Bachelor of Science in Data Science and Artificial Intelligence Model Study Plan (2024-2025 Cohort onwards)

For Students Admitted to the University from the Fall Semester
Total Degree Credit hours: 120

Semester	Course Code	Course Title	CH	Course type		Semester	Course Code	Course Title	CH	Course type
Year 1 **1** (Fall)	GEAE101	Academic English for Humanities and STEM	3	Gen Ed Course (Cluster 1: Area 2: English Communication)		**2** (Spring)	STAT210	Probability and Statistics	3	Specialization
	MATH105	Calculus I	3	Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)			MATH110	Calculus II	3	Specialization
	CSBP119	Algorithms and Problem Solving	3	Gen Ed Course (Cluster 1: Area 4: Critical Thinking)			CSBP219	Object Oriented Programming	3	Specialization
	GESU121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)			GEIT112	Fourth Industrial Revolution	3	Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)
	Elective	Student choice	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)			MATH140	Linear Algebra I	3	Specialization
Year 2 **3** (Fall)	Elective	Student choice	3	Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)		**4** (Spring)	CSBP340	Database Systems	3	Specialization
	CSBP323	Data Structures and Algorithms	3	Specialization			SWEB450	Analysis of Algorithms	3	Specialization
	MATH240	Applied Linear Algebra	3	Specialization			STAT470	Introduction to Statistical Computing	3	Specialization
	MATH290	Computational Mathematics	3	Specialization			CSBP224	Introduction to Data Science	3	Specialization
	STAT240	Data Exploration and Analysis	3	Specialization			CENG202	Discrete Mathematics	3	Specialization
Year 3 **5** (Fall)	Elective	Student choice	3	Major Elective		**6** (Spring)	CSBP320	Data Mining	3	Specialization
	CSBP301	Artificial Intelligence	3	Specialization			ITBP324	Cloud Computing Fundamentals	3	Specialization
	GEEM105	Emirates Studies	3	Gen Ed Course (Cluster 2: Area 3: Emirates Society)			CSBP411	Machine Learning	3	Specialization
	Elective	Student choice	3	Major Elective			Elective	Student choice	3	Major Elective
	ITBP418	Entrepreneurship in Information Technology	3	Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)			ISEC411	Privacy and Anonymity	3	Support course
Year 4 **7** (Fall)	MATH350	Optimization Methods	3	Support course		**8** (Spring)	ITBP481	Senior Graduation Project II	3	Specialization
	Elective	Student choice	3	Major Elective			Elective	Student choice	3	Major Elective
	Elective	Student choice	3	Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)			GEIS101	Biography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)
	ITBP480	Senior Graduation Project I	3	Specialization						
	Elective	Student choice	3	Major Elective						
Year 5 **9** (Fall)	ITBP495	Internship	6							

Bachelor of Science in Data Science and Artificial Intelligence Model Study Plan (2025-2026 Cohort onwards)

For Students Admitted to the University from the Fall Semester
Total Degree Credit hours: 120

Semester	Course Code	Course Title	CH	Course type		Semester	Course Code	Course Title	CH	Course type
Year 1 **1** (Fall)	GEAE101	Academic English for Humanities and STEM	3	Gen. Ed. Theme 2: Academic Language Proficiency		**2** (Spring)	STAT210	Probability and Statistics	3	Specialization
	MATH105	Calculus I	3	Specialization			MATH110	Calculus II	3	Specialization
	CSBP119	Algorithms and Problem Solving	3	Specialization			CSBP219	Object Oriented Programming	3	Specialization
	GESU121	Sustainability	3	Gen. Ed. Theme 5: Sustainability			ITBP301	Security Principles & Practice	3	Specialization
	PHYS105	General Physics I	3	Specialization			MATH140	Linear Algebra I	3	Specialization
Year 2 **3** (Fall)	Elective	Student choice	3	Gen. Ed. Theme 6 or 7 or 8 or 9 or 10 or 11		**4** (Spring)	CSBP340	Database Systems	3	Specialization
	CSBP323	Data Structures and Algorithms	3	Specialization			SWEB450	Analysis of Algorithms	3	Specialization
	MATH240	Applied Linear Algebra	3	Specialization			STAT470	Introduction to Statistical Computing	3	Specialization
	MATH290	Computational Mathematics	3	Specialization			CSBP224	Introduction to Data Science	3	Specialization
	STAT240	Data Exploration and Analysis	3	Specialization			CENG202	Discrete Mathematics	3	Specialization
Year 3 **5** (Fall)	Elective	Student choice	3	Major Elective		**6** (Spring)	Elective	Student choice	3	Gen. Ed. Theme 6 or 7 or 8 or 9 or 10 or 11
	CSBP301	Artificial Intelligence	3	Specialization			ITBP324	Cloud Computing Fundamentals	3	Specialization
	GEEM110	Contemporary Emirati Studies	3	Gen. Ed. Theme 1: UAE National Identity			CSBP411	Machine Learning	3	Specialization
	Elective	Student choice	3	Support Elective			ISEC411	Privacy and Anonymity	3	Support course
	ITBP218	Entrepreneurship and New Venture Creation in IT	3	Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)			Elective	Student choice	3	Major Elective
Year 4 **7** (Fall)	MATH350	Optimization Methods	3	Support course		**8** (Spring)	ITBP481	Senior Graduation Project II	3	Specialization
	Elective	Student choice	3	Support Elective			Elective	Student choice	3	Support Elective
	Elective	Student choice	3	Gen. Ed. Theme 6 or 7 or 8 or 9 or 10 or 11			CSBP320	Data Mining	3	Specialization
	ITBP480	Senior Graduation Project I	3	Specialization						
	Elective	Student choice	3	Major Elective						
Year 5 **9** (Fall)	ITBP495	Internship	6	Internship						