Data Science and Artificial Intelligence Advising Plan 2025/2026

First Year / First Semester

Subject Number	Subject Title	Theory	Lab	Total	Prerequisites
1401124	Communication skills (English 1)**	3	0	3	1401098
1301106	Structured Programming	2	2	3	-
1501167	Discrete Structures (1)	3	0	3	-
1501110	Calculus (1)	3	0	3	-
1401116	Islamic Education	3	0	3	-
	Total	14	2	15	

First Year / Second Semester

Subject Number	Subject Title	Theory	Lab	Total	Prerequisites
1306102	The Basics of Data Science and Artificial Intelligence	3	0	3	1301106
1301108	Object-Oriented Programming (1)	2	2	3	1301106
1501212	Probability and Statistics	3	0	3	1501110
1501230	Numerical Analysis	3	0	3	1501110
	University Elective	3	0	3	-
	Total	14	2	15	

Second Year / First Semester

Subject Number	Subject Title	Theory	Lab	Total	Prerequisites
1401123	Communication skills (Arabic 1)**	3	0	3	1401099
1301203	Data Structures and Algorithms	2	2	3	1301108+1501167
1501230	Numerical Analysis	3	0	3	1501110
1401225	Computing Ethics and Technical Writing	2	0	2	1401124
1401226	English Langugae for Information Technology Student	1	0	1	1401124
1306291	Artificial Intelligence Programming	2	2	3	1306102
1301236	Web-Based Programming	2	3	3	1301108
	Total	13	4	18	

Second Year / Second Semester

Subject Number	Subject Title	Theory	Lab	Total	Prerequisites
1301326	Operating Systems ⚙	3	0	3	1301203
1301305	Database and Application of Database	2	2	3	1301203
1306207	Data Engineering and Analysis	2	2	3	1306102
1306290	Data Science Programming	2	2	3	1306207
1301310	Design and Analysis of Algorithms	3	0	3	1301203
1306294	Knowledge Representation and Reasoning	3	0	3	1306102
	Total	15	6	18	

Third Year / First Semester

Subject Number	Subject Title	Theory	Lab	Total	Prerequisites
1306330	Machine Learning	2	2	3	1306291 + 1306290
1306293	Principles of Information Retrieval	3	0	3	1301305 + 1301310
1306395	Smart Mobile Robots	2	2	3	1306297 + 1306291
1306292	Data Modeling and Simulation	3	0	3	1501212 + 1301203
1306296	Data Security	3	0	3	1301310
100103	Military Sciences*	3	0	3	-
-	University Elective	3	0	3	-
	Total	16	4	18	

Third Year / Second Semester

Subject Number	Subject Title	Theory	Lab	Total	Prerequisites
1306329	Big Data Analysis	2	2	3	1306290
1306403	Artificial Neural Networks and Deep Learning ⚙	2	2	3	1306330
1301304	Visual Programming	2	2	3	1301305
1306314	Analysis and Design of Intelligent Software Systems	3	0	3	-
-	University Elective	3	0	3	-
-	Specialization Elective	3	0	3	-
	Total	15	6	18	

Subject Number	Subject Title	Theory	Lab	Total	Prerequisites	
1306369	Field Training	3	6	3	Pass. 90Cr. Hrs.	During summer semester of third year

Fourth Year / First Semester

Subject Number	Subject Title	Theory	Lab	Total	Prerequisites
1306237	Graduation Project (1)	0	2	1	Pass. 90 Cr. Hrs.
1306404	Natural Language Processing ⚙	3	0	3	1306403
1306406	Visual Data	3	0	3	1306329
1401150	National Education	3	0	3	-
-	University Elective	3	0	3	-
-	Specialization Elective	3	0	3	-
	Total	15	2	16	

Fourth Year / Second Semester

Subject Number	Subject Title	Theory	Lab	Total	Prerequisites
1306238	Graduation Project (2)	0	4	2	1306237
1306422	Business Intelligence	2	2	3	1306406
-	Specialization Elective	3	0	3	-
-	Elective	3	0	3	-
	Total	8	6	11	

⚙ Concurrent

Updated: 25/09/2025

Total Credit Hours (including field training)	132