GRADUATE PROGRAMS IN
COMPUTER SCIENCE

....

MASTER OF SCIENCE
DOCTORAL DEGREE
GRADUATE CERTIFICATES

STEVENS.EDU/GRAD-CS

STEVENS
INSTITUTE *of* TECHNOLOGY
THE INNOVATION UNIVERSITY®

1870

MASTER OF SCIENCE IN
Computer Science

The Master of Science in Computer Science is designed to meet the growing demand for professionals who are highly skilled in the development and application of information technology. Our program provides a solid foundation in theoretical instruction plus the practical applications necessary for success in industry, research and academia. World-renowned faculty members engage with graduate students in research areas such as security, programming languages, computer graphics and vision, software engineering and computer networking. Students have the flexibility to specialize in particular applications of computer science, including cloud computing, databases, web programming, network systems and administration and software development.

As a graduate student, you will work in world-class research labs, such as our Computer Vision and Graphics Laboratory, which immerses students in visual computing by advancing the fields of computer vision, sensor fusion, machine learning and robotic perception. Our Secure Systems Lab pioneers new technologies for usable, secure systems with high assurance.

► CAREER OPPORTUNITIES

- Computer Systems Analyst
- Programmer
- Database Administrator
- Software Developer
- Software Engineer
- Software Quality Assurance Tester
- Business Intelligence Analyst
- Web Developer
- Systems Administrator

► TOP HIRING ORGANIZATIONS

- Amazon
- Bank of America
- Barclays
- Facebook
- Google
- IBM
- Intel
- JPMorgan
- Microsoft
- Nomura

CURRICULUM

The master's program requires completion of 30 credits at the graduate level. At least 21 credits must be in computer science, with nine credits coming from a list of 20 courses. The remaining nine elective credits may be from computer science or any other discipline, allowing you to specialize in particular applications of computer science.
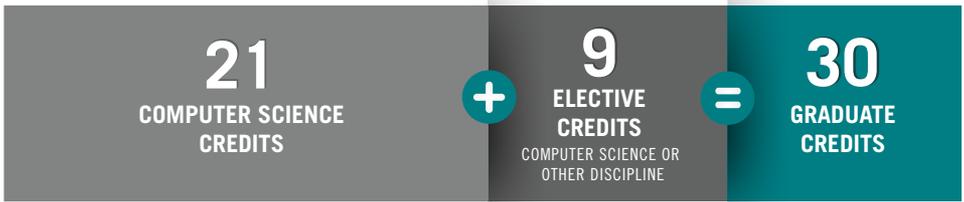
COURSES INCLUDE

- Advanced Algorithms
- Agile Methods for Software Development
- Artificial Intelligence
- Database Management Systems
- Enterprise and Cloud Computing
- Human Computer Interaction
- Machine Learning
- Mobile Systems and Applications
- Object-Oriented Analysis and Design
- Parallel Programming for Many-core Processors
- TCP/IP Networking
- Web Programming

ELECTIVES INCLUDE

Choose from electives in these areas:

- Advanced Algorithms
- Cloud Computing
- Cybersecurity
- Databases
- Data Mining
- E-Commerce
- Machine Learning
- Mobile Systems
- Modeling, Simulation and Visualization
- Network and Systems Administration
- Operating Systems
- Programming Languages
- Visual Computing Web Application Development

21 COMPUTER SCIENCE CREDITS **+** **9** ELECTIVE CREDITS COMPUTER SCIENCE OR OTHER DISCIPLINE **=** **30** GRADUATE CREDITS

DOCTORAL PROGRAM IN COMPUTER SCIENCE

The Ph.D. program in computer science is designed for those who want to make an impact on the future of computer science or advance it in academia. As a doctoral student, you will work in world-class research labs with acclaimed faculty members who will advise you in research areas such as security, programming languages, computer graphics and vision, software engineering and computer networking. Stevens offers a number of federally supported research programs, allowing some doctoral candidates to be fully funded.

RESEARCH

The Center for the Advancement of Secure Systems and Information Assurance (CASSIA)

A centerpiece of cybersecurity research at Stevens is the Center for the Advancement of Secure Systems and Information Assurance. CASSIA's mission is to foster collaboration and act as a catalyst for research, education and entrepreneurship in information assurance and cybersecurity. It is a nexus for:

- Basic and applied research in secure, dependable and sustainable computing and communications systems

- Exploration of the implications for information assurance and cybersecurity of ubiquitous computing and other visionary scenarios

- Anticipation of cultural evolution resulting from the inception of innovative technologies such as social networking

- Public-private partnerships for threat assessment, response and technology development and deployment

- Education of professionals in security technologies, policy and commerce

- Education of non-technical users – children, parents, teachers and small-business owners

GRADUATE CERTIFICATE PROGRAMS

Stevens offers 12-credit graduate certificate programs in engineering and science for those who want to improve their skills, make a career change or resume an academic path. Courses may be applied toward a master's degree. Certificates are available in:

- Databases
- Cybersecurity
- Enterprise Security and Information Assurance
- Enterprise and Cloud Computing
- Distributed Systems
- Health Informatics

WHO SHOULD APPLY

We welcome applicants who have a passion for problem-solving and "hacking" and a drive to innovate for technological progress. You can apply with an undergraduate degree in computer science, computer engineering or a closely related field.

Application requirements include:
- Bachelor's degree, with a minimum GPA of 3.0, from an accredited institution
- Official college transcripts
- Two letters of recommendation
- A statement of purpose
- TOEFL/IELTS scores (for international students)
- A competitive GRE or GMAT score*

GRE/GMAT is not required for part-time students.

ABOUT STEVENS INSTITUTE OF TECHNOLOGY

Stevens Institute of Technology, *The Innovation University*®, is a premier, private research university situated in Hoboken, N.J. overlooking the Manhattan skyline. Founded in 1870, technological innovation has been the hallmark and legacy of Stevens' education and research programs for more than 145 years. Within the university's three schools and one college, 6,600 undergraduate and graduate students collaborate with more than 290 full-time faculty members in an interdisciplinary, student-centric, entrepreneurial environment to advance the frontiers of science and leverage technology to confront global challenges. Stevens is home to three national research centers of excellence, as well as joint research programs focused on critical industries such as healthcare, energy, finance, defense, maritime security, STEM education and coastal sustainability.

ABOUT SCHAEFER SCHOOL OF ENGINEERING & SCIENCE

The Charles V. Schaefer, Jr. School of Engineering & Science (SES) is dedicated to preparing the next generation of technology leaders by offering a multi-disciplinary, design-based education. With eight departments and an intensive curriculum for undergraduates, master's and doctoral candidates, SES is dedicated to supporting hands-on learning, research and technology transfer that provides each student with invaluable, experiential knowledge. SES is globally recognized for its world-class faculty and leading-edge research facilities.

STEVENS.EDU/GRAD-CS

CONTACT INFORMATION:

Office of Graduate Admissions
Stevens Institute of Technology
1 Castle Point Terrace
Hoboken, New Jersey 07030
888.STEVENS (888.783.8367)
graduate@stevens.edu

Department of Computer Science
Graduate Program Director, Computer Science
Schaefer School of Engineering & Science
1 Castle Point Terrace
Hoboken, New Jersey 07030
grad-cs@stevens.edu