



Study Plan: Bachelor of Mathematics

First Level:

	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites	Type of requirements (University, College, or Program)
				Lec.	Tut.	Lab	Tr			
1	MTH 1101	General Mathematics	3	3	0	0	0	---	---	College
2	CHM 1100	General Chemistry (1)	3	2	0	2	0	---	---	College
3	ENGL 1102	English Language (1)	4	2	0	4	0	---	---	College
4		University Elective Course from Group (1)	2							University
5		University Elective Course from Group (1)	2							University
6		University Elective Course from Group (2)	2							University
7		University Elective Course from Group (3)	3							University
Total			19							

Second Level:

	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites	Type of requirements (University, College, or Program)
				Lec.	Tut.	Lab	Tr			
1	ENGL 1103	English Language (2)	4	2	0	4	0	ENGL 1102	---	College
2	BIO 1101	Principles of Biology	3	2	0	2	0	--	---	College
3	MTH 1102	Differential Calculus	3	3	0	0	0	MTH 1101	---	College
4	PHS 1100	General Physics (1)	3	2	0	2	0	--	---	College
5	MTH 1171	General Statistics	3	3	0	0	0	---	---	College
6	BUS 1102	Principles of Project Management	2	2	0	0	0	---	---	University
Total			18							



Third Level:

	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites	Type of requirements (University, College, or Program)
				Lec.	Tut.	Lab	Tr			
1	MTH 1201	Integral Calculus	3	3	0	0	0	MTH 1102	---	Program
2	MTH 1211	Real Analysis (1)	3	3	0	0	0	MTH 1102	---	Program
3	MTH 1231	Basics of Mathematics	3	3	0	0	0	MTH 1101	---	Program
4	MTH 1221	Computational Mathematics	3	2	0	2	0	MTH 1101	---	Program
5	MTH 1241	Linear Algebra (1)	3	3	0	0	0	MTH 1102	---	Program
6	CIS 1210	Principles of Artificial Intelligence in Science	2	2	0	0	0	-	---	Program
Total			17							

Fourth Level:

	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites	Type of requirements (University, College, or Program)
				Lec.	Tut.	Lab	Tr			
1	MTH 1202	Advanced Calculus	3	3	0	0	0	MTH 1201	---	Program
2	MTH 1222	Mathematical Linear Programming	3	3	0	0	0	MTH 1241	---	Program
3	MTH 1242	Linear Algebra (2)	3	3	0	0	0	MTH 1241	---	Program
4	MTH 1243	Numerical Analysis (1)	3	2	0	2	0	MTH 1241 MTH 1221	---	Program
5	MTH 1244	Numbers Theory	3	3	0	0	0	MTH 1231	---	Program
6	MTH 1271	Probability	3	3	0	0	0	MTH 1171	---	Program
Total			18							



Fifth Level:

	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites	Type of requirements (University, College, or Program)
				Lec.	Tut.	Lab	Tr			
1	MTH 1301	Ordinary Differential Equations	3	3	0	0	0	MTH 1202	---	Program
2	MTH 1311	Real Analysis (2)	3	3	0	0	0	MTH 1211	---	Program
3	MTH 1321	Mathematical Biology	3	2	0	2	0	MTH 1243	---	Program
4	MTH 1331	Abstract Algebra (1)	3	3	0	0	0	MTH 1244	---	Program
5	MTH 1371	Data Analysis	3	2	0	2	0	MTH 1271	---	Program
6	MTH 1351	Statics	3	3	0	0	0	MTH 1201	---	Program
Total			18							

Sixth Level:

	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites	Type of requirements (University, College, or Program)
				Lec.	Tut.	Lab	Tr			
1	MTH 1302	Partial Differential Equations	3	3	0	0	0	MTH 1301	---	Program
2	MTH 1332	Abstract Algebra (2)	3	3	0	0	0	MTH 1331	---	Program
3	MTH 1313	Complex Analysis	3	3	0	0	0	MTH 1311	---	Program
4		Elective Course From Group (A)	3						---	Program
5		Elective Course From Group (A)	3						---	Program
Total			15							



Seventh Level:

	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites	Type of requirements (University, College, or Program)
				Lec.	Tut.	Lab	Tr			
1	MTH 1491	Cooperative Training (1)	4	0	0	0	8	Pass 95 Credit Hours	PHS 1400	Program
2	MTH 1492	Skills in Writing Research and Analyzing Mathematical Data	2	0	0	4	0	Pass 95 Credit Hours		Program
3	PHS 1400	Professional Courses	2	0	0	0	4	---	MTH 1491	University
4	MTH 1401	Differential Geometry	3	3	0	0	0	MTH 1302	---	Program
5	MTH 1462	Functional Analysis	3	3	0	0	0	MTH 1311	---	Program
Total			14							

Eighth Level:

	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites	Type of requirements (University, College, or Program)
				Lec.	Tut.	Lab	Tr			
1	MTH 1494	Cooperative Training (2)	4	0	0	0	8	MTH 1491		Program
2	MTH 1493	Research Project	3	0	0	6	0	Pass 100 Credit Hours MTH 1492	---	Program
3	MTH 1461	Topology	3	3	0	0	0	MTH 1311	---	Program
4		Elective Course From Group (B)	3	3	0	0	0		---	Program
5		Elective Course From Group (B)	3	3	0	0	0		---	Program
Total			18							



Program Requirements (Elective Courses Group A):

The student must select (2) courses (6 Credit Hours) from the list below:

#	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites
				Lec.	Tut.	Lab	Tr		
1	MTH 1312	Special Functions	3	3	0	0	0	MTH 1311	--
2	MTH 1333	Theory of Cryptography	3	3	0	0	0	MTH 1331	--
3	MTH 1341	Numerical Analysis (2)	3	3	0	0	0	MTH 1243	--
4	MTH 1343	Introduction to Combinatorics	3	3	0	0	0	MTH 1241	--
5	MTH 1344	Discrete Mathematics	3	3	0	0	0	MTH 1244	--
Total			6						

Program Requirements (Elective Courses Group B):

The student must select (2) courses (6 Credit Hours) from the list below:

#	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites
				Lec.	Tut.	Lab	Tr		
1	MTH 1402	Introduction to Fractional Calculus	3	3	0	0	0	MTH 1311	--
2	MTH 1422	Optimization Techniques	3	3	0	0	0	MTH 1321	--
3	MTH 1431	Dynamical Systems	3	3	0	0	0	MTH 1302	--
4	MTH 1442	Numerical Linear Algebra	3	3	0	0	0	MTH 1321	--
5	MTH 1451	Dynamics	3	3	0	0	0	MTH 1351	--
6	MTH 1471	Advanced Probability	3	3	0	0	0	MTH 1271	--
7	MTH 1494	Selected Topics	3	3	0	0	0	Pass 90 Credit Hours	--
Total			6						



University Requirements (Elective Courses Group 1):

The student must select (2) courses (4 Credit Hours) from the list below Group (1):

#	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites
				Lec.	Tut.	Lab	Tr		
1	ISL 1100	The Noble Qur'an	2	2	0	0	0	--	--
2	ISL 1101	Interpretation of the Qur'an	2	2	0	0	0	--	--
3	ISL 1102	Creed and Family in Islam	2	2	0	0	0	--	--
4	ARB 1102	Arabic Language Skills	2	2	0	0	0	--	--
5	EDU 1101	History and Civilization of Kingdom of Saudi Arabia	2	2	0	0	0	--	--
6	EDU 1104	Islamic Ethics and Values	2	2	0	0	0	--	--
7	EDU 1105	Learning and Communication Skills	2	2	0	0	0	--	--
Total			4						

University Requirements (Elective Courses Group 2):

The student must select (1) course (2 Credit Hours) from the list below Group (2):

#	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites
				Lec.	Tut.	Lab	Tr		
1	BUS 1101	Entrepreneurship	2	2	0	0	0	--	--
2	BUS 1103	Principles of Financial Knowledge	2	2	0	0	0	--	--
Total			2						

University Requirements (Elective Courses Group 3):

The student must select (1) course (3 Credit Hours) from the list below Group (3):

#	Course Code	Course Title	Credit Hours	Activity				Pre-requisites	Co-requisites
				Lec.	Tut.	Lab	Tr		
1	CIS 1100	Computer Skills	3	2	0	2	0	-	-
Total			3						