

BSc in Mathematics

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	CO-requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
Level 1	ARB26101	Arabic Language Skills	Required			2	Institution
	CS26101	Computer Skills	Required			2	Institution
	ENG26111	General English (1)	Required			4	College
	MATH26111	Calculus -1	Required			3	College
	SLM26101	Introduction in Islamic Culture	Required			2	Institution
	CI26101	Communication Skills	Required			2	Institution
Level 2	ENG26114	General English (2)	Required	ENG26111		4	College
	CHM26113	General Chemistry	Required			4	College
	SLM26102	Family & community in Islam	Required			2	Institution
	PSY26101	Learning and Thinking Skills	Required			2	Institution
	PHYS26114	General Physics	Required			4	College
Level 3	MATH26221	Calculus -2	Required	MATH26111		4	Program
	ENG26121	English for Specific Purpose	Required	ENG26114		4	College
	STAT26212	Principles of Statistics	Required	MATH26111		2	College
	MATH26231	Fundamentals of Mathematics	Required			3	Program
	MATH26251	Analytic Geometry	Required	MATH26111		3	Program
	6*	University Elective	Elective			2	Institution
Level 4	BUA26302	Entrepreneurship	Required			1	Institution
	MATH26232	Linear Algebra	Required	MATH26231		3	Program
	MATH26222	Calculus -3	Required	MATH26221		3	Program
	MATH26281	Computer Programming for Mathematics	Required	MATH26221	MATH26232	2	Program
	MATH26223	Ordinary Differential Equations	Required	MATH26221		3	Program
	STAT26261	Statistical Learning	Required	STAT26212		2	Program
	MATH26282	Number Theory	Required	MATH26231		3	Program
	BUA26201	Volunteer Work	Required			1	Institution
Level 5	MATH26341	Real Analysis -1	Required	MATH26222		3	Program
	STAT26362	Probability Theory	Required	MATH26221 STAT26212		3	Program

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	CO-requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
	MATH26333	Abstract Algebra-1	Required	MATH26231		3	Program
	MATH26371	Applied Mathematics	Required	MATH26222		3	Program
	MATH26324	Vectors Analysis	Required	MATH26222		3	Program
	MATH26383	Operations Research	Required	MATH26221 MATH26232		3	Program
Level 6	MATH26342	Real Analysis -2	Required	MATH26341		3	Program
	MATH26334	Abstract Algebra -2	Required	MATH26333		3	Program
	MATH26343	Complex Analysis	Required	MATH26341		3	Program
	6**	College Elective	Elective			2	College
	STAT26363	Mathematical Statistics	Required	STAT26362		3	Program
MATH26344	Numerical Analysis	Required	MATH26223		3	Program	
Level 7	MATH26491	Principles of Scientific Research in Mathematics	Required			2	Program
	MATH26425	Special Functions	Required	MATH26223		3	Program
	MATH26453	Topology	Required	MATH26341		3	Program
	MATH26484	Introduction to Graph Theory	Required	MATH26231		3	Program
	6***	Program Elective	Elective			3	Program
MATH26452	Differential Geometry	Required	MATH26222 MATH26251		3	Program	
Level 8	MATH26485	Selected Topics	Required	MATH26342		2	Program
	MATH26426	Partial Differential Equations	Required	MATH26222 MATH26223		3	Program
	MATH26445	Functional Analysis	Required	MATH26342		3	Program
	MATH26492	Field Training	Required	Passing 75% of the total hours		4	Program
	MATH26493	Research project	Required	Passing 75% of the total hours		3	Program

University Elective Courses (6*)

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
Level 3	SLM26103	Economy In Islam	Elective		2	Institution
	SLM26104	Contemporary Issues	Elective		2	Institution
	ARB26102	Arabic Editing	Elective		2	Institution
	HIS26201	History of Kingdom of Saudi Arabia	Elective		2	Institution
	HIS26211	Studies in the biography of the Prophet	Elective		2	Institution
	ENG26224	Writing for specific purpose	Elective		2	Institution
	MDS26201	Health And Fitness	Elective		2	Institution
	TEC26212	e-learning applications	Elective		2	Institution
	ED26201	Youth and the value of citizenship	Elective		2	Institution

College Elective Courses (6**)

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
Level 6	PHYS26371	Renewable Energy	Elective	-----	2	College
	CHEM26361	Introduction to Nanotechnology	Elective	-----	2	College

Program Elective Courses (6***)

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
Level 7	MATH26454	Analytic Geometry in Space	Elective	MATH26251 MATH26324	3	Program
	MATH26472	Fluid Dynamics	Elective	MATH26371	3	Program