GRADUATE PROGRAMS IN
INFORMATION AND DATA ENGINEERING

MASTER OF ENGINEERING
MASTER OF SCIENCE
DOCTORAL DEGREE
GRADUATE CERTIFICATES

STEVENS.EDU/GRAD-IDE
Accelerate your career and place yourself at the forefront of new paradigms for networked systems at Stevens Institute of Technology, one of the country’s premier institutions for computer engineering, signal processing and emerging communications standards. In our information and data engineering (IDE) graduate program, you will acquire in-demand knowledge and competitive skills by taking advantage of our unique blend of courses covering fundamentals and advanced topics.

Develop a strong mastery of theory, applied research and technical knowledge while exploring innovative areas such as:

- Internet of Things
- Big data analytics
- Computer and information networks
- Applied machine learning

Just 15 minutes from downtown Manhattan, Stevens provides you with excellent career networking opportunities. Our award-winning co-op program offers invaluable workplace experience — and many of our graduates go directly to Wall Street or major tech firms.

Choose from career-relevant concentrations and hands-on classes. Work with renowned faculty members, including National Academy of Engineering (NAE) members, IEEE Fellows, major grant recipients and patent holders. Experiment with the latest technology and theories in our world-class laboratories.

You’ll gain experience and knowledge that’s hard to beat and earn a degree backed by Stevens’ outstanding reputation for engineering innovation.
CAREER OPPORTUNITIES

- Data Engineer
- Business Intelligence Engineer
- Data Architect
- Analytics Manager
- Statistician
- Big Data Engineer
- Data Visualization Developer

TOP HIRING ORGANIZATIONS

- AT&T
- Bank of America Merrill Lynch
- Comcast
- Facebook
- Goldman Sachs
- Google
- Intel
- LGS Innovations
- Quest Diagnostics
- Samsung
- Uber
The Master of Science (M.S.) and Master of Engineering (M.Eng.) degrees require the completion of 30 credits. Students must take one mathematical foundation class and two core courses. The M.Eng. requires the completion of two hardware/software skills courses. The M.S. requires the completion of two analytical skill courses. Both the M.Eng. and M.S. offer a thesis option.

MATHEMATICAL FOUNDATION COURSES (select one)

- Analytical Methods in Electrical Engineering
- Applied Discrete Mathematics
- Probability and Stochastic Processes I
- Applied Modeling and Optimization

CORE COURSES

- Analytical Methods for Networks
- Design and Analysis of Networked Systems
- Computer and Information Networks
- Applied Machine Learning

CONCENTRATIONS

Students must complete a three-course concentration sequence appropriate for any one of the following concentration areas. A course used as a core course can also be used to satisfy the requirement for three courses in a concentration, providing more flexibility in choosing electives. For more information on recommended elective courses under each concentration, check the academic catalog on the Stevens website or consult with an academic advisor.

- Robotics and Control
- Computer Architectures
- Embedded Systems
- Microelectronics and Photonics
- Communications and Signal Processing
- Power Engineering
- Software Engineering
- Data Engineering
- Networks and Security
- Networks: Business Practices

DOCTORAL PROGRAMS IN COMPUTER ENGINEERING OR ELECTRICAL ENGINEERING

Prepare for leadership in research, teaching and industry with our Ph.D. programs in electrical engineering or computer engineering. These fully funded programs give you the support, knowledge, facilities and mentorship you need to break new ground and shape the future of computer and electronic technology.

You’ll work on a close, daily basis with renowned faculty on our rapidly growing slate of federally sponsored research projects. Our New York metro area location also offers excellent opportunities for collaboration with nearby universities and major corporate research labs, which can turn into job offers upon graduation.
Students in graduate certificate programs must meet the same admission and performance standards as regular degree graduate students. Each of the certificate programs requires 12 credits (four courses), all of which are transferable to the appropriate master’s degree program.

- Autonomous Robotics
- Digital Signal Processing
- Microelectronics and Photonics
- Multimedia Technology
- Networked Information Systems
- Real-Time and Embedded Systems
- Secure Network Systems Design
- Software Design for Embedded and Information Systems
- Wireless Communications

Stevens is home to more than 15 world-class research centers. Graduate students collaborate with our leading faculty and industry partners to revolutionize systems engineering and create next-generation technologies and theories. Learn more on our website about IDE projects at Stevens centers such as:

- Systems Engineering Research Center (SERC), established by the United States Department of Defense
- Embedded Systems & Robotics Laboratory
- Center for Intelligent Networked Systems (iNetS)
- Signal Processing & Communications Lab
WHO SHOULD APPLY
We welcome applicants who have a passion for information and data engineering and a drive to innovate for technological progress. You can apply with an undergraduate degree in electrical engineering, computer engineering or a closely related discipline.

Application requirements include:
• Bachelor’s degree, with a minimum GPA of 3.0, from an accredited institution
• Official college transcripts
• Two letters of recommendation
• Resume (optional)
• Statement of purpose (Ph.D. program only)
• TOEFL or IELTS scores (for international students)
• GRE scores (recommended, but not required)

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.