

Honours in Mathematics-Science with concentration in Computer Science (122 credits)	Honours in Mathematics-Science with concentration in Computer Science (108 credits) Program abolished
Requirements 2003-2005	New course codes 2006
Compulsory first-year credits 35 Suggested course stream for full-time students	Compulsory first-year credits 30 Suggested course stream for full-time students
Fall:	Fall:
ITH220 Introduction to Computer Science I 4	ITH1120 Introduction to Computer Science I 3
ENG1112 Technical Report Writing 3	ENG1112 Technical Report Writing 3
MAT1320 Calculus I 3	MAT1320 Calculus I 3
MAT1341 Introduction to Linear Algebra 3	MAT1341 Introduction to Linear Algebra 3
PHY1101 Fundamentals of Physics I 3	PHY1121 Fundamentals of Physics I 3
or	or
PHY1301 Principles of Physics I 3	PHY1321 Principles of Physics I 3
Three credits from the Faculties of Science or Engineering 3	Three credits from the Faculties of Science or Engineering 3
Winter:	Winter:
ITH221 Introduction to Computer Science II 4	ITH1121 Introduction to Computer Science II 3
MAT1322 Calculus II 3	MAT1322 Calculus II 3
MAT1361 Logic and Discrete Mathematics 3	PHY1122 Fundamentals of Physics II 3
PHY1102 Fundamentals of Physics II 3	or
or	PHY1322 Principles of Physics II 3
PHY1302 Principles of Physics II 3	Three credits from the Faculties of Science or Engineering 3
Three credits from the Faculties of Science or Engineering 3	
Compulsory second-year credits 63	Compulsory second-year credits 48
MAT2122 Calculus II 3	MAT2121 Analysis II 3
MAT2141 Honours Linear Algebra I 3	MAT2141 Linear Algebra I 3
MAT2324 Ordinary Differential Equation and Laplace Transformation 3	MAT2324 Ordinary Differential Equation and Laplace Transformation 3
or	or
MAT2331 Ordinary Differential Equations and Numerical Methods 4	MAT2384 Ordinary Differential Equations and Numerical Methods 3
Winter:	Winter:
MAT2125 Mathematical Analysis I 3	MAT2120 Analysis I 3
MAT2143 Group Theory and Applications 3	MAT2143 Algebraic Structures 3
MAT2343 Elements of Discrete Mathematics 3	MAT2348 Discrete Mathematics 3
CSI2114 Data Structures 3	CSI2110 Data Structures and Algorithms 3
CSI2910 Professional Practice in Computing 1	
One programming language laboratory chosen in two different groups (excluding CSI2173). 2	
Fall:	Fall:
MAT2371 Introduction to Probability 3	MAT2371 Introduction to Probability 3
CSI2111 Computer Architecture 3	CSI2111 Computer Architecture 3
CSI3105 Design and Analysis of Algorithms I 3	CSI3105 Design and Analysis of Algorithms I 3

Winter:		Winter:	
MAT2375 Introduction to Statistics	3	MAT2375 Introduction to Statistics	3
MAT3380 Introduction to Numerical Methods	3	MAT3380 Introduction to Numerical Methods	3
CSI2121 Principles of Assembly Language Programming	3	CSI2121 Principles of Assembly Language Programming	3
CSI2131 File Management	3	CSI2131 File Management	3
One programming language laboratory chosen in two different groups (excluding CSI2173).	2		
Fall:		Fall:	
CSI3125 Concepts of Programming Languages	4	CSI3125 Concepts of Programming Languages	4
CSI3317 Database Management Systems	3	CSI3317 Database Management Systems	3
SEG2100 Introduction to Software Engineering	3	SEG2105 Introduction to Software Engineering	3
Winter:		Winter:	
CSI3310 Operating System Principles	3	CSI3310 Operating System Principles	3
CSI4101 Theory of Computability	3	CSI4101 Theory of Computability	3
or		or	
CSI4150 Introduction to Numerical Optimization Methods	3	CSI4150 Introduction to Numerical Optimization Methods	3
Additional requirements	15	Additional requirements	15
Three credits from:		Three credits from:	
MAT3121 Complex Analysis I	3	MAT3121 Complex Analysis I	3
MAT3125 Mathematical Analysis II	3	MAT3120 Analysis III	3
MAT3130 Introduction to Dynamical Systems	3	MAT3130 Introduction to Dynamical Systems	3
MAT3141 Honours Linear Algebra II	3	MAT3141 Linear Algebra II	3
MAT3143 Ring Theory and Applications	3	MAT3143 Ring Theory	3
Six credits from:		Six credits from:	
MAT3153 Introduction to Topology	3	MAT3153 Introduction to Topology	3
MAT3172 Probability II	3	MAT3172 Probability II	3
MAT3175 Introduction to Mathematical Statistics	3	MAT3175 Introduction to Mathematical Statistics	3
MAT3344 Discrete Mathematics	3		
MAT3361 Introduction to Mathematical Logic	3	MAT3361 Introduction to Mathematical Logic	3
MAT3375 Regression Analysis	3	MAT3375 Regression Analysis	3
MAT3376 Analysis of Variance	3	MAT3378 Analysis of experimental designs	3
MAT3377 Sampling and Surveys	3	MAT3377 Sampling and Surveys	3
Six credits of MAT at the 4000 level or from	6	Six credits of MAT at the 4000 level or from	6
MAT3121, 3125 , 3130, 3141, 3143 not used to satisfy the previous requirements.		MAT3121, 3120 , 3130, 3141, 3143 not used to satisfy the previous requirements.	
Nine credits from the Faculties of Arts, Education, Law, Social Science or the School of Management.	9	Nine credits from the Faculties of Arts, Education, Law, Social Science or the School of Management.	9