

COMPUTER SCIENCE (MINOR)

Program Description

Computer Science at NYU Shanghai is designed to create technological leaders with a global perspective, a broad education, and the capacity to think creatively. Computer science focuses on how to design, build, and effectively use the computers and systems that we interact with every day – from the iPhones in our hands to the complex databases in our banks and hospitals and to the self-driving cars of the future. Because computer technology powers the most essential functions of business, industry, government and entertainment, computer scientists have tremendous opportunities for growth and exploration.

The Bachelor of Science in Computer Science is a rigorous program that not only covers fundamental computer science subjects - such as object-oriented programming, computer architecture, algorithms, and operating systems – but provides a wide variety of elective courses, spanning artificial intelligence, game programming, natural language processing, information visualization, security and privacy, computer networking, machine learning, and database design. Students are actively encouraged to pursue research with NYU Shanghai computer science professors, all of whom are renown in their respective fields. Students are involved in an increasing number of interdisciplinary initiatives across the university, including the Center for Data Science and Artificial Intelligence and the Neuroscience Research Institute.

Computer science graduates have a myriad of career paths, including creating products for major high-tech companies such as Google, Tencent, Microsoft, founding or joining a high-tech startup, applying computer science savoir-faire in the public sector such as healthcare, law enforcement, or transportation, or going on to do cutting-edge research in a Ph.D. program. Household names such as Bill Gates, Mark Zuckerberg, Larry Page, Melisa Myers, Robin Li, and Kai-Fu Lee all began in computer science.

Program Requirements

Course	Title	Credits
CSCI-SHU 101	Introduction to Computer and Data Science	4
CSCI-SHU 210	Data Structures	4
Select one of the following:		4
CENG-SHU 202	Computer Architecture	
CSCI-UA 201	Computer Systems Org	
CSCI-SHU 350	Embedded Computer Systems	
One computer science elective course		4
Total Credits		16

Policies

Minor Policies

Students may minor in subjects outside of their major. A minor in a secondary subject enables a student to acquire a useful understanding of concepts and analysis without the same degree of coverage as would be obtained in a major. A grade of C or better is required for a course to be counted toward a minor. If a student fails a course required for the minor, the course must be retaken at NYU; a course taken outside the University will not normally be allowed to substitute for a minor requirement. No course for the minor may be taken as pass/fail. Students may use Core Curriculum classes to fill minor requirements but at least 12 credits of the

minor must be unique to the minor, meaning that it is not double-counted with any other major, minor, or core requirement.

Additionally, no single course may be used to meet more than two requirements.

NYU Policies

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

NYU Shanghai Policies

Additional academic policies can be found on the NYU Shanghai Academic Policies page (<https://bulletins.nyu.edu/undergraduate/shanghai/academic-policies/>).