



Total Credit Hours (160) Hrs.

Student Name: _____

Student No : _____

Academic Advisor: _____

First: University Requirements (27) Cr. Hr.				
A. First Field: University Compulsory Requirements: (18) Cr. Hr.				
Course No.	Course Title	Cr.Hrs	Prerequisite	Kind of Learning
115001	Military Science *	3	---	ONLINE
116101	National Education	3	---	ONLINE
116102	Entrepreneurship, Innovation, and Leadership skills	3	---	ONLINE
116103	Communication and Contact Skills (Arabic Language)	3	116099	Physical
116107	Communication and Contact Skills (English Language 1)	3	116098	Physical
116108	Communication and Contact Skills (English Language 2)	3	116107	Physical
116109	Voluntary Community Service	0	---	ONLINE
* Compulsory for Jordanian Students				
B. University Elective Courses (9) Cr. Hr.				
The student studies 9 credit hours from the table below:				
Course No.	Course Title	Cr. Hr.	Prerequisite	Kind of Learning
116105	Thinking Skills	3	---	Blended
116106	Economic Culture	3	---	Blended
116111	Language Skills (1) (European or Eastern languages)	3	---	Blended
116112	Language Skills (2) (European or Eastern languages)	3	116111	Blended
116113	Language Skills (3) (European or Eastern languages)	3	116112	Blended
116114	Introduction to Project Management "For Non – Engineering Students"	3	---	Blended
116143	Legal Culture	3	---	Blended
216102	Data Analysis Skills " For Non-Engineering Students"	3	---	Blended
216104	Digital Culture	3	---	Blended
Notes: -				
All students must take level examinations in Arabic Language, English language and Computer skills. Student who fails to pass in any examinations (less than 50 %) must successfully pass the remedial course which He / She did not pass.				
Codes used in Curriculum:				
(610) Electrical Eng. (620) Mechanical Eng.				
(611) Renewable Energy Eng. (640) Mechatronics Eng.				

Second: Faculty Requirements: (24) Cr. Hr.				
Course No.	Course Title	Cr.Hr.	Prerequisite	Kind of Learning
216111	Calculus (1)	3	---	Physical
250102	Calculus (2)	3	216111	Physical
216131	General Physics (1)	3	---	Physical
216132	General Physics (2)	3	216131	Blended
620130	Manual Engineering Drawing	1	---	Physical
620132	Computer Engineering Drawing	1	620130	Physical
620171	Engineering Workshop (1)	1	---	Physical
610263	Programming Language	3	216099	Blended
640253	Engineering Skills	3	116108	ONLINE
610550	Entrepreneurship	3	640253	ONLINE

Third: Department Requirements (109) Cr.Hrs.				
A. Compulsory Requirements: (80) Cr.Hrs.				
Course No.	Course Title	Cr.Hr.	Prerequisite	Kind of Learning
610218	Electrical Circuits	3	216132	Physical
610216	Electrical Circuits Lab.	1	610218(*)	Physical
620213	Solid Mechanics	3	620211	Physical
620434	Machine Design (1)	3	620213	Physical
620211	Statics	3	250102+216131	Blended
620212	Dynamics	3	620211	Blended
610242	Electronics (1)	3	610218	Blended
610332	Instruments and Measurements	3	024216	Physical
610310	Electrical Machines	3	610218	Physical
620320	Fluid Mechanics (1)	3	620212	Blended
620429	Fluid Mechanics Lab.	1	620320(*)	Physical
620323	Thermodynamics (1)	3	216132+250102	Physical
620420	Heat transfer (1)	3	620320 + 620323	Physical
620427	Thermal Lab.	1	620420(*)	Physical
620373	Properties of Engineering Materials	3	216141	ONLINE

Course No.	Course Title	Cr .Hrs.	Prerequisite	Kind of Learning
611341	Introduction to Renewable Energy	3	216132	Blended
610414	Automatic Control	3	610332+610260	Physical
611430	Electrical Power System	3	610310	Physical
611312	Energy Economics and Management	3	611341	Physical
611411	Energy Legislations	3	611312	Blended
611421	Solar Thermal Energy	3	611341 +620420	Physical
611422	Photovoltaic Energy System	3	611341	Physical
611440	Engineering Project (1)	1	(100) Cr.Hr	Physical
611511	Environmental Impact of energy	3	611312	Physical
611531	Wind Energy Systems	3	620320	Physical
611526	Solar Energy Lab.	1	611421(*) +611422(*)	Physical
611536	Wind Energy Lab.	1	611531(*)	Physical
610530	Power Electronics	3	610242	Physical
611533	Energy Storage Systems and Fuel Cells	3	611341+216141	Physical
611540	Engineering Project (2)	2	611499+611440	Physical
611499	Engineering Training (**)	3	Cr.Hr (115)	Physical

B. Compulsory Support Requirements: (20) Cr. Hr.

Course No.	Course Title	Cr.Hr	Prerequisite	Kind of Learning
216141	General Chemistry (1)	3	---	Physical
216143	General Chemistry Lab.	1	216141	Physical
250202	Calculus (3)	3	250102	Physical
250205	Linear Algebra and Vector Calculus	3	250102	Blended
610262	Engineering Analysis (2)	3	250205	Blended
611301	Engineering Statistics	3	610260	Blended
620172	Engineering Workshop (2)	1	620171	Physical
610260	Engineering Analysis (1)	3	250102	Blended

C. Elective Requirements: (9) Cr. Hr.

Course No.	Course Title	Cr.Hrs	Prerequisite	Kind of Learning
611541	Bioenergy Systems	3	611341	Blended
611542	Geothermal Energy	3	611341 +620420	Blended
611543	Hydraulic and Waves Energy	3	611341+620320	Blended
611544	Special Topics in Renewable Energy	3	Dept. Approval	Blended
611546	Smart Grids	3	611430	Blended
640329	Modeling and Simulation	3	610262+611301	Blended

(*) Concurrent

(**) Seven weeks (280 working hours) for training after completing (115) Gr.Hr.



C. 4/1/20

5/10/2022