School of Mathematics, Statistics & Applied Mathematics
B.Sc. Computing Pathway

For 1st year students Ac.Yr 2021/2022

B.Sc. Undenominated Science - 1BS1 - Computing Pathway					
1st year		ECTS		Sem	Pre/Co-requisites	Exclusion-requisites
CS102	Computing	15	Core	I+II		
Any other 45 ECTS						

For 2nd year students Ac.Yr 2021/2022

B.Sc. Undenominated Science - 2BS1 - Computing Pathway						
2nd year		ECTS		Sem	Pre/Co-requisites	Exclusion-requisites
CS2101	Programming for Science and Finance	5	Core	I		
CS211	Programming and Operating Systems	5	Core	II		
CT2101	Object Orientated Programming I	5	Core	I		
CT2102	Object Orientated Programming II	5	Core	II		
An additional 40ECTS pathways or electives.						
Please refer to the Programme Booklet for complete list of Pathways and electives.						

For 3rd year students Ac.Yr 2021/2022

B.Sc. Undenominated Science - 3BS9 - Computing Pathway						
3rd year				Sem	Pre/Co-requisites	Exclusion-requisites
CS3304	Logic	5	Core	I		
CS319	Scientific Computing	5	Core	II		
CT3535	Object Oriented Programming	5	Core	I		
CT2108	Networks and Data Communications	5	Core	II		
Select 10 ECTS from following options:						
CT511	Databases	5	Option	I		
CT331	Programming Paradigms	5	Option	I		
CT411	Multimedia Development	5	Option	II		
MA215	Mathematical Molecular Biology I	5	Option	I		
MA216	Mathematical Molecular Biology II	5	Option	II		
MP305	Modelling I	5	Option	I		
MP307	Modelling II	5	Option	II		
Select a further 30 ECTS from College of Science pathways or electives.						
Please refer to the Programme Booklet for complete list of Pathways and electives.						

For 4th year students Ac.Yr 2021/2022

B.Sc. Undenominated Science - 4BS2 - Computing Pathway						
4th year				Sem	Pre/Co-requisites	Exclusion-requisites
MM4000	Final Year Project	10	Core	I+II		
CS402	Cryptography	5	Core	II		
CS4102	Geometric Foundations in Data Analysis I	5	Core	I	CS2101(or dsctd.CS208)&CS211 or MA283&MA2287	
CS4103	Geometric Foundations in Data Analysis II	5	Core	II		
CS4423	Networks	5	Core	II		
CT336	Graphics And Image Processing	5	Core	I		
CT4101	Machine Learning	5	Core	I		
Select modules to a total 20 ECTS from following options, subject to timetabling and prerequisites - please refer to module owner:						
MA4102	Algebraic Foundations of Quantum Computing	5	Elective	I	MA283	
CT421	Artificial Intelligence	5	Elective	I		
CT865	Human Computer Interaction	5	Elective	I		

CT331	Programming Paradigms	5	Elective	I		
CT4100	Information Retrieval	5	Elective	I		
CT414	Distributed Systems and Cooperative Computing	5	Elective	II		
CT548	Object Oriented Software Design & Development	5	Elective	II		
MA385	Numerical Analysis I	5	Elective	I		
MA378	Numerical Analysis II	5	Elective	II		
MP305	Modelling I	5	Elective	I		
MP307	Modelling II	5	Elective	II		