

# List of Courses Bachelor of Science in Artificial Intelligence

Program Requirements	Total Credit Hours
General Education Courses	30 Credit Hours
Program Core Courses	36 Credit Hours
Program Specialization Courses	54 Credit Hours
Program Elective Courses	9 Credit Hours
Total	129 Credit Hours

#### **General Education Courses | 10 Courses (30 Credit Hours)**

SR.	Course Code	Course Name	Credit Hours	Pre-requisites
1	CIS 101	Computer Fundamentals	3	
2	ENG 101	English I	3	
3	HUM 101	Critical Thinking	3	
4	SSS 101	Study Skills	3	
5	ENG 102	English II	3	ENG 101
6	BUS 204	Innovation and Entrepreneurship	3	
7	ST 200	Introduction to Statistics	3	ST 102
8	ACS 101	Communication Skills in Arabic		
	ACSE 101	Communication Skills in Arabic	3	
		for non-Arabs		
9	ISLA 201	Islamic Culture (Arabic)	3	
	ISL 201	Islamic Culture (English)		
10	UAE/A 201	UAE Studies (Arabic)	3	
	UAE 201	UAE Studies (English)		

#### **Program Core Courses | 12 Courses (36 Credit Hours)**

SR.	Course Code	Course Name	Credit Hours	Pre-requisites
1	ST 101	Calculus I	3	
2	ST 102	Linear Algebra	3	ST 101
3	ST 103	Fundamentals of Computer Programming	3	CIS 101
4	ST 203	Database Management Systems	3	ST 103
5	ST 204	Data Structures and Algorithms	3	ST 103
6	ST 208	Probability Theory	3	ST 200
7	ST 205	Networking and Information Security	3	CIS 101

8	ST 207	Multimedia Technology	3	ST 103
9	ST 301	Discrete Structures and their Applications	3	ST 102
10	ST 305	Advanced Computer Programming	3	ST 103
11	ST 306	Parallel and Distributed Programming	3	ST 204
12	ST 308	Knowledge Management Systems	3	ST 203

## Program Specialization Courses | 18 Courses (54 Credit Hours)

SR.	Course Code	Course Name	Credit Hours	Pre-requisites
1	AI 101	Introduction to Artificial Intelligence	3	CIS 101
2	AI 201	Fundamentals of Natural Language	3	AI 101
		Processing		
3	AI 202	Fundamental of Machine Learning	3	AI 101
4	AI 206	Computer Vision Systems	3	AI 201,AI 202
5	AI 302	Advanced Techniques in Machine Learning	3	AI 202
6	AI 303	Application of AI to Energy Transition	3	AI 201,AI 202
7	AI 304	Neural Networks and Deep Learning	3	AI 202
8	AI 307	Data Mining	3	ST 203,ST 204
9	AI 309	Fuzzy Logic	3	ST 301
10	AI 310	Research in Al	3	AI 302,AI 303
11	AI 401	Robotics	3	AI 310
12	AI 402	Human Computer Interaction	3	AI 206
13	AI 403	Data Science and Analytics	3	AI 307
14	AI 404	Advanced Topics in AI	3	AI 310
15	AI 405	Pattern Recognition Systems	3	AI 302,AI 303
16	AI 406	Autonomous Robotics	3	AI 401
17	AI 495	Al Internship	3	
18	AI 499	Al Capstone	3	

### Program Elective Courses | 3 Courses (9 Credit Hours)

SR.	Course Code	Course Name	<b>Credit Hours</b>	Pre-requisites
1	ST 407	Cybersecurity (Elective)	3	ST 205
2	ST 408	Digital Forensics (Elective)	3	ST 205
3	ST 409	Cloud Computing Concepts (Elective)	3	ST 205
4	AI 410	AI and Internet of Things (Elective)	3	ST 205,ST 207
5	ST 411	Block chain and Applications (Elective)	3	AI 303