

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 Thinking
	M17 - Focused Inquiry/ English for Information Technology
S2	M21 - Probability and Statistics
	M22 - Introduction to Effective Speaking
	M23 - Database Management System
	M24 - C Programming
	M25 - Introduction to Operating System Linux/Unix
	M26 - Calculus II
	M27 - Management of Information Systems
S3	M31 - COO (UML)
	M32 - Linear Algebra
	M33 - Python Programming
	M34 - Technical and Scientific Writing
	M35 - C++ Programming
	M36 - COOP Project

SEMESTRE	MODULES
S4	M41 - Operationnal Research
	M42 - Java Programming
	M43 - Corporate Communication
	M44 - Client/Server Architecture
	M45 - Web Development PHP
	M46 - Operating Systems & Systems Programming
S5	M51 - Business Intelligence
	M52 - Mobile Programming
	M53 - Web Programming JEE /.NET
	M54 - Project Management
	M55 - Personal and Professionnal Development
	M56 - Artificial Intelligence: Principles and Applications
S6	M61 - Formal Verification and Automata
	M62 - Information Security and Cybersecurity
	M63 - Operations Management and Leadership
	M64 - The internship Project

