Philadelphia University
Faculty of Science
Department of Mathematics
Study Plan for Bachelor's Degree of Mathematics (2022-2023)
(132 Credit Hours)

First: University Requirements (Total 27 Credit Hours)

A. University Obligatory Requirements (18 Credit Hours)

Course No	Course Name	Credit Hours	Prerequist	Delivery Method
0115001	Military Science **	3	---	Online
0116101	National Education	3	---	Online
0116102	Leadership and Social Responsibility	1	---	Online
0116103	Communication Skills (Arabic Language)	3	0114099	Physical
0116107	Communication Skills (English Language 1)	3	0130099	Physical
0116108	Communication Skills (English Language 2)	3	0116107	Physical
0116109	Volunteer work in community service	0	---	Physical

** is compulsory for Jordanian students and ellective for non Jordanians

B. University Elective Requirements (9 Credit Hours)

The student chooses 9 credit hours from the following subjects

Course No	Course Name	Credit Hours	Prerequist	Delivery Method
0116105	Thinking Skills	3	----	Blended
0116106	Economic Culture	3	---	Blended
0116111	Language Skills (1) (European or Eastern)	3	----	Blended
0116112	Language skills (2) (European or Eastern)	3	0116111	Blended
0116114	Introduction to Project Management	3	---	Blended
0116133	Human Vision & Civilization	3	---	Blended
0116140	Human Rights	3	---	Blended
0116143	Legal Culture	3	---	Blended
0216102	Data Analysis Skills	3	---	Blended
0216104	Digital Cilture	3	---	Blended
0216105	Health Education	3	---	Blended

NOTE:

Each student is expected to pass a test evaluating his proficiency in Arabic and English languages, in adition to assessing his computer driving skills. Those who fail these exams (< 50%) should study (pre) courses

0116099 pre-arabic
0116098 pre-english
0216099 pre-computer

Second: Faculty Requirements (Total 18 Credit Hours)

A. Faculty Compulsary Requirements (12 Credit Hours)

Course No	Course Name	Credit Hours	Prerequist	Delivery Method
0216111	Calculus (1)	3	----	Physical
0216131	General Physics (1)	3	----	Physical
0216141	General Chemistry (1)	3	----	Physical
0216151	General Biology (1)	3	----	Physical

B. Faculty Elective Requirements (6 Credit Hours)

The student chooses 6 credit hours from the following subjects

Course No	Course Name	Credit Hours	Prerequist	Delivery Method
0216125	Biostatistics	3	0216121	Online
0216132	General Physics (2)	3	0216131	Blended
0216142	General Chemistry (2)	3	0216141	Online
0750115	C++ Programming for Scientists	3	---	Blended

Third: Major Requirements (Total 84 Credit Hours)

A. Obligatory Requirements (78 Credit Hours)

Course No	Course Name	Credit Hours	Prerequist	Delivery Method
0216121	Introduction to Probability & Statistics	3	----	Physical
0250102	Calculus (2)	3	0216111	Physical
0250202	Calculus (3)	3	0250102	Physical
0250203	Ordinary Differentional Equations	3	0250202 (0750099 or sync.)	Physical
0250232	Propability Theory	3	0216121 0250202	Physical
0250241	Linear Algebra (1)	3	0216111	Physical
0250251	Set Theory	3	0250102	Physical
0250262	Modern Euclidan Geametry (1)	3	0250251	Physical
0250302	Calculus (4)	3	0250202	Physical
0250305	Partial Differential Equations	3	0250203	Physical
0250311	Real Analysis	3	0250251	Physical
0250312	Complex Analysis	3	0250311	Physical
0250313	Number Theory	3	0250251	Physical
0250332	Mathematical Statistics	3	0250232	Blended
0250341	Linear Algebara (2)	3	0250241	Physical
0250352	Graph Theory and Combinatorics	3	0250251	Blended
0250342	Abstract Algebra (1)	3	0250251	Physical
0250371	Numerical Analysis	3	0250203	Physical
0250372	Computer Aided Math *	3	0250203	Blended
0250373	Linnear Programming	3	0250241	Blended
0250381	Problem Solving	3	0250311	Blended
0250411	Real Analysis (2)	3	0250311	Physical
0250442	Abstract Algebra (2)	3	0250342	Physical
0250465	Topology	3	0250311	Physical
0250471	Mathematical Modeling	3	0250203	Blended
0250481	Teaching Methods Math	3	0250262	Blended
0250492	Special Topics	3	0250341	Blended

* Theoretical and practical

B. Elective Requirements (6 Credit Hours)

The student chooses 6 credit hours from the following subjects

Course No	Course Name	Credit Hours	Prerequist	Delivery Method
0250333	Applied Probability	3	0250232	Online
0250444	Matrix Theory	3	0250241	Blended
0250453	History of Math	3	0250313 0250262	Blended
0250467	Modern Euclidean Geometry (2)	3	0250262	Online
0250475	Special Functions	3	0250311	Blended
0250476	Game Theory	3	0250241	Blended