

ÉCOLE D'INGÉNIERIE

COMPUTER SCIENCE

100% ENGLISH TRACK

Bachelor



PRESENTATION

Computer science is a discipline that works with processing information in digital computers, and possibly quantum computers in the future. It is the integration of principles and technologies required to collect, store, access, and process information. Computer science focuses on designing algorithms for solving complex problems.

The Bachelor of Science in Computer Science is built on a rigorous curriculum of computer science courses and includes a concentration in data science. The program provides a strong foundation in the discipline and includes advanced study in several important areas of computer science.

In order to provide a quality undergraduate degree, the computer science program at UIC aims to develop:

1. Technical competence

Graduates will apply technical knowledge and skills to develop and implement computer solutions for industry, government, or research area in which they are working. Moreover, they will explore and integrate new technologies.

2. Interpersonal skills

Graduates will communicate and collaborate with both technical and non-technical people from multiple domains and work as part of teams.

3. Professional awareness

Graduates will continue to grow intellectually and professionally in their chosen field.

These are the traits we expect our students to accomplish during the first few years following graduation in order for them to succeed in either a career or graduate studies.

ADMISSION PROCESS

To be eligible for enrollment into the Bachelor of Computer Science Degree, the applicant must have completed a high school degree that is recognized by Morocco's Ministry of Higher Education such as a Baccalaureate from a local or international institution including public and recognized private entities. Admission criteria for this program are based on a comprehensive review of the relative strength of high school grades, test scores, class rank and GPA. Applicants must complete the following:

(A) Evidence of Math Proficiency

(B) Evidence of English Proficiency

Undergraduate applicants require one of the following exams as proof of English proficiency:

UIC's Language Proficiency Test: minimum level of CEFR B2.1 for Speaking, Listening, Reading, and Writing.

TOEFL score of > 60 or higher (TOEFL iBT); all sub-scores must meet a minimum level of 15

IELTS score of > 5.5 or higher. Speaking and listening: 5.5 or higher, Reading and Writing: 5.0 or higher

(C) Interview

Selected applicants may be invited for an interview with the Admissions Office. The screening tests are completed at the admissions office. The interview, conducted in English by the academic team, focuses on interpersonal skills, motivation, fluency of expression, and the capacity to meet the academic requirements.

EMPLOYEMENT OPPORTUNITIES

Careers in Computer Science are challenging and stimulating. Computer science graduates are in high demand and enjoy excellent employment opportunities after graduation. Possible career paths include:

- Application programming
- Web programming
- Network management
- Systems programming and analysis
- Software development and maintenance

CURRICULUM

SEMESTRE	MODULES
S1	M11 - Calculus I
	M12 - Algorithmics Fundamentals
	M13 - Introduction to Computer Science
	M14 - Introduction to web development HTML/CSS
	M15 - Introduction to Computer Networks/Computer Systems
	M16 - Foundations of Engineering Design Thinkin
	M17 - Focused Inquiry/ English for Information Technology
S2	M18 - Probability and Statistics
	M19 - Introduction to Effective Speaking
	M20 - Database Management System
	M21 - C Programming
	M22 - Introduction to Operating System Linux/Unix
	M23 - Calculus II
	M24 - Management of Information Systems
S3	M25 - COO (UML)
	M26 - Linear Algebra
	M27 - Python Programming
	M28 - Technical and Scientific Writing
	M29 - C++ Programming
	M30 - COOP Project

SEMESTRE	MODULES
S4	M31 - Operationnal Research
	M32 - Java Programming
	M33 - Corporate Communication
	M34 - Client/Server Architecture
	M35 - Web Development PHP
	M36 - Operating Systems & Systems Programming
S5	M37 - Business Intelligence
	M38 - Mobile Programming
	M39 - Web Programming JEE /.NET
	M40 - Project Management
	M41 - Personal and Professional Development
	M42 - Artificial Intelligence: Principles and Applications
S6	M43 - Formal Verification and Automata
	M44 - Information Security and Cybersecurity
	M45 - Operations Management and Leadership
	M46 - The internship Project

