

DATA SCIENCE & ARTIFICIAL INTELLIGENCE

BACHELOR'S DEGREE | 2022 Advisory Plan

YEAR 1	First Semester					Second Semester				
	Unit Code	Unit Title	Credit Hrs.	Theory Hrs.	Prct. Hrs.	Unit Code	Unit Title	Credit Hrs.	Theory Hrs.	Prct. Hrs.
	BA-ENG99	English 99	0	4	2		English Language Level 1	0	4	2
	37700110	Study Skills	3	3	0	37700111	Life Skills	3	3	0
	37700132	Calculus (1)	3	3	0	37700131	Principles of Statistics	3	1	4
	37700134	Discrete Math	3	3	0	30771151	Computer Networks	3	2	2
	30771165	Programming	3	2	2	30771161	Introduction to Web Development	3	2	2
	30771116	Information Technology Fundamentals	3	3	0	30772121	Object Oriented Programming	3	0	6
	30772131	Introduction to Data Science	3	2	2	30771215	Professional Practice	3	3	0
	Total		18	20	6	Total		18	15	16
YEAR 2	First Semester					Second Semester				
	Unit Code	Unit Title	Credit Hrs.	Theory Hrs.	Prct. Hrs.	Unit Code	Unit Title	Credit Hrs.	Theory Hrs.	Prct. Hrs.
		English Language Level 2	0	4	2	BA-CS 99	Computer Skills 99	0	1	6
	37700114	Military Sciences	3	3	0	37700121	Intermediate English	3	4	2
		Elective 1: University College Requirement	3				Elective 1: Program (Specialism) Requirements	3		
	30772242	Data Analytics	3	1	4	30771212	Data Structures & Algorithms	3	2	2
	30772232	Artificial Intelligence	3	2	2	37700135	Numerical Analysis	3	2	2
	30771244	Database Design & Development	3	2	2	30772344	Data Mining	3	2	2
	30772223	Data Science programming	3	0	6	30772236	Data Visualization	3	2	2
	Total		18	12	16	Total		18	13	16
YEAR 3	First Semester					Second Semester				
	Unit Code	Unit Title	Credit Hrs.	Theory Hrs.	Prct. Hrs.	Unit Code	Unit Title	Credit Hrs.	Theory Hrs.	Prct. Hrs.
	BA-AR 99	Arabic 99	0	3	0	37700413	Entrepreneurship skills	3	3	0
	37700412	Career Readiness	3	3	0	30771211	Operating Systems	3	2	2
		Elective 2: University College Requirement	3				Elective 2: Program (Specialism) Requirements	3		
	30772241	Information Security	3	2	2	30772335	Big Data Analytics	3	2	2
	30772233	Machine Learning	3	2	2	30772334	Computing Research Project	3	2	2
	30772312	Algorithms Design and Analysis	3	2	2	30772324	Advanced Programming for Data Analysis	3	0	6
	30772322	Web development	3	0	6					
	Total		18	12	12	Total		18	9	12
YEAR 4	First Semester					Second Semester				
	Unit Code	Unit Title	Credit Hrs.	Theory Hrs.	Prct. Hrs.	Unit Code	Unit Title	Credit Hrs.	Theory Hrs.	Prct. Hrs.
		Elective 3: University College Requirement	3				Elective 3: Program (Specialism) Requirements	3		
	30772445	Deep Learning	3	2	2	30771213	Computer Systems Architecture	3	2	2
	30771471	Graduation Project	3	0	6	30772438	Field Training	3	0	6
	30772446	Natural Language Processing	3	2	2					
	30771442	Business Intelligence	3	2	2					
	Total		15	6	12	Total		9	2	8

Unit Category	Unit Code	Unit Title	Credit Hours	Theory Hours	Practical Hours	Fin. Crd.	Prerequisite Code
Prerequisite Requirements		English Language Level 1 *	0	4	2	3	
		English Language Level 2 *	0	4	2	3	
Compulsory University College Requirement	37700114	Military Sciences	3	3	0	1	
	37700110	Study Skills	3	3	0	3	
	37700111	Life Skills	3	3	0	2	
	37700412	Career Readiness	3	3	0	3	
	37700413	Entrepreneurship skills	3	3	0	3	
	37700121	Intermediate English	3	4	2	3	
Elective University College Requirement [3 Units Selection]	37700122	Foreign Languages	3	3		3	
	37700241	Digital Literacy	3	1	4	3	
	37700115	Digital Marketing and Social Media	3	1	4	3	
	30332124	Culinary Art <i>(for learners not majoring in Culinary Arts Management)</i>	3	1	4	3	
	30112110	Principles of Media and Journalism <i>(for learners not majoring in Digital Media)</i>	3	2	2	3	
	37700216	Logical Math and Critical Thinking	3	3	0	3	
Compulsory Department Requirements	35521502	Occupational Health and Safety	3	2	2	3	
	37700131	Principles of Statistics	3	1	4	3	
	37700132	Calculus (1)	3	3	0	3	
	37700134	Discrete Math	3	3	0	3	
	30771165	Programming	3	2	2	3	
	30771244	Database Design & Development	3	2	2	3	
Compulsory Program (Specialism) Requirements	30771116	Information Technology Fundamentals	3	3	0	3	
	30771215	Professional Practice	3	3	0	3	30771116
	30771161	Introduction to Web Development	3	2	2	3	
	30771151	Computer Networks	3	2	2	3	
	30771211	Operating Systems	3	2	2	3	
	30771212	Data Structures & Algorithms	3	2	2	3	30772121
	30771213	Computer Systems Architecture	3	2	2	3	30771211
	30771442	Business Intelligence	3	2	2	3	
	30772121	Object Oriented Programming	3	0	6	3	30771165
	30772344	Data Mining	3	2	2	3	20442232
	30772232	Artificial Intelligence	3	2	2	3	
	30772241	Information Security	3	2	2	3	30771151
	30772334	Computing Research Project	3	2	2	3	
	30772242	Data Analytics	3	1	4	3	30772131
	30772233	Machine Learning	3	2	2	3	30772242
	30772322	Web development	3	0	6	3	30771161
	30772312	Algorithms Design and Analysis	3	2	2	3	30771212
	30772223	Data Science programming	3	0	6	3	30772131, 30771165
	30772131	Introduction to Data Science	3	2	2	3	
	30772324	Advanced Programming for Data Analysis	3	0	6	3	30772223
	30772335	Big Data Analytics	3	2	2	3	30772242
	30772446	Natural Language Processing	3	2	2	3	30772233
	30772445	Deep Learning	3	2	2	3	30772233
	30772236	Data Visualization	3	2	2	3	
	30772437	Graduation Project	3	0	6	3	نجاح 90 ساعة
	30772438	Field Training	3	0	6	3	نجاح 90 ساعة
	37700135	Numerical Analysis	3	2	2	3	37700132
Elective Program (Specialism) Requirements [3 Units Selection]	30772343	Applied Analytical models	3	2	2	3	30772242
	30772447	Robotics	3	2	2	3	30772223
	30772314	Information Retrieval	3	3	0	3	
	30772348	Knowledge Representation	3	3	0	3	30772232
	30772415	NoSQL Databases	3	3	0	3	30771244
			132	85	98	135	

University Requirements [ADDITIONAL UNITS]	BA-AR 99	Arabic 99	0	3	0	3	Learners who pass the placement test will be exempted from the course.
	BA-CS 99	Computer Skills 99	0	1	6	3	
	BA-ENG99	English 99	0	4	2	3	
			132	93	106	144	

* English Language Levels	A1-BA	Elementary English	0	4	2	3	Learners have to attend 2 levels out of this list based on their initial placement test result.
	A2-BA	Pre-Intermediate English	0	4	2	3	
	B2-BA	Upper Intermediate English	0	4	2	3	
	C1-BA	Advanced English	0	4	2	3	
	C2-BA	Proficiency (English)	0	4	2	3	