Second Year

Fall Semester

Code	Title	Credits	Prerequisites	Corequisites
MATH310	Probability & Statistics for Scientists & Engineers	3	MATH210-ENGL201	
MENG320L	Engineering Thermodynamics I Lab	1		CHEM200-MENG320
MENG320	Engineering Thermodynamics I	3	MENG250	CHEM200-MENG320L
MENG310	Engineering Material Science	3	MENG250	CHEM200

MENG300	Dynamics	3	ENGL051-ENGL101-MENG250	PHYS220-MATH220
ENGG300	Engineering Economics	3	ENGL201-MATH225-MATH220	
Total		16		

Spring Semester

Code	Title	Credits	Prerequisites	Corequisites
EENG370L	Industrial Electronics Lab	1		EENG370
MENG370L	Fluid Mechanics I Lab	1	MENG300	MENG370
MENG370	Fluid Mechanics I	3	MENG300	MATH375-MENG370L
MENG360L	Mechanics Of Materials I Lab	1	MENG310	MENG360
MENG360	Mechanics of Materials I	3	MENG310	MENG360L
MATH375	Numerical Methods for Scientists & Engineers	3	ENGL051-MATH270-MATH225	
EENG370	Industrial Electronics	3	EENG250	EENG370L
Total		15		

Summer Semester

Code	Title	Credits	Prerequisites	Corequisites
ARAB200	Arabic Language and Literature	3		
	General Education Electives	3		
Total		6		

Third Year

Fall Semester

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

Spring Semester

Code	Title	Credits	Prerequisites	Corequisites
ENGG450	Engineering Ethics and Professional Practice	3	ENGL251	ENGG300
EENG492L	Electric Machines For Mechanical Engineers Lab	1		EENG492
MENG450L	Mechanical Systems I Lab	1	MENG300-MENG225	MENG450
MENG470	Internal Combustion Engines	3	MENG420	
MENG560	Machine Design I	3	MENG410	
EENG492	Electric Machines For Mechanical Engineers	3	PHYS220-EENG370	MENG430-EENG492L
MENG450	Mechanical Systems I	3	MENG300	MENG430-MENG450L

Total	17	
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Summer Semester

Code	Title	Credits	Prerequisites	Corequisites
ENGG499	Practical Experience	4		
Total	4			

Fourth Year

Fall Semester

Code	Title	Credits	Prerequisites	Corequisites
MENG610	Machine Design II	3	MENG560	MENG501L
MENG615	Refrigeration & Air conditioning	3	MENG470	MENG610-MENG520-MENG525-MENG615L
MENG615L	Refrigeration & Air conditioning Lab.	1		MENG615
MENG520	Fluid Mechanics II	3	MENG470	
MENG525	Engineering Thermodynamics II	3	MENG420	
MENG601	Hydraulic and Pneumatic Systems	3	MENG470	MENG610-MENG525-MENG520
MENG501L	Mechanical Engineering Workshop	1	MENG450L	
Total	17			

Spring Semester

Code	Title	Credits	Prerequisites	Corequisites
	Major Elective	3		
	Major Elective	3		
CULT200	Introduction to Arab - Islamic Civilization	3		
	Major Elective	3		
MENG550	Mechanical Systems II	3	MENG450	
Total	15			

Summer Semester

Code	Title	Credits	Prerequisites	Corequisites
MENG596	Capstone Project	6	MENG550-MENG615-MENG601-ENGL251-MENG610	
Total	6			

Major Elective Courses

Code	Title	Credits	Prerequisites	Corequisites
EENG585	Introduction to Mechatronics	3	MENG250-MENG601-EENG492-EENG435	
MENG555	Introduction To Finite Element Analysis	3		MENG560
MENG580	Advanced Heat Transfer	3	MENG520	
MENG585	Solar Energy & Thermal Systems	3	MENG525-MENG520	
MENG591	Automotive Engineering Fundamentals	3	MENG550	MENG591L
MENG591L	Automotive Engineering Fundamentals Lab	1	MENG550	MENG591
MENG595	Turbomachinery	3	MENG525-MENG520	

MENG615	Refrigeration & Air conditioning	3	MENG470	MENG610-MENG520-MENG525-MENG615L
MENG615L	Refrigeration & Air conditioning Lab.	1		MENG615
MENG655	Power Plant Engineering	3	MENG525-MENG520	