

Faculty of Information Technology Study Plan Form
Data Science & Artificial Intelligence
Number of Credit Hours: 135

First: University Compulsory Requirements – (12) Credit Hours:

Course No.	Course Title	CH	Pre.
01101101	Military Science	3	For Jordanian Only*
01101112	English Language	3	01100012
01101111	Arabic Language	3	01100011
01101102	National Education	3	For Jordanian Only*

Second: University Selective Requirements - (12) Credit Hours:

Course No.	Course Title	Hrs	Pre.
01101103	Traffic awareness	3	-
01101104	Leadership and creativity	3	-
01101121	Life skills	3	-
01101131	Islamic Culture	3	-
01101132	Jerusalem and the Hashemite Trusteeship	3	-
01101141	Sports and Health	3	-
01101142	Environment and society	3	-
01101151	Computer Skills	3	01100051
01101161	Economic concepts and systems	3	-
01101171	Psychology and Society	3	-
01101152	Communication and Internet	3	-
01101213	Communication skills in Arabic language	3	101099
01101214	Communication skills in English language	3	102099
01101243	Public safety and first aid	3	-
01101281	Scientific Research Methods	3	-
01101282	Introduction to Astronomy	3	-
03011101	Law in our Life	3	-
03021201	Human Rights	3	-

Third: Faculty Compulsory Requirements - (21) Credit Hours:

Course No.	Course Title	CH	Theoretical	Practical	Pre.
11021101	General Physics (1)	3	3	0	-
11031101	Calculus (1)	3	3	0	-
06051110	Programming Methodology	3	3	0	-
06051200	Discrete Mathematics	3	3	0	-
06051220	Logic Design	3	2	2	11021101
06051211	Programming Fundamentals	3	2	2	-
06032102	Data Structures	3	2	2	06051211

* None Jordanian students can enroll in this course or choose any other university course.

** Students must take pre-courses in the case of failure in the following Pre-exams:

Pre-Arabic Language (01100011),
Pre-English Language (01100012)
Pre-Computer Skills (01100053)

Fourth: Department Requirements – (87) Credit Hours, distributed as the following:

A. Compulsory Requirements (72) Credit Hours:

Course No.	Course Title	CH	Th.	Pra.	Pre.
06032112	Object Oriented Paradigms	3	2	2	06051211
06012201	Algorithms	3	3	0	06032102
06033113	Visual Programming	3	2	2	06032112
06012232	Information Systems Analysis & Design	3	3	0	06032112
06032122	Computer Architecture	3	3	0	06051220
06052221	Computer Organization and Design	3	3	0	06032122
06083223	Operating System	3	3	0	06032122
06082140	Computer Networks	3	3	0	06051220
06042150	Information Security	3	3	0	11031230
06013214	Web Design (1)	3	2	2	06012201
06013130	Databases	3	2	2	06012201
06032250	Fundamental of Software Engineering	3	3	0	06032112
06072111	Python Programming	3	2	2	06051211
06072151	Artificial Intelligence	3	3	0	06012201
06072252	Fundamentals of Machine Learning	3	2	2	06013176
06072150	Computing Systems for Data Science and Artificial Intelligence	3	3	0	06072151
06073161	Data Science	3	2	2	06072252 + 06051211
06073162	Big Data	3	2	2	06013130
06074263	Data Visualization	3	2	2	06012201
06073264	Data Mining	3	2	2	06073161
06074165	Natural Language Processing	3	2	2	06073264
06074154	Robotics	3	2	2	06072252
06074190	Practical Training	3	0	3	> 90 h.
06074191	Graduation Project	3	0	3	> 90 h.

B. Elective Requirements: (9) Credit Hours:

Course No.	Course Title	CH	Th.	Prac.	Pre.
06074181	Data Engineering	3	2	2	06073162
06074282	Deep Learning & Neural Networks	3	2	2	06013176
06074283	Business Intelligence	3	2	2	06073132
06074276	Machine Vision	3	2	2	06013176
06074171	Expert Systems	3	3	0	06072151
06074272	Data Modeling and Simulation	3	3	0	06072151
06074173	Cognitive Science	3	3	0	06072151
06074174	Knowledge Inference and Representation	3	3	0	06072151
06074175	Pattern Recognition	3	3	0	06072151
06074176	Information Retrieval	3	2	2	06072151
06033172	Mathematical Programming	3	2	2	06032112
06074284	Selected Topics	3	3	0	Dept. Appr.

C. Ancillary Requirements (6) Credit Hours:

Course No.	Course Title	Hrs	Pre.
11031230	Statistics and Probabilities	3	11031101
11031221	Linear Algebra	3	11031101

Fifth: Free subject: (3) Credit Hours chosen from the courses offered by the University.