

BACHELOR OF SCIENCE HONOURS IN COMPUTER SCIENCE (3735)

B.220 ADMISSION

Unless Senate decides otherwise and subject to Rule A.2.3, candidates will be required to meet the following criteria to be enrolled for the degree: **Bachelor of Science Honours - BScHons (Computer Science)**

B.220.1 A student must have a BSc degree in Computer Science or another degree with a major in Computer Science and must have obtained a 60% average for the 3rd year Computer Science modules. In addition, the prospective student is required to have completed EED (English for Educational Development) or equivalent or shall complete it as a co-requisite.

B.220.2 The approval of the departmental Post-Graduate committee is required for admission into the programme.

B.221 SELECTION

As only a limited number of students can be admitted to the programme, applicants will be subject to a selection procedure.

B.222 DURATION

Unless Senate decides otherwise the duration of the programme shall extend over one year's full-time study and two years part-time study.

B.223 CURRICULUM

B.223.1 A student may take up to an equivalent of two Honours modules, not exceeding 30 credits, from cognate or associate disciplines, provided they have the permission from the Chairpersons of the said department (s) and the Chairperson of the Computer Science department.

Module Name	Alpha Code	Cred
Compulsory (select all modules)		
Project Analysis and Design 731	COS731	15
Project Implementation and Testing 732	COS732	15
	Sub-total	30

Electives (select 6 modules from group 1 or select 4 to 5 modules from group 1 and 1 to 2 modules from group 2)

Group 1 (select 4 to 6 modules)		
Machine Learning 711	COS711	15
Internet Programming 725	COS725	15
Advanced Software Engineering 726	COS726	15
Advanced Operating Systems 727	COS727	15
Compilers 729	COS729	15
Advanced Computer Networks 730	COS730	15
Software Engineering for Free and Open Source Software 733	COS733	15
Information and Communication Technologies for Development 734	COS734	15
Capita Selecta 792/3/4	COS792/3/4	15
	Sub-total	60-90

Group 2 (select 1 to 2 modules)

Mathematics

Computational Linear Algebra 728	MAM728	15
Coding Theory 747	MAM747	15
Number Theory 709	MAM709	15
Graph Theory 710	MAM710	15
Partial Differential Equations 717	MAM717	15
Topology 737	MAM737	15
Functional Analysis 767	MAM767	15
Group Theory 739	MAM739	15
Introduction to Optimal control 740	MAM740	15
Stochastic Calculus for Finance 714	COF714	15
Financial Engineering 716	COF716	15

Statistics

Biostatistics 733	STA733	15
Statistical Modelling 733	STA737	15
Survey Methods 706	POP706	15
Official Statistics 703	POP703	15
Theoretical Statistics 705	STA705	15
Population Projections 790	STA790	15
Data Mining I 760	STA760	15
Simulation 710	COF710	15
Demographic Analysis 707	POP707	15
Probability and Stochastic Processes 712	COF712	15
Time Series Analysis 711	COF711	15
Matrix Methods 734	STA734	15
Multivariate Analysis 701	STA701	15
Applied Statistics 501	STA501	15
Social Demography 709	POP709	15
Research Project 761	STA761	30

Physics

Applied and Computational Physics 720	PHY720	30
Nuclear Physics 723	PHY723	30
Advanced Analytical Techniques 726	PHY726	30

Information Systems

Delivering IS Benefits 711	IFS711	15
IS Practice 721	IFS721	15
Managing System Delivery 712	IFS712	15
IS Research 721	IFS721	15
	Sub-total	15-30
	TOTAL	120

B.224 ASSESSMENT

Assessment is governed by Rule A.5 as stipulated in the University Calendar: General Information Part 1.

B.225 PROGRESS RULES

B.225.1 Full-time

Unless Senate decides otherwise, a full-time student shall complete the programme in one year. A student who passed at least 60 credits may proceed with his/her studies to complete the programme the following year.

B.225.2 Part-time

Unless Senate decides otherwise, a part time student shall complete the programme in two consecutive years and accumulate at least 60 credits per annum to proceed with his or her studies. A student who accumulated 90 credits within two years may be allowed to proceed to the following year to complete the programme.

B.226 RENEWAL OF REGISTRATION

The renewal of registration will be governed by the Rule A.4, as stipulated in the University Calendar: General Information Part 1.

B.227 SPECIAL REQUIREMENTS FOR THE PROGRAMME

- B.227.1** Special topics presented by visiting lecturers, industry partners, etc., that may be offered instead of any of the topics given above or as an additional module.
- B.227.2** Not all modules are offered every year, and the department may offer additional Capita Selecta modules.