

	Semester	Course Code	Course Title	Cr	Course type		Semester	Course Code	Course Title	Cr	Course type
Year 1	1 (Fall)	MATH105	Calculus I	3	Foundation	2 (Spring)	MATH110	Calculus II	3	Foundation	
		PHYS105	General Physics I	3	Foundation		MATH140	Linear Algebra I	3	Foundation	
		GENA101	Academic English for Humanities and STEM	3	Gen. Ed. Theme 2: Academic Language Proficiency		STAT210	Probability and Statistics	3	Foundation	
		CSBP119	Algorithms and Problem Solving	3	Foundation		CSBP119	Object Oriented Programming	3	Foundation	
		Elective	Student choice	3	Gen. Ed. Theme 6 or 7 or 8 or 9 or 10 or 11		GENM110	Contemporary Environmental Studies	3	Gen. Ed. Theme 3: UAE National Identity	
Year 2	3 (Fall)	MATH230	Optimization Methods	3	Major Requirements	4 (Spring)	CINC202	Discrete Mathematics	3	Foundation	
		MATH240	Applied Linear Algebra	3	Foundation		MATH360	Mathematics for Machine Learning	3	Major Requirements	
		MATH290	Computational Mathematics	3	Major Requirements		CSBP224	Introduction to Data Science	3	Foundation	
		STAT240	Data Exploration and Analysis	3	Major Requirements		CSBP301	Artificial Intelligence	3	Foundation	
		CSBP323	Data Structures and Algorithms	3	Foundation		MATH350	Optimization Methods	3	Major Requirements	
GESU121	Sustainability	3	Gen. Ed. Theme 5: Sustainability								
Year 3	5 (Fall)	MATH215	Introduction to Analysis	3	Major Requirements	6 (Spring)	Elective	Student choice	3	Specialization Electives	
		STAT470	Introduction to Statistical Computing	3	Foundation		Elective	Supporting Elective	3	Supporting Elective	
		Elective	Student choice	3	Supporting Elective		CSBP411	Machine Learning	3	Foundation	
		CSBP320	Data Mining	3	Foundation		Elective	Student choice	3	Specialization Electives	
		GED222	Fundamentals of Innovation and Entrepreneurship	3	Gen. Ed. Theme 4: Entrepreneurship		Elective	Student choice	3	Advanced Math Electives	
Year 4	7 (Fall)			16		8 (Spring)			16		
		Elective	Student choice	3	Advanced Math Electives		MATH497	Research Project II	3	Major Requirements	
		Elective	Student choice	3	Supporting Elective		MATH501	Internship	6	Internship	
		Elective	Student choice	3	Specialization Electives						
		Elective	Student choice	3	Gen. Ed. Theme 5 or 7 or 8 or 9 or 10 or 11						
	MATH496	Research Project I	3	Major Requirements							