

First: University Requirements (27 Credit Hours)

A. University Compulsory Requirements (18 Credit Hours)

Course No	Course Name	Teachin Method	Credit Hours	Prerequist
011500100	Military Science*	Online	3	----
011610100	National Education	Online	3	----
011610200	Leadership, Innovation, and Entrepreneurship Skills	Online	3	----
011610300	Communication Skills (Arabic Language)	Physical	3	011609900
011610700	Communication Skills (English Language 1)	Physical	3	011609800
011610800	Communication Skills (English Language 2)	Physical	3	011610700
011610900	Volunteer Work in Community Service	Physical	0	----

Compulsory for Jordanian students and elective for non-Jordanian students*

Second: Faculty Requirements (18 Credit Hours)

Course No	Course Name	Teachin Method	Credit Hours	Prerequist
021611100	Calculus (1)	Physical	3	----
021612400	Introduction to Probability & Statistics (1)	Blended	3	----
021613100	General Physics (1)	Physical	3	----
021614100	General Chemistry (1)	Physical	3	----
021615100	General Biology (1)	Physical	3	----
021616100	Introduction to Scientific Programming Using Python**	Physical	2	021609900
021616200	Data Analysis and Digital Tools**	Physical	2	021609900
021617100	English for Science	Physical	2	011609800

Theoretical and Practical Course**

B. University Elective Requirements (9 Credit Hours)

The student selects 9 credit hours from the following courses:

Course No	Course Name	Teachin Method	Credit Hours	Prerequist
011611600	Personal and Professional Skills	Blended	3	Department Approval
011611700	Financial and Economic Literacy	Blended	3	Department Approval
011611100	Language Skills (1) (European or Eastern)	Blended	3	----
011611200	Language Skills (2) (European or Eastern)	Blended	3	011611100
011611300	Language Skills (3) (European or Eastern)	Blended	3	011611200
021611300	Sustainable Development and Environment	Blended	3	Department Approval

Note:

All students are required to take the placement tests in Arabic Language, English Language, and Computer Skills.

A student who fails to pass any of these tests (with a score below 50%) must register for and successfully complete the corresponding remedial course.

011609900 Pre-Arabic
011609800 Pre-English
021609900 Pre-Computer

Third: Major Requirements (86 Credit Hours)

A. Major Compulsory Requirements (80 Credit Hours)

Course No	Course Name	Teachin Method	Credit Hours	Prerequist
025010200	Calculus (2)	Physical	3	021611100
025013200	Introduction to Probability & Statistics (2)	Online	3	021612400
025020200	Calculus (3)	Physical	3	025010200
025020300	Ordinary Differential Equations	Blended	3	025020200
025023200	Propability Theory	Physical	3	021612400+025020200
025024200	Linear Algebra for Artificial Intelligence and Data Science	Blended	3	021611100
025025100	Set Theory	Physical	3	025010200
025026200	Modern Eucliddan Geametry (1)	Physical	3	025025100
025030200	Calculus (4)	Physical	3	025020200
025030500	Partial Differential Equations	Blended	3	025020300
025031100	Real Analysis (1)	Physical	3	025025100
025031200	Complex Analysis	Physical	3	025031100
025031300	Number Theory	Physical	3	025025100
025033200	Mathematical Statistics	Blended	3	025023200
025034200	Abstract Algebra (1)	Physical	3	025025100
025034300	Advanced Linear Algebra	Physical	3	025024200
025035200	Graph Theory and Combinatorics	Blended	3	025025100

Course No	Course Name	Teachin Method	Credit Hours	Prerequist
025037300	Linnear Programming	Blended	3	025024200
025037400	Numerical Methods Using Python**	Physical	3	025020300 + 021616100
025038100	Problem Solving	Blended	3	025031100
025041100	Real Analysis (2)	Physical	3	025031100
025044200	Abstract Algebra (2)	Physical	3	025034200
025046500	Topology	Physical	3	025031100
025047700	Computational Mathematical Modeling**	Blended	3	025020300
025047800	Professional Scientific Communication	Blended	2	025026200
025048300	Graduation Project	Physical	3	Department Approval
025049300	Field Training	Physical	3	Department Approval

Theoretical and Practical Course**

B. Major Elective Requirements (6 Credit Hours)

The student selects 6 credit hours from the following courses:

Course No	Course Name	Teachin Method	Credit Hours	Prerequist
025033300	Applied Probability	Online	3	025023200
025044400	Matrix Theory	Blended	3	025024200
025045300	History of Mathematics	Blended	3	025031300 + 025026200
025046700	Modern Euclidean Geometry (2)	Online	3	025026200
025047500	Special Functions	Blended	3	025031100
025047600	Game Theory	Blended	3	025024200

