



B.A. Mathematics and Education

For 1st year students Ac. Yr. 2021/22

Module Code	Module Name	Module Type	Semester	ECTS	Pre-requisites	Exclusion-requisites
ED109	Principles of Second-Level Mathematics	Core	I	5		
ED116	History and Structure of Irish Education	Core	I	5		
ED117	Introduction to Educational Sciences	Core	II	10		
ED199	Practical Teaching Programme I	Core	II	10		
MA185	Analysis and Algebra I	Core	I	5		
MA186	Analysis and Algebra II	Core	II	5		
MA187	Mathematical Skills	Core	I & II	5		
MP171	Introduction to Applied Mathematics	Core	I	5		
MP172	Introduction to Mathematical Modelling	Core	II	5		
MP173	Skills of Applied Mathematics	Core	I & II	5		

For 2nd year students Ac. Yr. 2022/23 *

Module Code	Module Name	Module Type	Semester	ECTS	Pre-requisites	Exclusion-requisites
ED294	Philosophical Foundations of Education	Core	I	5		
ED292	Practical Teaching Programme I	Core	II	15		
ED295	Mathematics Methodology & Skills of Teaching	Core	II	10		
MA2286	Differential Forms	Core	I	5		
MA283	Linear Algebra	Core	II	5		
MA334	Geometry	Core	II	5		
MP236	Mechanics I	Core	I	5		
ST2001	Statistics for Data Science I	Core	I	5		
ST2002	Statistics for Data Science II	Core	II	5		

For 3rd year students Ac. Yr. 2023/2024 *

Module Code	Module Name	Module Type	Semester	ECTS	Pre-requisites	Exclusion-requisites
ED302	Curriculum & Assessment	Core	I	5		
ED303	Practical Teaching Programme 3a	Core	II	5		
ED304	Professional Skills	Core	II	5		
ED305	Psychology, Sociology & Catering for Diversity	Core	II	10		
ED329	Research Literacies for Professional Development & Lifelong Learning	Core	II	5		
MA284	Discrete Mathematics	Core	I	5		
MA3343	Groups	Core	I	5		
MA2287	Complex Analysis	Core	II	5		
MP237	Mechanics II	Core	II	5		
MP305	Modelling I	Core	I	5		

and choose one option from:

CS402	Cryptography	Optional	II	5		
CS4423	Networks	Optional	II	5		
MA342	Topology	Optional	II	5		
MA3491	Fields and Applications	Optional	II	5		
MA378	Numerical Analysis II	Optional	II	5		
MA2111	Anailis	Optional	II	5		
MP307	Modelling II	Optional	II	5		

For 4th Year students Ac. Yr. 2024/25 *

Module Code	Module Name	Module Type	Semester	ECTS	Pre-requisites	Exclusion-requisites
ED412	Practical Teaching Programme	Core	I	5		
ED413	Block Teaching Practice	Core	I	20		
ED411	Final-year Symposium	Core	II	5		
and choose up to a total of 30ECTS from:						
MM4000	Final Year Project	Optional	II	10		
CS402	Cryptography	Optional	II	5		
CS4423	Networks	Optional	II	5		
MA216	Mathematical Molecular Biology II	Optional	II	5		
MA342	Topology	Optional	II	5		
MA3491	Fields & Applications	Optional	II	5		
MA378	Numerical Analysis II	Optional	II	5		
MA4344	Advanced Group Theory	Optional	II	5	MA3491	
MA482	Functional Analysis	Optional	II	5		
MP307	Modelling II	Optional	II	5		
MP491	Nonlinear Systems	Optional	II	5		
ST311	Applied Statistics I	Optional	I	5		
ST312	Applied Statistics II	Optional	II	5	ST311	

* Syllabus structure of any future years may be subject to change due to ongoing annual syllabus review.