The International University of Beirut
الجامعة الدولية في بيروت

Major Title: Bachelor of Engineering in Industrial Engineering
Major Code: BEIENG
Level: underGraduate
Number Of Credits: 150
Date: 19-05-2023

Bachelor of Engineering in Industrial Engineering (BEIENG)

First Year

Fall Semester

Code	Title	Credits	Prerequisites	Corequisites
MATH225	Linear Algebra with Applications	3	ENGL051 - MATH161	
CHEM200	General Chemistry	3	ENGL101 - CHEM160	
ENGG200	Introduction to Engineering	3	MATH160 - CHEM160	
PHYS220	Physics for Engineers	3	PHYS161 - ENGL101 - PHYS160	MATH210
MATH210	Calculus II	3	MATH161 - MATH160	
Total		15		

Spring Semester

Code	Title	Credits	Prerequisites	Corequisites
MATH220	Calculus III	3	MATH210	
CSCI250	Introduction to Programming	3		ENGL101 - CSCI250L
CSCI250L	Introduction to Programming Lab	1		ENGL101 - CSCI250
MENG250	Statics	3	MATH161 - MATH160 - PHYS161 - PHYS160 - ENGL051	MATH210
MATH270	Ordinary Differential Equations	3	MATH210	MATH225
EENG250	Electric Circuits I	3	PHYS161 - PHYS160 - MATH161 - MATH160 - ENGL051	ENGG200 - MATH210
Total		16		

Summer Semester

Code	Title	Credits	Prerequisites	Corequisites
MENG225	Engineering Drawing & CAD	3		
ENGL201	Composition and Research Skills	3	ENGL151	
Total		6		

Second Year

Fall Semester

Code	Title	Credits	Prerequisites	Corequisites
	Elective	3		
ENGG300	Engineering Economics	3	ENGL201 - MATH225 - MATH220	
IENG320	Introduction to Environmental Engineering	3	ENGL201	
IENG310L	Industrial Engineering Field Visit	1	ENGL201	
MATH310	Probability & Statistics for Scientists & Engineers	3	MATH210 - ENGL201	
MENG310	Engineering Material Science	3	MENG250	CHEM200
Total		16		

Spring Semester

Code	Title	Credits	Prerequisites	Corequisites
ENGL251	Communication Skills	3	ENGL201	
EENG370L	Industrial Electronics Lab	1		EENG370
IENG370	Industrial Systems Simulation	3	MATH310 - CSCI250	
IENG350	Introduction to System Engineering	3	ENGG200 - CSCI250	
IENG360	Operations Analysis Methods	3	MATH310	

EENG370	Industrial Electronics	3	EENG250	EENG370L
Total		16		
Summer Semester				
Code	**Title**	**Credits**	**Prerequisites**	**Corequisites**
ARAB200	Arabic Language and Literature	3		
	Elective	3		
Total		6		

Third Year

Fall Semester				
Code	**Title**	**Credits**	**Prerequisites**	**Corequisites**
IENG410	Human Factors Engineering	3	IENG350 - ENGL201	
IENG420	Industrial Engineering Information Systems	3	IENG350	
IENG440	Quality Control and Reliability	3	IENG360	
IENG430	Inventory Control	3	IENG350 - CSCI250	
IENG400	Design and Analysis of Engineering Experiments	3	IENG370 - MATH310 - CSCI250	
Total		15		
Spring Semester				
Code	**Title**	**Credits**	**Prerequisites**	**Corequisites**
IENG480	Manufacturing Processes	3	IENG400 - IENG430	
IENG470	Facilities Planning	3	IENG440 - IENG430	
IENG460	Production Planning and Control	3	IENG430 - IENG360	
IENG450	Industrial Engineering CAD/CAM Tools	3	IENG350	
ENGG450	Engineering Ethics and Professional Practice	3	ENGL251	ENGG300
Total		15		
Summer Semester				
Code	**Title**	**Credits**	**Prerequisites**	**Corequisites**
CULT200	Introduction to Arab - Islamic Civilization	3		
ENGG499	Practical Experience	4		
Total		7		

Fourth Year

Fall Semester				
Code	**Title**	**Credits**	**Prerequisites**	**Corequisites**
IENG515	Organizational Environments	3	IENG410	
EENG500L	Industrial Systems Automation and Control Lab	1		EENG500
EENG500	Industrial Systems Automation and Control	3	CSCI250	EENG500L
	Elective	3		
IENG510	Manufacturing Systems	3	IENG460 - IENG360	
IENG615	Operations Research	3	IENG460 - IENG430	
Total		16		
Spring Semester				
Code	**Title**	**Credits**	**Prerequisites**	**Corequisites**
IENG551L	Industrial and Manufacturing Workshop	1	IENG510	
	Elective	3		
	Elective	3		
IENG570	Occupational Safety Engineering	3	IENG470	
IENG565	Industrial Waste Management	3	IENG515 - IENG320	

IENG555	Advanced Concepts in Quality Improvement	3	IENG440	
Total		16		
Summer Semester				
Code	**Title**	**Credits**	**Prerequisites**	**Corequisites**
IENG595	Capstone Project	6	IENG615 - IENG555 - ENGG450	
Total		6		
Major Elective Courses				
Code	**Title**	**Credits**	**Prerequisites**	**Corequisites**
EENG601	Advanced Systems Automation	3	EENG500	
ENGG510	Methods of Optimization	3	ENGG450 - MATH310 - MATH270 - MATH220	IENG615
ENGG550	Engineering Project Management and Control	3	IENG420	
ENGG600	Engineering Entrepreneurship	3	ENGG450 - IENG515	
IENG560	Infrastructure and Facilities Management	3	IENG510	
IENG610	Selected Topics in Industrial Engineering	3	ENGG450	
IENG625	Data Analysis and Decision Models	3	IENG410 - MATH310	
IENG635	Food Engineering	3	IENG510 - IENG440	
IENG640	Fundamentals of Petroleum and Petrochemical Engineering	3	IENG570 - IENG480 - IENG320	
IENG665	Oil and Gas Production Logistics	3	IENG640	
IENG680	Food Manufacturing Processes	3	IENG635	