

Integrated 4+1 Year BS/MS in Mathematics
Based on BS Option A

Fall		Year 1		Spring	
UK Core CC1	3	UK Core CC2	3		
Foreign Language 101	4	Foreign Language 102	4		
UK Core QFO (MA 113/MA 193)	5	UK Core QFO (MA 114/MA 194)	5		
UK Core HUM	3	CS 115	3		
Total Credits	15	Total Credits	15		
Fall		Year 2		Spring	
Foreign Language 201	3	Foreign Language 202	3		
UK Core NPM (PHY 231)	4	MA 261: Number Theory or MA 214: Calculus IV	3		
UK Core NPM (PHY 241_	1	MA 322: Matrix Algebra	3		
MA 213: Calculus III	4	A&S NS (PHY 232: General Physics)	4		
UK Core SIR (STA 210)	3	A&S Lab (PHY: 242: Physics Lab II)	1		
Total Credits	15	Total Credits	14		
Fall		Year 3		Spring	
MA 361 Abstract Algebra I	3	MA 362 Abstract Algebra II	3		
MA 471G Advanced Calculus I	3	MA 472G Advanced Calculus II	3		
CS 215: Introduction to program design, abstraction, and problem solving	4	UK Core GDY	3		
UK Core ACR	3	MA 391 - GCCR	3		
UK Core CCC	3	A&S SS (ECO 201: Principles of Economics)	3		
Total Credits	16	Total Credits	15		
Fall		Year 4		Spring	
MA 565 Linear Algebra I	3	MA 614 Enumerative Combinatorics	3		
MA 575 Principles of Analysis	3	MA 676 Real Analysis I	3		
UK Core CCC	3	UK Core GDY	3		
UK Core SSC	3	Elective	3		
Elective	3	Elective	3		
Total Credits	15	Total Credits	15		
Fall		Year 5		Spring	
MA 561 Abstract Algebra I	3	MA 661 Abstract Algebra II	3		
MA 514 Combinatorial Structures	3	MA 671 Complex Analysis I	3		
MA 551 Topology I	3	MA 651 Topology II	3		
Total Credits	9	Total Credits	9		

Degree Requirement Analysis

Total Undergraduate Hours	120
Total Undergraduate Hours Toward MA	12
Total Graduate Hours Toward MA	18
Total Hours at 600+ from Year 4	6
Total Hours at 600+ from Year 5	9