Alumni Testimonial

"Hofstra was a great learning experience for me. The faculty's expertise and genuine interest in the subject areas was immediately apparent. I was able to maintain a full-time work schedule with frequent work trips while attending classes and applying new knowledge to my job. With my schedule, distance learning was the only way I could achieve my goal — and Hofstra made it possible."

— Nathan Clark '11 (MS), Deputy Resources Division Chief, Air Force Sustainment Center

For information about the MS in Computer Science Program, please contact:

Krishnan Pillaipakkamnatt
Graduate Program Director
Professor, Computer Science

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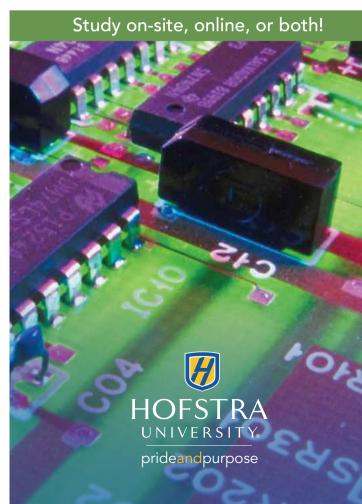Program website: **cs.hofstra.edu**

HOFSTRA UNIVERSITY®

DEPARTMENT OF COMPUTER SCIENCE

School of Engineering and Applied Science

Master of Science
in
Computer Science

Study on-site, online, or both!

HOFSTRA UNIVERSITY®

prideandpurpose

About the Program

The objectives of this program are to develop highly qualified professionals capable of adapting with ease to the dynamic field of computing, and to prepare students interested in pursuing doctoral studies in computer science or related fields. The program provides a strong foundation and breadth in computer science, and students may choose an area of specialization.

Elective courses are offered in cutting-edge areas, such as data mining and machine learning; networks and network security; distributed, parallel, and mobile computing; computer graphics and computer vision; artificial intelligence; and bioinformatics. In addition, a software management course is offered for interested students and those who wish to pursue leadership positions. Courses are designed to help students choose their area of specialization and develop expertise in that area. The program ends with a capstone experience, which may be in the form of an independent project or a master's thesis.

The program offers flexible course completion options to meet the diverse needs of students. Students may complete degree requirements on-site, online, or using a dual-learning approach. Distance Learning (DL) courses are offered in seven-week rotations, in addition to the traditional, classroom-format graduate courses that allow face-to-face interaction. Each DL class is equivalent to its face-to-face version.

Admission Requirements

1. Completion of a bachelor's degree from an accredited institution.
2. An undergraduate minimum grade point average of 3.0.
3. GRE Verbal, Quantitative, and Analytical Writing scores must be provided from an examination within the previous five years of the date of application.

Prerequisite Requirements

1. Discrete Mathematics
2. Programming Principles and Techniques
3. Algorithms and Data Structures
4. Computer Architecture
5. Operating Systems
6. Calculus II

Students may satisfy any or all of the listed prerequisites by completing equivalent courses at Hofstra University or an accredited institution.

With the permission of the graduate program director, eligible students may elect to sit for proficiency examinations. Applicants without undergraduate computer science degrees may be admitted as provisionally matriculated students if they meet all admission criteria except for the prerequisite courses. They may enroll in graduate courses if they meet individual course prerequisites and satisfy the general requirements before completing 12 semester hours of graduate study. This condition is automatically lifted as soon as the prerequisites or their equivalents are satisfactorily completed.

Program Requirements (30 s.h.)

The Master of Science in Computer Science requires the satisfactory completion of a 30-semester hour program, including either a 6 semester hour thesis (CSC 301 and 302) or a 3 semester hour capstone project (CSC 300 or 303). Full-time students can complete the program in four semesters. Part-time students usually complete the program in six or seven semesters. At least 24 semester hours must be completed in-residence at Hofstra. A minimum 3.0 average with a grade of C or better in all courses is required.

Required Fundamental Courses (9 s.h.)
▸ CSC 204: Algorithm Design and Analysis, 3 s.h.
▸ CSC 252: Programming Language Concepts, 3 s.h.
▸ CSC 256: Advanced Operating Systems Design, 3 s.h.

Interested students may fulfill their elective requirements by taking the courses from the following concentrations:

Concentrations (9 s.h.)
Web Engineering
Choose any three courses from the following:
▸ CSC 251: Software Project Management, 3 s.h.
▸ CSC 254: Database Design, 3 s.h.
▸ CSC 283: Web Application Development, 3 s.h.
▸ CSC 285: Mobile Device Programming, 3 s.h.

Networking and Security (Cyber Security)
Choose any three courses from the following:
▸ CSC 203: Privacy in a Wired World, 3 s.h.
▸ CSC 215: Secure Systems, 3 s.h.
▸ CSC 284: Computer Communication Networks and Distributed Processing, 3 s.h.
▸ CSC 288: Network Security, 3 s.h.

Electives
Students may select elective courses, including up to two independent study/research courses (CSC 290 A-Z). For the complete list of graduate courses see the course listings within the Hofstra Graduate Studies Bulletin.

Required Capstone Experience
A student must have a thesis/project advisor and a thesis/project committee prior to registering for a thesis or a project. Both the thesis and the project include a written body of work and a presentation. A student defends a thesis at an individual one-hour presentation, whereas a project is presented in a 15-minute presentation as part of a departmental colloquium (or an online presentation is made publicly, available on the department website).