CK101 BA (HONS) SUBJECT - MATHEMATICAL STUDIES

Programme Requirements

Note: Students who wish to pursue a teaching career are advised to consult the Mathematical Studies Degree coordinator to discuss the requirements of the Teaching Council of Ireland.

Code	Title	Credits
Year 1		
Students take **15** credits as follows:		
Core Modules		
MS1002	Calculus	5
MS1003	Linear Algebra	5
MS1004	Introduction to Statistics	5
Year 2		
30-credit Subject		
Students take **30** credits as follows - all listed core modules (**15** credits) and **15** credits of elective modules:		
Core Modules		
MS2015	Multivariable Calculus with Financial Applications	5
MS2005	Discrete Mathematics	5
MS2013	Geometry	5
Elective Modules		
Students take modules to the value of **15** credits from the following:		15
AM1053	Introduction to Mathematical Modelling (5)	
MS2017	Mechanics I (5)	
MS2019	Quantitative Research and Survey Sampling Methods (5)	
MS2020	Business Data Analytics (5)	
20-credit Subject		
Students take **20** credits as follows - all listed core modules (**10** credits) and **10** credits of elective modules:		
Core Modules		
MS2013	Geometry	5
MS2015	Multivariable Calculus with Financial Applications	5
Elective Modules		
Students take modules to the value of **10** credits from the following:		10
AM1053	Introduction to Mathematical Modelling (5)	
MS2005	Discrete Mathematics (5)	
MS2017	Mechanics I (5)	
MS2019	Quantitative Research and Survey Sampling Methods (5)	
MS2020	Business Data Analytics (5)	
Year 3		
30-credit Subject		
Students take **30** credits as follows - all listed core modules (**5** credits) and **25** credits of elective modules:		
MS3015	Ordinary Differential Equations and Dynamical Systems	5
Elective Modules		
Students take modules to the value of **25** credits from the following:		25
MA4403	Discrete Time Financial Models (5)	
MS3001	Introduction to Abstract Algebra (5)	
MS3016	Introduction to Analysis and Metric Spaces (5)	
MS3017	Vector Spaces and Linear Algebra (5)	
MS3020	Linear Predictive Modelling (5)	
MS3021	Computational Data Analytics (5)	
MS3022	Operations Research (5)	
MS3023	Stochastic Decision Science (5)	
MS3024	Geometry and Applications (5)	
20-credit Subject		
Students take **20** credits as follows - all listed core modules (**5** credits) and **15** credits of elective modules:		
Core Modules		
MS3015	Ordinary Differential Equations and Dynamical Systems	5
Elective Modules		
Students take modules to the value of **15** credits from the following:		15
MA4403	Discrete Time Financial Models (5)	
MS3001	Introduction to Abstract Algebra (5)	
MS3016	Introduction to Analysis and Metric Spaces (5)	
MS3017	Vector Spaces and Linear Algebra (5)	
MS3020	Linear Predictive Modelling (5)	
MS3021	Computational Data Analytics (5)	
MS3022	Operations Research (5)	
MS3023	Stochastic Decision Science (5)	
MS3024	Geometry and Applications (5)	
Mathematical Studies as part of the BEd (Hons) (Sports Studies and Physical Education)		
Students take **20** credits as follows - all listed core modules (**10** credits) and **10** credits of elective modules:		
Core Modules		
MS3015	Ordinary Differential Equations and Dynamical Systems	5
MS3024	Geometry and Applications	5
Elective Modules		
Students take modules to the value of **10** credits from the following:		10
MA4403	Discrete Time Financial Models (5)	
MS3001	Introduction to Abstract Algebra (5)	
MS3016	Introduction to Analysis and Metric Spaces (5)	
MS3017	Vector Spaces and Linear Algebra (5)	
MS3020	Linear Predictive Modelling (5)	
MS3021	Computational Data Analytics (5)	
MS3022	Operations Research (5)	
MS3023	Stochastic Decision Science (5)	

Examinations

Full details and regulations governing Examinations for each programme will be contained in the *Marks and Standards Book* and for each module in the *Book of Modules*.