



Bachelor of Sicience in Mathematics Model Study Plan (2022-2023 Cohort onwards)

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

	Semester	Course Code	Course Title	СН	Course type	Semester	Course Code	Course Title	СН	Course type
		MATH105	Calculus I	3	Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)		MATH110	Calculus II	3	Major 1
\vdash	1	PHYS105	General Physics I	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)	2	PHYS110	General Physics II		Support course
≒	_	CSBP112	Introduction To Programming	3	Support course	_	MATH140	Linear Algebra I	3	Major 1
ω̈	- III	ESPU102	Introduction to Academic English For Science		Gen Ed Course (Cluster 1: Area 2: English Communication)	10	Elective	Student choice		Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)
> ((Fall)	Elective	Student choice	3	Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)	(Spring)	GESU121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)
	,					()	Elective	Student choice	3	Gen Ed Course (Cluster 1: Area 4: Critical Thinking)
				15					18	
		MATH210	Calculus III	3	Major 1		MATH246	Number Theory	3	Major 1
?	2	MATH205	Set Theory and Logic		Major 1	1	MATH315			Major 1
ਰ	,	MATH275	Ordinary Differential Equations		Major 1	_	MATH320	Numerical Analysis I		Major 1
Ş	- III	GEIE222	Fundamentals of Innovation and Entrepreneurship		Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)	10	Elective	Student choice	3	Major Elective
	(Fall)	HSS105	Emirates Studies	3	Gen Ed Course (Cluster 2: Area 3: Emirates Society)	(Spring)	ISLM100/ISLM101	Islamic culture	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)
	,	GEIE222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)					
				18					15	
33	_	MATH215	Introduction to Analysis	3	Major 1	_	MATH310	Real Analysis	3	Major 1
≒	5	MATH340	Abstract Algebra 1	3	Major 1	6	MATH372	Partial Differential Equations		Major 1
õ		Elective	Student choice	3	Major Elective	(Spring)	Elective	Student choice	3	Major Elective
> 1	Fall)	Elective	Student choice	3	Support course		Elective	Student choice	3	Support course
	ı alı <i>j</i>	STAT230	Principles of Probability	3	Support course		Elective	Student choice	3	Free Elective
				15					15	
	7	Elective	Student choice	3	Major Elective	8	MATH495	Research Project	3	Major 1
4		ENG310	Writing for Research	3	Support course		MATH500	Internship	6	Internship
ō		Elective	Student choice	3	Support course	_				
e l	Eall\	Elective	Student choice	3	Support course	(Spring)				
7	rall)	Elective	Student choice	3	Free Elective	(Spring)				
				15					0	

Bachelor of Sicience in Mathematics Model Study Plan (2023-2024 Cohort onwards)

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

	Semester	Course Code	Course Title	СН	Course type	Semester	Course Code	Course Title	СН	
		MATH105	Calculus I		Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)		MATH110	Calculus II		Major 1
\leftarrow	1	PHYS105	General Physics I	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)	2	PHYS110	General Physics II	3	Support course
≒	/= . IIV	CSBP119	Algorithms and Problem Solving	3	Gen Ed Course (Cluster 1: Area 4: Critical Thinking)		MATH140	Linear Algebra I	3	Major 1
e			Introduction to Academic English For Science		Gen Ed Course (Cluster 1: Area 2: English Communication)	(0)	Elective			Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)
>	(Fall)	Elective	Student choice	3	Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)	(Spring)	GESU121			Gen Ed Course (Cluster 3: Area 2: Sustainability)
	` ,						CSBP224	Introduction to Data Science	3	Support course
				15					18	
			Calculus III		Major 1		MATH246			Major 1
2	3		Set Theory and Logic		Major 1	4	MATH315			Major 1
ō	9		Ordinary Differential Equations		Major 1	1 7	MATH320	Numerical Analysis I		Major 1
×	/E-II\	GEIE222	Fundamentals of Innovation and Entrepreneurship		Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)	/C:	Elective			Major Elective
	(Fall)		Emirates Studies		Gen Ed Course (Cluster 2: Area 3: Emirates Society)	(Spring)	GEIS100/GEIS101	Islamic Culture/Biography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)
		GEIE222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)	` '				
				18					15	
33	_		Introduction to Analysis		Major 1	_	MATH310			Major 1
≒	5		Abstract Algebra 1		Major 1	6	MATH372	Partial Differential Equations		Major 1
e.			Student choice		Major Elective		Elective			Major Elective
>	(Fall)		Student choice		Support course	(Spring)	Elective			Support course
	(i uii)	STAT230	Principles of Probability	3	Support course	(Spring)	Elective	Student choice	3	Free Elective
				15					15	
	7		Student choice	3	Major Elective	8	MATH495	Research Project		Major 1
7	/	ENG310	Writing for Research	3	Support course		MATH500	Internship	6	Internship
œ		Elective	Student choice	3	Support course					
×	(Fall)		Student choice		Support course	(Spring)				
	(1 411)	Elective	Student choice	3	Free Elective	(Spiring)				
				15					o n	

Bachelor of Sicience in Mathematics 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	СН		Semester	Course Code		СН	
	1	MATH105	Calculus I	3	Specialization		MATH110			Specialization
Ţ		PHYS105	General Physics I	3	Support course	2	PHYS110			Support course
≒	-	CSBP119	Algorithms and Problem Solving	3	Support course	_	MATH140			Specialization
õ	/E - III	GEAE101	Academic English for Humanities and STEM		Gen. Ed. Theme 2: Academic Language Proficiency	10	Elective			Gen. Ed. Theme 6 or 7 or 8 or 9 or 10 or 11
>	(Fall)	GEEM110	Contemporary Emirati Studies	3	Gen. Ed. Theme 1: UAE National Identity	(Spring)	GESU121			Gen. Ed. Theme 5: Sustainability
	` ,					Š	CSBP224	Introduction to Data Science	3	Support course
				15					18	
	1	MATH210	Calculus III	3	Specialization	4	MATH246			Specialization
2	3	MATH205	Set Theory and Logic	3	Specialization	4	MATH315			Specialization
œ		MATH275	Ordinary Differential Equations	3	Specialization	i	MATH320			Specialization
Ϋ́e	(Fall)	Elective	Student choice	3	Gen. Ed. Theme 6 or 7 or 8 or 9 or 10 or 11	(Spring)	Elective			Math/Sci Elective
	(1 411)	GEIT113	Introduction to Artificial Intelligence	3	Gen. Ed. Theme 3: Innovation	(Spiring)	GEIE222	Fundamentals of Innovation and Entrepreneurshi	3	Gen. Ed. Theme 4: Entrepreneurship
				15					15	
3		MATH215	Introduction to Analysis		Specialization		MATH310			Specialization
ar	5	MATH340	Abstract Algebra 1	3	Specialization	6 (Spring)	MATH372			Specialization
ĕ		Elective	Student choice	3	Math/Sci Elective		Elective	Student choice		Math/Sci Elective
_	/E - III	Elective	Student choice	3	Support Elective		Elective			Support Elective
	(Fall)	STAT230	Principles of Probability	3	Support course		Elective	Student choice	3	Free Elective
	• ,	Elective	Student choice	3	Free Elective					
				18					15	
	7	MATH462	Introduction to Topology		Specialization	8 (Spring)	MATH495			Specialization
r 4		ENG310	Writing for Research	3	Support course		MATH500	Internship	6	Internship
æ		Elective	Student choice	3	Math/Sci Elective					
۶	(Fall)	Elective	Student choice	3	Support Elective					
	(i aii)	Elective	Student choice	3	Support Elective	(Spring)				
				15					9	