Computer Science

Graduate Certificate in Computer Science

The Graduate Certificate in Computer Science (CS) provides essential skills for professionals interested in designing and developing a variety of software systems. The program is often taken as a precursor to one of the MS degrees offered by the CS Department at NJIT.

Prerequisites

Applicants should have a bachelor's degree from an accredited institution in a STEM discipline, or have relevant professional experience in computing. Further information can be found here (https://cs.njit.edu/certificate-computer-science/).

Related MS programs

Students who achieve a GPA of at least 3.0 are assured admission into MS programs (https://computing.njit.edu/graduate-degrees/) offered by the Ying Wu College of Computing. All courses within this Certificate program fulfill the degree requirements for the MS in Computer Science program (https://catalog.njit.edu/graduate/computing-sciences/computer-science/ms/). For students interested in other MS programs, it is recommended to consult the catalogs (https://catalog.njit.edu/graduate/computing-sciences/#masterstext), to determine which courses fulfill the respective requirements. Current students may also reach out to YWCC advisors (https://computing.njit.edu/academic-advisors-graduate/) for additional information.

Degree Requirements

The Graduate Certificate in Computer Science can be completed by taking four courses (12 credits). The requirements must be satisfied as indicated in the following Course List.

Code	Title	Credits
Entry-level Courses [&]		
At most two courses from this list:		
CS 506	Foundations of Computer Science	
IS 601	Web Systems Development	
Core Courses		
At least two courses from this list:		
CS 630	Operating System Design	
CS 631	Data Management System Design	
CS/DS 675	Machine Learning	
Electives		
At most two courses from this list:		
CS 602	Java Programming	
CS 610	Data Structures and Algorithms	
CS 632	Advanced Database System Design	
CS 635	Computer Programming Languages	
CS/DS 644	Introduction to Big Data	
CS 645	Security and Privacy in Computer Systems	
CS 656	Internet and Higher-Layer Protocols	
CS 673	Software Design and Production Methodology	

& Entry-level courses are recommended to students with limited academic or professional background in computing.