

Undergraduate pathways

Computer Science

Artificial Intelligence

Computer Science

Information Technology

Networks

Software Engineering

Stage 1: University Foundation



Intakes

September and January

Duration

Two semesters

Modules

Semester one

- Interactive Learning Skills and Communication (ILSC)
- Principles of Computing
- Business Studies
- Mathematics 1

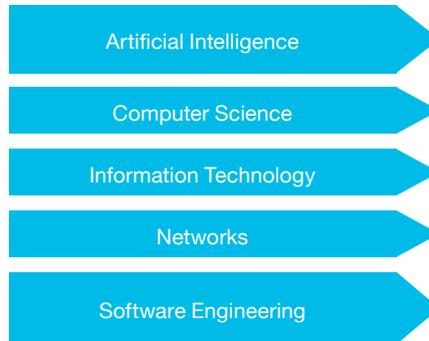
Semester two

- Mathematics 2
- Mass Communications
- Programming
- Statistics

Progression rule to Stage 2

Minimum 50% pass mark in all modules except ILSC which is 50% with minimum 85% attendance required across all modules.

Stage 2: First Year of Degree



Intake

September

Duration

Two semesters

Modules

HIC provides subject specialist skill progression classes during integrated First Year Degree.

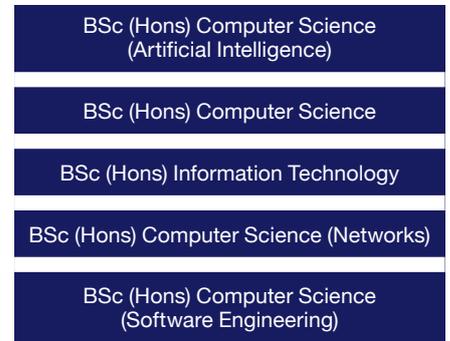
Students need to pass all modules to progress. All students study a collection of modules, totalling 120 credits.

More information about the University's degree modules can be found on their website: www.herts.ac.uk/apply/schools-of-study/schools/computer-science.

Progression rule to Stage 3

Minimum 40% pass mark in all modules except ILSC which is 40% with minimum 85% attendance required.

Stage 3: Second & Final Year Degree



Intake

September

Duration

Two semesters

Modules

More information about the University's degree modules can be found on their website: www.herts.ac.uk/apply/schools-of-study/schools/computer-science.

Employment & career options

Previous graduates have gone to work in a variety of roles both at management level and at the technical level with companies such as Accenture, Cisco, CCNA, IBM, Oracle OCA, Sun Microsystems, Xerox, Yell.



Foundation in Computer Science (Two Semesters)

Computer Science

Core Modules			Credit Points	Pass Mark %	Exam %	Coursework %
Contact Hrs/Week	College Module Code	Module Name				
Semester 1:						
4	ILS001	Interactive Learning Skills and Communication	15	60	30	70
4	BUS107	Principles of ICT	15	50	60	40
4	BUS104	Mathematics 1	15	50	50	50
4	BUS106	Business Studies	15	50	50	50
Semester 2:						
4	MTH002	Mathematics 2	15	50	70	30
4	COM101	Introduction to Programming	15	50	50	50
4	BUS105	Statistics	15	50	70	30
4	MAC101	Introduction to Mass Communications	15	50	-	100
Undergraduate Stage 1 : Science and Engineering			Computer Science Pathway: 120 credit points			

Interactive Learning Skills & Communications (ILS001)

The aims of this module are to develop a range of academic and communicative skills necessary for successful study in Higher Education; to develop independent learning and encourage students to take responsibility for their personal, academic and professional development; and to develop the knowledge and ability to use a range of digital technologies.

Assessment: 30% examination and 70% coursework

Principles of ICT (BUS107)

This Principles of ICT module attempts to deliver an accurate snapshot of the state of ICT as it exists currently, as well as to equip the student with a useful set of skills in the use of common productivity software and Internet based applications. The module introduces candidates to the interesting challenges that ICT presents today and covers many anchor points that may serve as a bridge to their interests and lifestyles. These bridges include the technology in their mobile telephones, computing equipment, home appliances, motor vehicles, shopping, movies and entertainment software.

Assessment: 60% examination and 40% coursework

Maths 1 (BUS104)

On this module you will study the basis of algebra including, indices, surds and use of brackets within statements and basic equations; Solutions of quadratic equations, factorization, and the laws of logarithms and surds; Simultaneous equations involving 2 and 3 variables; Trigonometrical ratios, equations of tangents, and the normal to a curve; Sequences, Arithmetic and Geometric transfers; Simple and compound interest formulae. Binomial expansions; Differentiation by first principles and other topics.

Assessment: 50% examination and 50% coursework

Business Studies (BUS106)

This module has been designed to present some of the fundamental aspects of business and the business evaluation process to students seeking to progress to one of the prescribed undergraduate degree programmes at the University of Hertfordshire. They also seek to provide students with an appreciation of the knowledge and skills needed to run a business.

Assessment: 50% examination and 50% coursework

Introduction to Mass Communications (MAC101)

The Mass Communications module is a clear and concise introduction to the communication and manipulation of signs, symbols and language in the modern world. It is through an understanding of these processes that students are able to recognise the ways in which institutions, such as the media, are able to construct “realities” or versions of the world for large groups of people at once. Beginning with a look at some broad definitions and concepts, students are immediately asked to recognise and analyse some of the forms of mass communication that they may have come across in the past and begin to explore new culture-specific forms in Britain.

Assessment: 100% coursework

Introduction to Programming (COM101)

On this module you will study about the following: algorithms and computer programs designed to solve problems; The success of a program depends on how well the problem is understood and then broken down into identifiable components; Control structures such as conditions and iteration can be used to effect an algorithm; Data can be represented using variables of different types; and Understanding of Boolean arithmetic and its use in conditional statements.

Assessment: 50% examination and 50% coursework

Statistics (BUS105)

By the end of this module you will be able to: Explain the foundations underlying and relevant to statistics and statistical principles; Examine measures of Central Tendency as a means of describing data; Examine and interpret measures of dispersion as a means of describing data. Sampling techniques to data collection; Determine probabilities in a variety of situations; Explain Normal Probability Distribution and Central Limit Theorem; Collect bivariate data and interpret patterns and relationships with that data; Determine and interpret measures of association; Draw and interpret tables; Examine and interpret Time Series data and Trend Analysis; and Use a statistical calculator to complete basic statistical operations.

Assessment: 70% examination and 30% coursework

Mathematics 2 (MTH002)

During this module you will study: Integration techniques involving, products and quotients, exponential, logarithmic and trig functions; General and particular solutions of homogeneous and inhomogeneous differential equations of the first and second order; Numerical techniques for the manipulation of matrices, the law of matrices. The identity matrix and its function; The determinant of a matrix, cofactors and minors, conditions for trivial and non-trivial solutions; The augmented matrix and its row echelon form. Solutions of a system of equations via Gaussian elimination/ and Matrix algebra techniques; Eigenvalues and associated eigenvectors for non-trivial solutions of a system of equations; Three-dimensional Cartesian coordinates; The unit vectors; Direction cosines; and The vector and scalar products rules and definitions.

Assessment: 70% examination and 30% coursework