Philadelphia University
Study Plan (2026-2027)
B.Sc. in Electrical Engineering

Faculty of Engineering and Technology

Student Name: _____
Student No : _____
Academic Advisor: _____

Total Credit Hours (160) Hrs.

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
116002	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
116116	Personal and Professional Skills	3	Dept. Approval	Blended
116117	Financial and Economic Literacy	3	Dept. Approval	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
216113	Sustainable Development and the Environment	3	Dept. Approval	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.
(670) Civil Eng.

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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
620173	Engineering Workshops	1	---	Physical
610266	Artificial Intelligence & Data analytics in Engineering	3	216099	Blended
610358	Engineering Innovation & Tech. Entrepreneurship	3	116108	ONLINE
670558	Engineering Economics & Digital Applications	3	610358	Blended

Third: Department Requirements (109) Cr.Hrs.
A. Compulsory Requirements: (77) Cr.Hrs.

Course No.	Course Title	Cr.Hr.	Prerequisite	Kind of Learning
610211	Electrical Circuits (1)	3	216132	Physical
610212	Electrical Circuits (2)	3	610211	Physical
610216	Electrical Circuits Lab.	1	610211 (*)	Physical
610313	Electromagnetic Fields	3	610260	Physical
610220	Logic Circuits	3	610211	Physical
610222	Logic Circuits Lab.	1	610220 (*)	Physical
610242	Electronics (1)	3	610211	Blended
610342	Electronics (2)	3	610242	Physical
610343	Electronics (1) Lab.	1	610242 (*)	Physical
610323	Microprocessors	3	610220	Physical
610324	Microprocessors Lab.	1	610323(*)	Physical
610314	Electrical Machines (1)	3	610313	Physical
610316	Electrical Machines (1) Lab.	1	610314(*)	Physical
610325	Systems and Signals	3	610260	Blended
610332	Instruments and Measurements	3	610342	Physical
610344	Digital Electronics	3	610242	Blended
610411	Power System (1)	3	610314	Physical
610412	Power System (2)	3	610411+610262	Physical
610414	Automatic Control	3	610332+640263	Physical
610424	Embedded Systems Design	3	610323	Physical
610416	Automatic Control Lab.	1	610414(*)	Physical
610417	Power System Lab.	1	610411(*)	Physical

Course No.	Course Title	Cr .Hrs.	Prerequisite	Kind of Learning
610420	Analogue Communications	3	610325	Blended
610428	Communications Lab.	1	610420(*)	Physical
610440	Engineering Project (1)	1	100 Cr.Hr.	Physical
640458	Reverse Engineering	3	640263	Blended
610514	Electrical Machines (2)	3	610314	Physical
610527	Communication Systems	3	610420	ONLINE
610530	Power Electronics	3	610342	Physical
611341	Introduction to Renewable Energy	3	216132	ONLINE
610540	Engineering Project (2)	2	610440+ 610499	Physical
610499	Engineering Training (**)	3	(115) Cr.Hr+610490	Physical

B. Compulsory Support Requirements: (23) Cr. Hr.

Course No.	Course Title	Cr.H.r	Prerequisite	Kind of Learning
216141	General Chemistry (1)	3	---	Physical
250202	Calculus (3)	3	250102	Physical
250205	Linear Algebra and Vector Calculus	3	250102	Blended
610262	Engineering Analysis (2)	3	250205	Blended
610490	Vocational Qualification	2	(100) Cr. Hr.	Physical
610260	Engineering Analysis (1)	3	250102	Blended
640263	Modeling & Simulation in Engineering Applications	3	610260	Blended
610364	Probability and Random Variables	3	610260	Blended

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

Course No.	Course Title	Cr.Hrs	Prerequisite	Kind of Learning
610419	Electrical Installation	3	610411	Blended
610519	Electric and Hybrid Vehicle Engineering	3	610314	Blended
610515	Transmission& Distribution of Power Systems	3	610411	Blended
610516	Special Topics in Electrical Engineering	3	Dept. Approval	Blended
610520	Operating and Control of Power System	3	610411	Blended
610586	Power Systems Reliability	3	610411	Blended

(*) Concurrent
(**) Seven weeks (280 hours) of training after completing (115) Cr.Hrs.