MS, COMPUTER SCIENCE

The Master of Science in Computer Science is designed to prepare students for immediate entry into the global professional workforce in computer science. The program provides advanced quality graduate studies in areas of critical importance and great demand such as software engineering, database architecture and management, website development, computer networking, cyber security, big data, cloud computing and mobile application development.

Typical career paths for graduates include:

- Data analyst
- IT consultant
- Multimedia programmer
- SEO specialist
- Systems analyst
- Web developer

The Concordia University Chicago Advantage

- Founded in 1864, Concordia University Chicago has been bringing higher education to the world for more than 150 years.
- CUC has been selected as a 2016-17 College of Distinction. The university has been part of a select group of colleges to earn this prestigious recognition since 2010.
- CUC was voted 96th out of 684 master's-degree-granting universities in 2013 by *Washington Monthly*.
- Benefit from being taught by our highly dedicated and experienced faculty.
- Enjoy a more personalized learning experience with small classes.
- Network with professionals in and around Chicago, a truly global business city.
- Enjoy our campus located in a safe, quiet, and beautiful residential area close to shopping, restaurants, and transportation.

Program Structure

Core Requirements
- CSC-6051 Operating System II
- CSC-6021 Data Structures and Algorithms II
- CSC-6022 Advanced Data Structures and Algorithms

Specialization Requirements

Software Engineering
- CSC-6160 Software Engineering I
- CSC-6161 Software Engineering II
- CSC-6162 Advanced Software Engineering

Database Design and Development
- CSC-6220 Database Design and Development I
- CSC-6221 Database Design and Development II
- CSC-6222 Advanced Design and Development (Big Data)

Website Design and Development
- CSC-6350 Website Design and Development I
- CSC-6351 Website Design and Development II
- CSC-6352 Advanced Web Design and Development

Computer Networking and Cyber Security
- CSC-6440 Computer Networking and Cyber Security I
- CSC-6441 Computer Networking and Cyber Security II
- CSC-6442 Advanced Computer Networking and Cyber Security

Mobile Application Design and Development
- CSC-6530 Mobile Application Design and Development I
- CSC-6531 Mobile Application Design and Development II
- CSC-6532 Advanced Mobile Application Design and Development
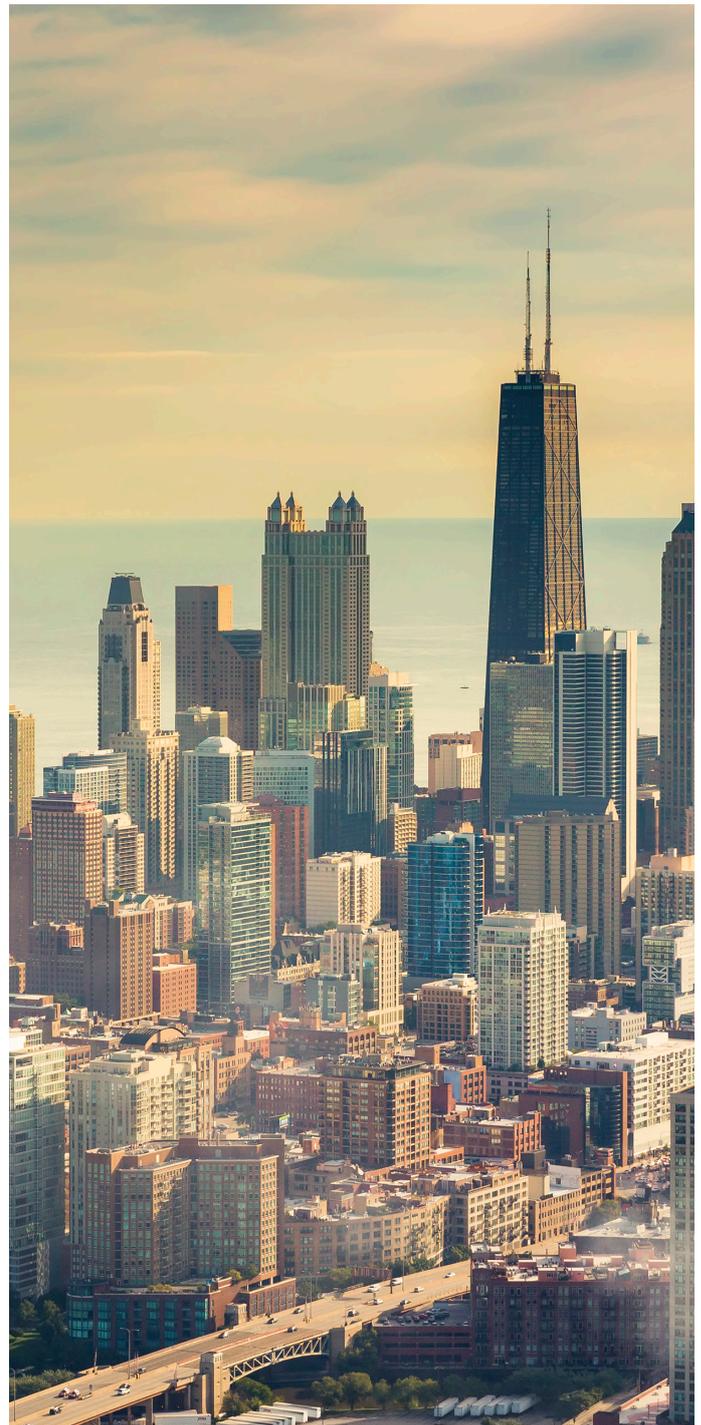
Program Objectives

The program will enable students to attain, by the time of graduation:

- An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design, implementation and evaluation of software systems, processes, components, or programs of varying complexity in a way that meets the desired needs and demonstrates comprehension of the tradeoffs involved in design choices.

- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.

- An ability to function effectively on teams to accomplish a common goal.

- An understanding of professional, ethical, legal, security and social issues and responsibilities.

- An ability to communicate effectively with a range of audiences.

- An ability to analyze the local and global impact of computing on individuals, organizations, and society.

- Recognition of the need for and an ability to engage in continued professional development.

- An ability to use current techniques, skills, and tools necessary for computing practice.

Key Facts

- **Duration:** 2 years

- **Intakes:** August

- **Fees:** $28,275

- **STEM extension:** 2 years (3 years OPT in total)

International Students

In addition to the base program curriculum, international students attending face-to-face classes on the CUC campus are required to take the Seminar in Higher Education, a 3-credit course.

GLOBAL UNIVERSITY SYSTEMS

Concordia University Chicago is partnered with GUS

Graduate Entry Requirements

Academic Entry Requirements:

- Bachelor's degree from a U.S. equivalent, regionally accredited institution
- GPA earned 2.85 or above

English Language Proficiency*:

- IELTS: minimum 6.0
- or TOEFL: minimum 72 (internet-based)
- or Michigan Test: minimum 85
- or Bachelor's degree from international English-speaking university
- or advanced degree from a U.S. institution

Official test scores should be provided

International applicants with a "3+2" Master's degree will be evaluated as equivalent to a 4-year Bachelor's degree.

Other Documents:

- Completed and signed application
- Objective statement
- Copy of official transcript
- Copy of passport
- Foreign transcript evaluation**
- Two letters of recommendation
- Proof of English language proficiency
- Declaration of finances/bank statement/ financial guarantee

Admission and Degree Requirements

Program Planning: Once admitted to the program, a student's transcripts will be evaluated to determine if prerequisite coursework is needed. Candidates will be provided with a program plan which will outline their graduate program.

Graduation eligibility requires completion of the 36 hours of coursework (plus any required deficiency courses) with a minimum earned cumulative GPA of 3.00.

Candidates will be evaluated on demonstrated proficiency in the following prerequisite areas:
- C++ or Java
- Data Structures
- Operating Systems
- Computer Architecture

Note: If the candidate is deficient in any of the above prerequisite areas, he/she will need to complete and pass CUC undergraduate deficiency courses and earn a grade of C or higher while being enrolled in the Computer Science graduate program. These courses will remain undergraduate credit and will not apply to toward the graduate degree.

The deficiency courses are:

- CSC-2410 Computer Science I
- CSC-2510 Computer Science II
- CSC-3420 Data Structure and Algorithms
- CSC-4450 Operating Systems
- CSC-2710 Computer Organization and Architecture

*For more detailed information please visit **CUChicago.edu/academics/masters/ms-computer-science/***

** Note: For further clarification, please contact your dedicated educational consultant or international.gus@CUChicago.edu