

Bachelor of Science in Artificial Intelligence Program Structure

The B.Sc. degree in Artificial Intelligence requires 120 credit hours. After completing 90 credit hours, the student must complete a 16-week internship program (sector normal hours). This internship experience is equivalent to three credit hours, making the total completion requirement 123 credit hours.

Type of Courses	Credit hours
1. General Education Requirements	
(a) University Compulsory Courses	18
(b) University Elective Courses	12
2. Artificial Intelligence Program Courses	
(a) Mathematics and Statistics Courses	9
(b) Program Core Courses	72
(c) Program Elective Courses	9
(d) Internship	3
Total Credit Hours	123

Program Courses

University General Education Courses

(a) University Compulsory Courses (18 Cr.Hrs.)

Course code	Course Title	Th.	Lab.	Tut.	Cr. Hrs.	Prerequisite
ARB113 Or ARB116	Arabic Written Expression Or Arabic as a Foreign Language (Non-Arab)	3	0	0	3	-
ENG 104	Advanced English Writing	3	0	0	3	-
INN311	Innovation & Entrepreneurship	3	0	0	3	45 Credits Hours
ISL114 or ISL112	Islamic Culture or Islamic Culture in English (Non-Arab)	3	0	0	3	-
EMS 112	Emiratis Studies	3	0	0	3	-
STA 114	General Statistics	2	2	0	3	-

(b) University Elective Courses (12 Cr.Hrs.)

Course Code	Course Title	Th.	Lab.	Tut.	Cr. Hrs.	Prerequisite
1. Humanities / Arts (3 Credit Hours)						
ART 111	Introduction to Arts	3	0	0	3	-
ART 112	Introduction to Aesthetics	3	0	0	3	-
ART 113	Introduction to performing Arts	3	0	0	3	-
FRE 212	Francophone world: Language and Culture	3	0	0	3	-
ISH 211	Islamic Civilization	3	0	0	3	-
LAW 106	Human Rights	3	0	0	3	-
WLT 115	World Literature	3	0	0	3	-
2. Natural Sciences (3 Credit Hours)						
AST211	Astronomy	3	0	0	3	
BIO111	General Biology	2	2	0	3	
CHM111	General Chemistry	2	2	0	3	
PHY111	General Physics	3	0	0	3	
3. Social or Behavioral Sciences (6 Credit Hours)						
THI211	Critical Thinking	3	0	0	3	-
PSY111	General Psychology	3	0	0	3	-
INF112	Media Culture	3	0	0	3	-
SSW111	Social Responsibility	1	4	0	3	-
LAW112	Work Ethics	3	0	0	3	-
LED111	Leadership and Team Building	3	0	0	3	-

Artificial Intelligence Program Compulsory Courses

(a) Mathematics and Statistics Courses (9 Cr. Hrs.)

Course code	Course Title	Th.	Lab.	Tut.	Cr. Hrs.	Prerequisite
INT101	Calculus for Information Technology	3	0	2	3	-
DAT201	Linear Algebra	3	0	2	3	INT101
INT202	Discrete Mathematics	3	0	2	3	INT101

(b) Program Core Courses & Internship (75 Cr. Hrs.)

Course code	Course Title	Th.	Lab.	Tut.	Cr. Hrs.	Prerequisite
INT100	Introductory Programming	2	2	2	3	-

DAT205	Programming for Data Analytics I	2	2	0	3	INT100
DAT204	Data Engineering	2	2	0	3	INT209
INT201	Object-Oriented Programming	2	2	2	3	INT100
INT209	Data Structures	3	0	2	3	INT201
DAT302	Programming for Data Analytics II	2	2	0	3	DAT205
DAT405	Machine Learning	2	2	0	3	DAT205, STA114
BAI211	Artificial Intelligence Fundamentals	2	2	0	3	INT209
INT301	Operating Systems	2	2	0	3	INT201
INT302	Database Management Systems	2	2	0	3	INT209
BAI301	Deep and Reinforcement Learning	2	2	0	3	DAT405
BAI302	Evolutionary Computation	2	2	0	3	BAI211
BAI490	Artificial Intelligence Summer Internship	16 weeks-Sector normal hours min 30 per week			3	90 Cr. Hrs.
DAT323	Big Data Technologies	2	2	0	3	INT302, DAT204
INT205	Fundamentals of Data Communications and Networking	2	2	0	3	INT201
BAI311	Natural Language Processing	2	2	0	3	BAI301
INT303	Fundamentals of Information Security	3	0	0	3	INT205
BAI312	Machine Learning Operations	2	2	0	3	DAT323, BAI301
BAI313	Computer Vision and Pattern Recognition	2	2	0	3	BAI301
INT309	Cloud Computing	2	2	0	3	INT303
BAI411	Internet of Things	2	2	0	3	INT309
INT306	Computer Ethics and Professional Practices	3	0	0	3	INT303
BAI402	AI for Robotics	2	2	0	3	BAI313
BAI498	Capstone Project I	0	6	0	3	90 Credit Hours
BAI499	Capstone Project II	0	6	0	3	BAI498, BAI312

(c) Program Elective Courses (9 Credit Hours)

Course code	Course Title	Th.	Lab.	Tut.	Cr. Hrs.	Prerequisite
BAI430	Semantic Web	3	0	0	3	BAI311
BAI431	Social Network Analysis	3	0	0	3	INT209
INS402	Business Intelligence and Data Warehousing	2	2	0	3	INT302
BAI432	Recommender Systems	3	0	0	3	DAT405
BAI435	AI Applications in Finance, Legal, and Industry	3	0	0	3	BAI312
BAI436	Advanced Drone Technology and Autonomous Systems	3	0	0	3	BAI402

BAI437	Special Topics in Artificial Intelligence	3	0	0	3	
BAI438	Human-Computer Interaction	3	0	0	3	BAI312
BAI439	Extended Reality	3	0	0	3	BAI313

Bachelor of Science in Artificial Intelligence Program Study Plan and Course Sequencing

First Semester

Course Code	Course Name	Credit Hours				Prerequisite
		Lec	Lab	Tut	Cr.Hrs.	
INT100	Introductory Programming	2	2	2	3	-
INT101	Calculus for Information Technology	3	0	2	3	-
ISL114	Islamic Culture	3	0	0	3	-
ENG 114	Advanced English Writing	3	0	0	3	-
EMS 112	Emiratis Studies	3	0	0	3	-
TOTAL		14	2	4	15	

Second Semester

Course Code	Course Name	Credit Hours				Prerequisite
		Lec	Lab	Tut	Cr.Hrs.	
INT202	Discrete Mathematics	3	0	2	3	INT101
INT201	Object Oriented Programming	2	2	2	3	INT100
DAT205	Programming for Data Analytics I	2	2	0	3	INT100
xxx###	University Elective 1	x	x	x	3	xxx###
ARB113 or ARB116	Arabic Written Expression / Arabic as a Foreign Language	3	0	0	3	-
TOTAL		10	4	4	15	

Third Semester

Course Code	Course Name	Credit Hours				Prerequisite
		Lec	Lab	Tut	Cr.Hrs.	
DAT201	Linear Algebra	3	0	2	3	INT101
INT301	Operating Systems	2	2	0	3	INT201
INT209	Data Structures	3	0	2	3	INT201