

Al-Ahliyya Amman University
Faculty of Engineering
Department of Medical Engineering
(160) Credit Hours
Study Plan 2019-2020



First: University Requirements: (24) Credit Hours

1) Compulsory University Requirements: (12) Credit Hours

Course no.	Course Title	Cr.H.	Prerequisite	Exception
A0161101	Arabic Communication Skills	3	A0161100	-
A0161201	English Communication Skills	3	A0161200	-
A0161301	National Education	3	-	-
A0161401	Military Sciences	3	-	Non Jordanian

2) Elective University Requirements: (12) Credit Hours

A) First group: (6) Credit Hours

Course no.	Course Title	Cr.H.	Prerequisite	Exception
A0161501	Islamic Culture	3	-	-
A0161601	Contemporary Issues	3	-	-
A0161701	History of Jordan and Palestine	3	-	-
A0161901	Media and Puplic Relations	3	-	-
A0411601	Legal Education and Human Rights	3	-	Law students
A0161703	Archaeology and tourism in Jordan	3	-	Marketing students

B) Second group: (6) Credit Hours

Course no.	Course Title	Cr.H.	Prerequisite	Exception
A0161602	Critical Thinking Skills	3	-	-
A0161603	Entrepreneurship Skills	3	-	-
A0161801	Environment and Public Safety	3	-	-
A0181100	Sport and Health	3	-	Physical Education Students
A0612303	Community Health	3	-	Nursing Students
A0871103	Principles of Renewable Energy	3	-	Electrical Engineering Students

Second: Faculty Compulsory Requirements: (37) Credit Hours

Course no.	Course Title	Cr.H.	Prerequisite	Co-requisite
A0111101	Mathematics (1)	3	-	-
A0111102	Mathematics (2)	3	A0111101	-
A0111201	General Physics (1)	3	-	-
A0111202	General Physics (2)	3	A0111201	-
A0111203	General Physics Lab.	1	-	A0111201
A0111301	General Chemistry	3	-	-
A0112101	Linear Algebra	3	A0111102	-
A0811201	Computer Skills (Engineering)	3	A0331700	-
A0811202	Engineering Workshop	1	-	-
A0812201	Communication Skills and Professional Ethics	3	A0161201	-
A0831201	Engineering Drawing	2	-	-
A0832101	Differential Equations	3	*A0111102	-
A0832102	Engineering Statistics	3	A0111101	-
A0833101	Numerical Analysis	3	A0112101	-

Community Service is a Mandatory Graduation Requirement (10 hours of service).

* This prerequisite must be successfully passed before registering the course

Third: Major Requirements: (99) Credit Hours

A) Compulsory Major Requirements: (50) Credit Hours

Course no.	Course Title	Cr.H.	Prerequisite	Co-requisite
A0832601	Biomechanics (1)	3	*A0111201	-
A0833301	Medical Electronics	3	A0822502	-
A0833302	Simulation Lab. for Medical Engineering	1	A0833301	-
A0833601	Biomechanics (2)	3	*A0832601	A1111103
A0833602	Biomaterials	2	A0111301	A0833601
A0834301	Computer Applications in ME	3	A0112101 A0811201	-
A0834302	Medical Instrumentation (1)	3	A1112204 A0833301	-
A0834303	Medical Sensors and Biotelemetry	3	A0834302 A0823402	-
A0834304	Medical Instrumentation (2)	3	*A0834302	-
A0834305	Medical Instrumentation Lab.	1	-	A0834304
A0834306	Medical Sensors and Biotelemetry Lab.	1	A0834303	-
A0834601	Medical Rehabilitation Engineering	3	A0833601	A0834303
A0834602	Biomechanics and Rehabilitation Lab.	1	-	A0834601
A0834701	Field Training	3	Pass (115) Cr.H	-
A0835301	Design Concepts in Biomedical Engineering	3	A0834304	-
A0835302	Medical Technology Management	2	A0834304	-
A0835401	Medical Imaging Systems	3	A0834304	-
A0835402	Medical Digital Image Processing	3	*A0823401	-
A0835501	Selected Topics in Medical Engineering	3	Department Approval	A0835301
A0835701	Graduation Project (1)	1	Pass Field Training *A0834701	A0835301
A0835702	Graduation Project (2)	2	A0835701	-

B) Ancillary Major Requirements: (40) Credit Hours

Course no.	Course Title	Cr.H.	Prerequisite	Co-requisite
A1111103	Anatomy	3	-	-
A1112204	Physiology	3	-	-
A0812401	Digital Logic Circuits	3	A0111101	-
A0812402	Digital Logic Circuits Lab.	1	-	A0812401
A0813201	Engineering Economy and Management	3	A0111101	-
A0822502	Electronics	3	*A0872303	-
A0823502	Electronics Lab.	1	-	A0822502
A0823401	Signals and Systems	3	A0872303	-
A0823402	Communication Systems	3	A0823401	-
A0823503	Digital Electronics	3	A0822502	-
A0823504	Digital Electronics Lab	1	-	A0823503
A0824403	Digital Signal Processing	3	A0823401	-
A0872303	Electrical Circuits	3	A0111202	-
A0872304	Electric circuits Lab.	1	-	A0872303
A0873501	Machines and Electrical Power	3	A0872303	-
A0874501	Control Systems	3	A0823401	-

C) Elective Major Requirements: (9) Credit Hours

Course no.	Course Title	Cr.H.	Prerequisite	Co-requisite
A0813403	Microprocessors and Embedded Systems	3	A0812401	-
A0834401	Data Mining and Pattern Recognition	3	A0834301	-
A0834603	Fluid Mechanics for ME	3	A0833601	-
A0834604	Tissue Engineering	3	A0834601 A0833602	-
A0835303	Laboratory Instrumentation and Medical Laser	3	A0834304	-
A0835304	Implanted Medical Devices	3	A0834304	-
A0835403	Bioinformatics	3	A0834301	-
A0835601	Prosthetic and Artificial Organs	3	A0834601	-
A0835602	Nanotechnology in ME	3	A0834601	-

Fourth: Remedial Requirements (to a student who has not passed the level exam)

Course no.	Course Title	Cr.H.	Prerequisite
A0161100	Arabic Language (Remedial)	3	-
A0161200	English Language (Remedial)	3	-
A0331700	Computer Skills (Remedial)	3	-



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