

NCUK

International
Year One

**COMPUTER
SCIENCE**

NCUK
UNIVERSITY PATHWAYS



International Year One in Computer Science

Programme and Module Overview

International Year One in Computer Science



**COMPUTER
SCIENCE**

Overview

The International Year One in Computer Science is a first-year undergraduate programme that equips students with essential knowledge and skills in computer science. This programme provides a strong academic base, ensuring a seamless transition into the second year (FHEQ Level 5) of a computer science-related undergraduate degree.

Benchmarking statement

The International Year One in Computer Science is at FHEQ Level 4.

Entry requirements

- **GCE A-levels:** A minimum of grade 'B' in mathematics at UK-recognised 'A' level and IELTS 6.0 with no component below 5.5 (or equivalent), OR
- Country-specific⁷ entry requirements that are similar.
- All applicants must have basic digital literacy skills such as familiarity with navigating a file system, using office productivity software and interacting with computer hardware.

Programme structure

The programme comprises 1200 total learning hours, divided into 585 guided learning hours and 615 independent study hours. Students will complete six compulsory modules. Three modules will be studied concurrently per semester.

Modules

- **Introduction to Programming (20 credits):** Covers programming fundamentals, object-oriented design, modular coding, and web applications with a focus on maintainability and ethical practices.
- **Computer Architecture & Systems (20 credits):** Explores computer architecture, hardware-software interaction, assembly programming, and system design with practical and ethical considerations.
- **Foundations of Theoretical Computer Science (20 credits):** Introduces formal languages, automata, computational models, and mathematical techniques for analysing computational problems and their limitations.
- **Introduction to Software Engineering (20 credits):** Covers software development life cycles, design methodologies, coding, testing, and teamwork with a focus on industry standards and ethics.

⁷ Country-specific entry requirements for the NCUK International Year One: <https://www.ncuk.ac.uk/ncuk-programmes/international-year-one>

- **Practical Data Structures & Algorithms (20 credits):** Focuses on implementing data structures, optimising algorithms, and solving computational problems with efficient, well-documented code.
- **Introduction to Artificial Intelligence (20 credits):** Explores AI and Data Science principles, applications, and ethical implications, with hands-on experience in data analysis and model building.

Assessment, grading & certification

The assessment breakdown consists of 45% coursework and 55% examination. Each module requires a minimum pass mark of 40%. The programme awards classifications as follows:

- **Distinction:** 70%+ overall mean mark
- **Pass:** 40%+ overall mean mark
- **Fail:** Less than 40% overall

Progression

Students who complete the programme successfully are certified for progression to the second year of appropriate undergraduate degree courses at NCUK's university partners.



Learn more

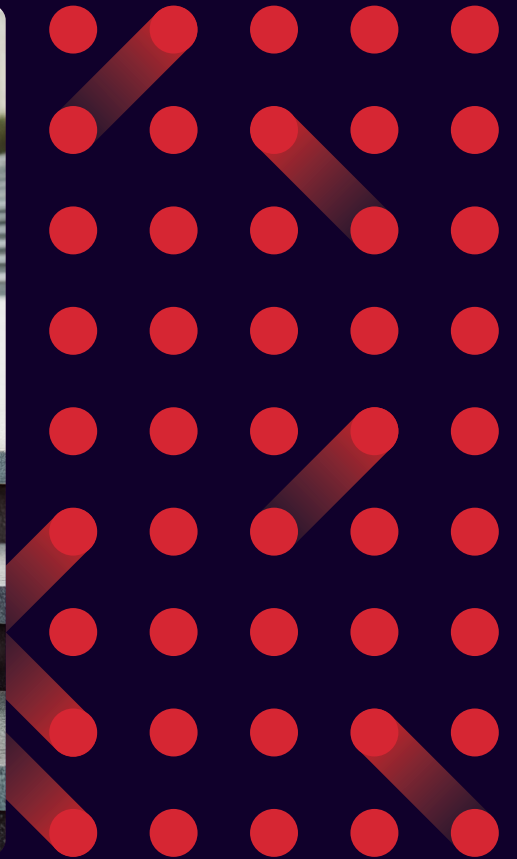


NCUK University Partners

As this is a new programme for 25/26, university progression routes are being added regularly, please check our website for the latest options.

Learn more





www.ncuk.ac.uk | www.ncuk.cn

