

COMPUTER SCIENCE (MINOR)

Department Website (<http://cs.nyu.edu/>)

Program Description

Computing plays an increasingly important role in almost all fields. It is a very diverse discipline that comprises both theory and applications and incorporates the design and analysis of computing technology. The Department of Computer Science is part of the Courant Institute of Mathematical Sciences, a world-renowned center for the study of mathematics and computer science.

The department offers four major programs: the computer science major, the joint computer science/data science major, the joint economics/computer science major, and the joint mathematics/computer science major. The department also offers three minor programs: the computer science minor, the web programming and applications minor, and the joint mathematics/computer science minor. The goal of the majors is to train students in fundamental principles of computer science as well as many practical aspects of software development. Courses combine practical programming experience with techniques for analyzing problems and designing computer algorithms. The goal of the minors is to train students to be proficient users of computers and computer software with less emphasis on the underlying technology and mathematical tools.

Advanced undergraduate students can work on a variety of research projects with the faculty. Outstanding undergraduates may pursue a master's degree through an accelerated five-year program.

Minor Declaration

To request declaration of a minor, CAS students should visit the host department. To request declaration of a cross-school minor, CAS students should complete the online Minor Application available in their Albert Student Center. Students may also use the Minor Application (<http://www.nyu.edu/students/student-information-and-resources/registration-records-and-graduation/registration.html>) in Albert to request cancellation of a CAS or cross-school minor.

Program Requirements

The minor requires the completion of 16 credits, comprised of the following:

Course	Title	Credits
Minor Requirements		
CSCI-UA 101	Intro to Computer Science	4
CSCI-UA 102	Data Structures	4
CSCI-UA 201	Computer Systems Org	4
Select one of the following:		4
CSCI-UA 400-level elective		
CSCI-UA 202	Operating Systems	
CSCI-UA 310	Basic Algorithms ¹	
Total Credits		16

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Requires Discrete Mathematics, MATH-UA 120 Discrete Mathematics

Policies

Policy on Declaration of Major or Minor

Students must complete either CSCI-UA 101 Intro to Computer Science or CSCI-UA 102 Data Structures (depending on placement) with a grade of C or better before they can declare the major or minor in computer science; the joint majors with economics and mathematics; and the joint minor with mathematics. To declare the joint major in computer and data science, students must first meet this prerequisite and also complete either DS-UA 111 Data Science for Everyone or DS-UA 112 Principles of Data Science (depending on placement) with a grade of C or better. To declare the minor in web programming and applications, students must first complete their choice of either (1) CSCI-UA 2 Introduction to Computer Programming (No Prior Experience) or CSCI-UA 3 Introduction to Computer Programming (Limited Prior Experience) (depending on placement) or (2) CSCI-UA 4 Introduction to Web Design and Computer Principles with a grade of C or better. These policies apply to all NYU students, not just to those matriculated in CAS.

Restrictions on Minors

1. Tandon students are not permitted to declare a minor in Computer Science or a minor in Computer Science / Math at CAS. Tandon Students may declare the Web Programming and Applications Minor.
2. Students who are planning to declare a Data Science major or who already have a declared Data Science major are not permitted to declare a minor in Computer Science or a minor in Computer Science/ Math due to significant course overlap. Data Science majors may declare the Web Programming and Applications Minor. Only 1 course can be shared between the Data Science major and the Web Programming and Applications minor.

We teach both computer science and technology so that students can develop the skills they need to pursue their careers and interests. Our interdisciplinary approach allows for students from all backgrounds and fields to find our courses both fun and practical. We can accommodate all levels so no prior background is required. If you do have prior computer experience, we would welcome you into our advanced classes.

All College of Arts Science students are eligible to pursue any of these programs. Non-CAS students will need written authorization from their home school. Students with transfer credits are required to complete half of their minor requirements at the Computer Science department.

Students must complete one CSCI-UA course with a grade of C or better before they may declare any major or minor in this department.

Grading Policy

A grade of C or better is necessary in all courses to fulfill the minor requirements.

NYU Policies

University-wide policies can be found on the New York University Policy pages (<https://bulletins.nyu.edu/nyu/policies/>).

College of Arts and Science Policies

A full list of relevant academic policies can be found on the CAS Academic Policies page (<https://bulletins.nyu.edu/undergraduate/arts-science/academic-policies/>).