Artificial Intelligence BEng (Hons.)

Gain the skills to design and develop the next generation of Artificial Intelligence (Al) systems and services.

Increased use of Artificial Intelligence (AI) can bring major social and economic benefits by automating tasks currently done by humans. Al computers can analyse and learn from information at higher accuracy and speed than humans can. It offers massive gains in efficiency and performance to most or all industry sectors, for example Health, Financial Technology, Advanced Manufacturing and Social Media. Al is software that can be integrated into existing processes, improving them, scaling them, and reducing their costs, by making or suggesting more accurate decisions through better use of information.

This course will develop your employability skills by:

- · providing you with a broadly-based education in AI and its related technologies which will equip you with the knowledge and skills to select and apply appropriate AI techniques to a particular domain.
- · providing a systematic study of the theory and principles of Al, which includes fundamental theoretical computer science, mathematics, programming and software engineering.
- developing your competence in the use of programming languages for the production of AI and Machine Learning software components.
- developing your ability to analyse problems, reason a solution, and represent the knowledge using suitable AI methods and computational techniques.



HOW TO APPLY

Please apply directly to the university













Entry Requirements:

Entry Point: Foundation

- Be 18 years old or over upon completion of the International Foundation Programme
- Have successfully completed the General Secondary Education Certificate or Qatar Senior School Certificate with a minimum of 50% in 5 subjects (including Maths, if studying the STE pathway)

Entry Point: Year 1

- A level: Grades BBB to include ONF subject from Mathematics. Further Mathematics, Physics, Chemistry, Biology, Computing (not ICT/IT), Software Systems Development, Technology and Design, Design and Technology, Digital Technology, Electronics, Engineering For applicants offering Mathematics or Further Mathematics or Physics subjects at A level, a two-grade reduction will be applied i.e. BCC
- BTEC Level 3 RQF National Extended Diploma in Computing (not ICT/IT), Electronics or an Engineering discipline with overall award profile of DDM
- International Baccalaureate: Minimum 26 points (13 at Higher level to include Grade 4 HL Mathematics and another HL subject from Mathematics, Physics, Chemistry, Biology, Computing, Technology or Engineering).

AND

• Academic IELTS overall score of 6.0 (with no contributing band score of less than 5.5).

If you do not meet the entry requirements, CÚC will provide you with a support programme that will help you improve your English level and your academic skills.

What Will you Study

International Foundation Year

- Foundation in Science & Technology
- Foundation in Mathematics
- Introduction to Physiology and Chemistry
- Introduction to Computing, Engineering and the Built Environment
- English with Study Skills
- Extending Critical Thinking for Undergraduate Study
- English for Academic Transition
- Exploring Cultural Identities
- Project-Based Learning

Year 1

- Mathematics for Computing
- Software Development I
- Software Development II
- Database Systems
- Computer Hardware and Operating Systems
- Systems Analysis and Design

Year 2

- Computer Networks & Security
- Object oriented Programming
- Algorithms and Data Structures
- Web Application Development
- Mobile Application Development
- Professional Development (Optional if taking 3rd year as Work Experience)

Year 3

- Final Year Project
- Cyber Security (optional)
- Concurrent and Distributed Systems (optional)
- Enterprise Computing (optional)
- Network Operating Systems (optional)Advanced Mobile Technology (optional)
- Intelligent Robotics (optional)
- Computer Vision (optional)
- Mixed Reality (optional)