

<i>Requisite Type:</i>	<i>Module Code</i>	<i>Module Name</i>	<i>ECTS Credits</i>	<i>Taught in Semester 1, 2, or Full Year</i>	<i>Written exam in Semester(s)</i>	<i>Additional Assessment details (CBE, C/A, Essay, Project)*</i>	<i>Lectures Shared With: (Bonded with:)</i>	<i>Bonded With:</i>
<b>(IBCT) First University Examination in Computer Science and Information Technology</b>								
	EE130	Fundamentals of Electrical & Electronic Engineering I	5	1	1			
	PH150	Introduction to Physics	5	2	2		1BCM	
	CT101	Computing Systems	10	Full Year	2			
	CT102	Algorithms & Information Systems	10	Full Year	2			
	CT103	Programming	10	Full Year	2			
PR: Maths HL	MA160	Mathematics	10	Full Year	2		1BCM	
	Or MA190	Mathematics (honours)	10	Full Year	2			
	CT1112	Professional Skills I	5	Full Year	2	c/a		
	CT1113	Next-Generation Technologies I	5	2	2			
<b>TOTAL FOR THE COMPUTATION OF HONOURS = 60 ECTS</b> up to 60% of a module may be examined by continuous assessment								

<i>Requisite Type:</i>	<i>Module Code</i>	<i>Module Name</i>	<i>ECTS Credits</i>	<i>Taught in Semester 1, 2, or Full Year</i>	<i>Written exam in Semester(s)</i>	<i>Additional Assessment details (CBE, C/A, Essay, Project)*</i>	<i>Lectures Shared With: (Bonded with:)</i>	<i>Bonded With:</i>
<b>(2BCT) Second University Examination in Computer Science and Information Technology</b>								
<b>Core Modules (40 ECTS)</b>								
	CT213	Computer Systems and Organisation	5	1	1			
	CT230	Database Systems I	5	1	1		2BP, 2BA,2BCS, 2BFS,	CT241 CM
	ST237	Statistics I	5	1	1			
	CT216	Software Engineering I	10	Full Year	2			
	CT2106	Object-Oriented Programming	5	1		CBE		
	CT2109	OOP:Data Structures and Algorithms	5	2	2			
	CT2108	Networks and Data Comms I	5	2	2			
<b>Stream 1* (20 ECTS)</b>								
	MA204	Discrete Mathematics	5	1	1		2BS1, 2EH1	
	MA203	Linear Algebra	5	2	2		2BA, 2BS1, 2EH1	
	CT248	Intro. to Modelling	5	2	2		3BSE	
	CT255	Next Generation Technologies II	5	2	2			
<b>Stream 2* (20 ECTS)</b>								
	MA284	Discrete Maths	5	1	1			
	MA2286	Differential Forms	5	1	1			
	MA283	Algebra	5	2	2			
	MA2287	Complex Analysis	5	2	2			
<b>TOTAL FOR THE COMPUTATION OF HONOURS = 60 ECTS</b> up to 60% of a module may be examined by continuous assessment								

\*The core modules are compulsory. Students must take either Stream 1 or Stream 2 modules. Only students who have taken MA190 (Honours Module) in 1BCT are eligible to take Stream 2.

<i>Requisite Type:</i>	<i>Module Code</i>	<i>Module Name</i>	<i>ECTS Credits</i>	<i>Taught in Semester 1, 2, or Full Year</i>	<i>Written exam in Semester(s)</i>	<i>Additional Assessment details (CBE, C/A, Essay, Project)*</i>	<i>Exam common to another group:</i>	<i>Bonded with:</i>
<b>(3BCT) Third University Examination in Computer Science and Information Technology</b>								
<b>Core Modules (25 ECTS)</b>								
	CT5106	Software Engineering 2	5	1	1			
	CT326	Programming III	10	1	1		3BP	
	CT3531	Networks and Data Comms II	5	1	1			
	CT3532	Databases Systems II	5	1	1			
<b>PEP Modules (20 ECTS)</b>								
	CT3534	PEP Project or POC	10	2	2			
	CT3112	Professional Skills	5	2	2			
	CT3533	Organisational Innovation	5	2	2			
<b>Stream 1* (15 ECTS)</b>								
CR:CT331 CR:CT3111	CT318	Human Computer Interaction	5	1	1		3BA, 1SD, 4BA, 1MF1, 1SD1	CT865 CM
CR:CT318 CR:CT3111	CT331	Programming Paradigms	5	1	1			
CR:CT318 CR:CT331	CT3111	Next-Generation Technologies III	5	1	1			
<b>Stream 2* (15 ECTS) Choose 3 modules:</b>								
	MA385	Numerical Analysis I	5	1	1			
	MA341	Metric Spaces	5	1	1			
	MA3343	Groups	5	1	1			
	ST235	Probability	5	1	1			
<b>TOTAL FOR THE COMPUTATION OF HONOURS = 60 ECTS</b>								
CBE=computer based exam, c/a= continuous assessment. Additional Assessments: S.1=semester 1, S.2=semester 2 up to 60% of a module may be examined by continuous assessment								

\*The Core modules are compulsory. Students must take either Stream 1 or Stream 2 modules. Only students who have taken Stream 2 in 2BCT are eligible to take Stream 2 in 3BCT.

<i>Requisite Type:</i>	<i>Module Code</i>	<i>Module Name</i>	<i>ECTS Credits</i>	<i>Taught in Semester 1, 2, or Full Year</i>	<i>Written exam in Semester(s)</i>	<i>Additional Assessment details (CBE, C/A, Essay, Project)*</i>	<i>Lectures Shared With: (Bonded with:)</i>	<i>Bonded With:</i>
<b>(4BCT) Fourth University Examination in Computer Science &amp; Information Technology</b>								
<b>Core Modules (40 ECTS)</b>								
	CT421	Artificial Intelligence	5	1	1			
	CT417	Software Engineering III	5	1	1	c/a	4BLE, 4BP	
	CT414	Distributed Systems & Co-Operative Computing	5	2	2		4BP	
	CT436	Advanced Professional Skills	5	1	1	c/a		
	CT420	Real Time Systems	5	2	2		4BP1	
	CT475	Machine Learning and Data Mining	5	1	1		ME (CS&IT), 4BP1	
	CT413 Or MA436	Final Year Project Final Year Project	10	Full Year	2	project		
<b>Optional Modules (20 ECTS)</b>								
	CT404	Graphics and Image Processing	5	1	1		1SD1, 3BA, 1MF1 (CT336), 4BP (CT404)	CT336 (BA) CM
	CT422	Modern Information Management	5	1	1		APE	
	CT437	Computer Security and Forensic Computing	5	2	2			
	CT561	Systems Modelling and Simulation	5	1	1			
	MA490	Measure Theory	5	1	1			
	MA416	Rings	5	1	1			
	MA3101	Euclidean and non-Euclidean Geometry	5	1	1			
	MA342	Topology	5	2	2			

	MA4344	Advanced Group Theory	5	2	2			
	MA236	Statistical Inference	5	2	2			
	MA3491	Fields & Applications	5	2	2			
	CS402	Cryptography	5	2	2			
	CS4423	Networks	5	2	2			
<p><b><i>TOTAL FOR THE COMPUTATION OF HONOURS = 60 ECTS</i></b></p> <p>CBE=computer based exam, c/a= continuous assessment. Additional Assessments: S.1=semester 1, S.2=semester 2 up to 60% of a module may be examined by continuous assessment</p>								

\*The Core modules are compulsory. Students must take either Stream 1 or Stream 2 modules. Only students who have taken Stream 2 in 3BCT are eligible to take Stream 2 or MA436 Final Year Project.