

Bachelor of Science in Artificial Intelligence and Smart Systems
Four-year study plan (120 credit hours)

Year	Semester	Courses	Credits	Prerequisites	
First Year	First Semester	ENG 103: English I	3	-	
		MTH 100: College Algebra	3	-	
		CIT 100: Computer Concepts and Applications	3	-	
		GED 101: Islamic Culture	3	-	
		MAT 140: Probability and Statistics	3	-	
		GED 112: Contemporary Emirati Studies	3	-	
			Total	18	
	Second Semester	ENG 104: English II	3	ENG 103	
		MAT 110: Calculus	3	MTH 100	
		MAT 130: Linear Algebra	3	MTH 100	
		AIS 120: Foundations of Data Science	3	-	
		AIS 140: Programming with Python	3	CIT 100	
GED-Free Elective		3	-		
		Total	18		
Second Year	First Semester	MAT 150: Numerical Analysis	3	MAT 110	
		AIS 210: Object Oriented Programming	3	AIS 140	
		AIS 230: Knowledge Representation	3	-	
		AIS 250: Introduction to Artificial Intelligence	3	AIS 140	
		AIS 270: Digital Systems	3	-	
		IES 111: Innovation, Entrepreneurship, and Sustainability	3	-	
			Total	18	
	Second Semester	AIS 220: Machine Learning	3	AIS 140, AIS 250	
		AIS 240: Data Structures and Algorithms	3	AIS 140	
		AIS 260: Fundamentals of Data & Network Communication	3	CIT 100	
		MAT 160: Discrete Mathematics	3	MTH 100	
		MAT 170: Optimization Techniques	3	MAT 140	
IES 112: Introduction to Environmental Sustainability		3	-		
		Total	18		

Year	Semester	Courses	Credits	Prerequisites	
	Summer Term	AIS 390: Internship I	3	60 cr. Hrs	
		Total	3		
Third Year	First Semester	AIS 310: Deep Learning	3	AIS 220	
		AIS 330: Computer Vision	3	AIS 140	
		AIS 350: Database Systems	3	AIS 240	
		AIS 370: Cybersecurity Principles	3	CIT 100	
		AIS 371: Human-Robot Interaction	3	AIS 140	
			Total	15	
	Second Semester	AIS 320: Reinforcement Learning	3	AIS 220	
		AIS 322: Natural Language Processing	3	AIS 250	
		AIS 340: IoT and Robotics	3	AIS 270	
		AIS 360: AI Systems Design and Deployment	3	AIS 220	
		AIS 380: Artificial Intelligence Safety and Security	3	AIS 370	
		Total	15		
Fourth Year	First Semester	AIS 410: Internship II	3	AIS 390 + 90 cr. Hrs	
		Total	3		
	Second Semester	AIS 420: Project Management	3	80 cr. Hrs	
		One Major Elective	3		
		One Major Elective	3		
		AIS 440: Senior Graduation Project	3	AIS 410 + 93 cr. Hrs	
			Total	12	
Total Program Credits			120		