Degree and Study Plan (Spring intake)

CollegeApplied and Health SciencesDepartmentBasic and Applied Sciences

Program Mathematics
Degree Level Bachelor of Science

Total Credit Hours 120

Cohort 2024 and above

	Summary of Credits				
University Requirements (UR)	12				
University Electives (UE)	6				
College Requirements (CR)	12				
Program Requirements (PR)	72				
Program Electives (PE)	18				
Total	120				

c	-	m	aro.	info	rm	atia	n	nnt	act:
-	'n	mo)re	INTO	rm.	atio	n c	:ONT	act:

Dr. Jamal Salah

HoD: Dr. Rayya Al Balushi

Dean: Dr. Said Al Gunaimi

Date:

		Semes	ter 1 (Sprin	g)	
	Course Code	Course Title	Credits	Pre-Request/ Co- Request	Category
	ENGL101	English Communication Skills	3		UR
	MATH101	Calculus I	3		PR
	MATH140	Discrete Mathematics	3		PR
One	PHYS101	Physics I	3		CR
Year One	PHYS181	Physics I Lab	1		CR
, Les	OMNS101	Oman Society	3		UR
	Total Credits		16		
		Semeste	er 2 (Summ	er)	
	Course	Course Title	Credits	Pre-Request/ Co-	Category
	Code			Request*	
	MATH102	Calculus II	3	MATH101	PR
	MAT211	Principles of Mathematics	3		PR
	Total Credits		6		

		Seme	ester 3 (Fall)				
	Course	Course Title	Credits	Pre-Request/ Co-	Category		
	Code			Request			
	ARAB101	Arabic I	3		UR		
		University Elective 1	3		UE		
	MATH251	Modern Euclidean Geometry	3	MATH211	PR		
	MATH221	Ordinary Differential Equations I	3	MATH102	PR		
	MATH242	Linear Algebra	3	MATH101	PR		
Year Two	Total Credits		15				
ar	Semester 4 (Spring)						
, ≺e	Course	Course Title	Credits	Pre-Request/ Co-	Category		
	Code			Request			
		University Elective 2	3		UE		
	BIOL101/ or CHEM101	Biology I/ or Chemistry I	3		CR		
	BIOL181/ Or	Biology I Lab/ or Chemistry I	1		CR		
	CHEM181	Lab	'		l on		
		Program Elective 1	3		PE		
	MATH212	Real Analysis	3	MATH211	PR		
	MATH301	Multivariable Calculus	3	MATH102	PR		
	Total Credits		16				
		Semester 5 (Summer)					
		Program Elective 2	3		PE		
		Program Elective 3	3		PE		
	Total Credits		6		•		

e ≺	Semester 6 (Fall)

Course Code	Course Title	Credits	Pre-Request/ Co- Request	Category
MATH361	Computational Mathematics	3	MATH242	PR
MATH321	Partial Differential Equations I	3	MATH221	PR
MATH341	Modern Algebra	3	MATH211	PR
	Program Elective 4	3		PE
MATH312	Set Theory	3	MATH211	PR
Total Credits		15		
	Semest	er 7 (Spring	<u>(</u>	
Course	Course Title	Credits	Pre-Request/ Co-	Category
Code			Request	
MATH342	Number Theory	3	MATH341	PR
	Program Elective 5	3		PE
MATH313	Advanced Real Analysis	3	MATH212	PR
MATH343	Advanced Linear Algebra	3	MATH242	PR
MNGT313	Entrepreneurship	3		UR
Total Credits		15		
	Ser	nester 8 (Su	mmer)	
PHYS102	Physics II	3	PHYS101	CR
PHYS182	Physics II/Lab	1	PHYS181	CR
Total Credits		4		

		Seme	ster 9 (Fall))			
	Course Code	Course Title	Credits	Pre-Request/ Co- Request	Category		
	MATH411	Complex Analysis	3	MATH212	PR		
	MATH422	Partial Differential Equation II	3	MATH321	PR		
	MATH421	Ordinary Differential	3	MATH221	PR		
		Equations II					
		Program Elective 6	3		PE		
_	MATH461	Numerical Analysis	3	MATH321	PR		
mo	Total Credits		15				
느	Semester 10 (Spring)						
Year Four	Course Code	Course Title	Credits	Pre-Request/ Co- Request	Category		
	MATH462	Operation Research	3	MATH242	PR		
	MATH442	Mathematical Modeling	3	MATH321	PR		
	MATH499	Project in Mathematics	6	After 72 CR	PR		
	Total Credits		12				
		S	ummer				
	Course Code	Course Title	Credits	Pre-Request/ Co- Request	Category		

– Փ	Semester 9 (Fall)				
Year Five	Course Code	Course Title	Credits	Pre-Request/ Co- Request	Category

Total Credits		120		

List of Program Elective Courses:

Course Code	Course Title	Credits	Pre-Request/ Co-Request
MATH131	Principles of Statistics	3	TTO HOQUOOD GO HOQUOOD
MATH332	Advanced Statistics	3	MATH131
ENGL102	English Communication skills II	3	ENGL101
MATH371	Special Functions	3	MATH221
MATH344	Advanced Modern Algebra	3	MATH341
MATH314	Topology	3	MATH212
MATH412	Advanced Complex Analysis	3	MATH411
MATH441	Analytic Number Theory	3	MATH411
MATH414	Fuzzy Sets and its Applications	3	MATH312
MATH472	Special Topics	3	
MATH352	Graph Theory	3	MATH251
MATH451	Functional Analysis	3	MATH242
MATH132	Probability Theory I	3	
INTE105	Introduction to Computer Programing	3	
INTE130	Object Oriented Programing	3	INTE105

University Electives:

Choose 2 courses from this list:					
Course Code	Course Title	Credits	Pre-Request/ Co-Request		
ARAB102	الأدب العربي	3			
ISLM101	Islamic Civilizations	3			
PHIL101	Introduction to Logic (Philosophy)	3			
SOCI101	Sociology	3			
PSYC100	مدخل إلى علم النفس	3			
FINA202A	التمويل الشخصي	3			
ECON101	الاقتصاد الجزئي	3			

FAID101	First Aid	3	
PUHE211	Introduction to Public Health	3	
LAWC101	القانون في حياتنا	3	
LAWC102	التشريعات الوظيفية	3	
LAWC103	نظام الأسرة	3	