



Master of Science in

DIGITAL FORENSICS AND CYBERSECURITY

STUDY IN NEW YORK CITY

**JOHN
JAY** COLLEGE
OF
CRIMINAL
JUSTICE

The Internet is today's venue of choice among today's thieves, child pornographers, terrorists, spies, and insurgents. Crimes are being committed on a scale never before imagined. One ring of cyber thieves recently amassed 1.2 billion stolen user names and password combinations and more than 500 million email addresses. Terrorists have mastered the use of the Internet to recruit, raise funds, and covertly communicate. Would-be saboteurs relentlessly probe the networks of utilities looking for vulnerabilities in the nation's power grid. It's now possible for a few politically motivated and technically savvy cyber activists to disable an entire nation's Internet. Even a lone cyber spy can clandestinely penetrate and steal countless secret documents from government and corporate servers.

Now, more than ever, there is an urgent call for individuals with a computer science background and a passion for justice who can attain the necessary forensic and security skills to combat today's cyber threats. John Jay College of Criminal Justice is committed to producing highly competent, driven, ethical, and self-sufficient professionals who can apply and sustain their expertise in digital forensics and cybersecurity as new challenges emerge.

A one-of-a-kind course of study

John Jay College's Digital Forensics and Cybersecurity master's degree program has the distinction of having been the first graduate degree program in digital forensics in the U.S. The program is unique in that students study computer science within the context of the College's focus on educating for justice.



Grounded in computer science

At John Jay College, we believe graduate education in digital forensics and cybersecurity should be based on computer science—which equips students to be technically self-sufficient throughout their entire careers—rather than information technology—which teaches students how to use tools that will soon be outdated. Our program emphasizes hands-on experience based on computing theory. Not only do the courses balance theory and practice, they do so by taking advantage of our state-of-the-art Digital Forensics and Cybersecurity lab, which is equipped with forensic tools like EnCase, FTK, XRY, IDA Pro, WinHex, and X-Ways, and educational tools such as VMWare and “The Hacker Academy.”

A powerful stepping stone for career enhancement

To meld the forensic and computer sciences in our curriculum, we offer an Advanced Certificate in Applied Digital Forensics. The Certificate can be pursued as a stand-alone program or as an integrated complement to the master's degree program in Digital Forensics and Cybersecurity. As a stand-alone program, this advanced certificate is geared toward mid-career professionals who are looking to gain an academic footing for a career shift, but who do not need or wish to commit to our full degree program. It is also intended for practitioners with advanced STEM (science, technology, engineering, mathematics) degrees who are seeking to upgrade their expertise.

Because the courses that comprise this unusual advanced certificate program are part of the College's MS in Digital Forensics and Cybersecurity program, the same admissions standards apply. Certificate students can opt to transfer into the degree program if they so desire.

A master's degree in Digital Forensics and Cybersecurity from John Jay College opens doors.

Our graduates go on to become highly recruited cyber investigators, special agents with federal agencies, digital forensic analysts, eDiscovery specialists, managers of prestigious labs, information security specialists, cyber incident analyst responders, cybersecurity analysts, computer security and network security analysts, and information assurance consultants. They hold counterterrorism and counterintelligence positions in federal agencies. In addition, they have successful careers in forensic computing product research and development. These are but a few of the opportunities open to our students. Our graduates also use their degree as a springboard to gain entry into doctoral programs and they go on to become teachers and researchers. The career options for students who hold an MS in Digital Forensics and Cybersecurity from John Jay College are limitless.

An exceptional preparatory program

Admission to both the MS and the Certificate of Applied Digital Forensics programs requires knowledge of core computer science. If you are looking to make a career shift, but need to backfill your undergraduate work because you lack the required background or need a refresher, we offer an exceptional preparatory program—"CSIBridge." The goal of this program is to provide basic knowledge of computer science to facilitate mastery of the technical side of digital forensics and cybersecurity. You can choose from two tracks of study, based on your capacity for intensive work: CSIBridge Express and CSIBridge Local. Admission to and success in the preparatory program enables you to transfer seamlessly into the MS degree program without having to reapply. Admissions requirements for the prep program are the same as for the degree program, aside from the computer science background.

An accomplished, engaged and accessible faculty

Our Digital Forensics and Cybersecurity program brings together internationally recognized experts who boast a mix of academic and professional accomplishments, including National Science Foundation awards and grants. Faculty members have a broad range of corporate and agency experience. Some have had distinguished careers in the corporate world, while others are former military counterintelligence officers, former federal special agents and public defenders. They also serve as consultants and conduct research for the NSF, FBI, DOD, Interpol, the United Nations, the U.S. Department of Justice, not to mention collaborate with educational institutions from around the world. They are highly published authors, scholars, and researchers. All of these professionals share a talent for conveying the wealth of their knowledge to their students

and a commitment to developing future leaders in the field of Digital Forensics and Cybersecurity. Our full-time faculty are complemented by a dynamic corps of seasoned practitioners recruited from among our own graduates.

An innovative, intellectually rigorous course of study

Our MS degree program in Digital Forensics and Cybersecurity is rigorous and unique. It is built upon a foundation of computer science, with the technical curriculum grounded in John Jay College's traditional focus on justice. The program includes capstone options of either fieldwork, an applied research project, or a thesis. Students who do a thesis for their capstone and/or attain the Advanced Certificate in Applied Digital Forensics, need 33 credits in designated courses in order to graduate. Otherwise, students complete 39 credits of coursework. Our small classes facilitate interactions and strong ties between faculty and students. We continue to value on-campus, lab-based learning and we strive to fill our courses with projects that are challenging and engaging. Because our student body includes sworn personnel, IT professionals, and others who work full-time, classes are held on weekday evenings, with some electives offered on Saturday.

Extraordinary internship opportunities

John Jay College maintains professional relationships with a number of investigative organizations that use digital forensics on criminal or civil cases, including federal agencies such as the U.S. Secret Service and the U.S. Department of Health and Human Services. Students also have the option of interning within the offices of county prosecutors and district attorneys. In addition, fieldwork opportunities in forensics and cybersecurity exist within some of the top firms in the private sector.

Contact Us

No program of this scope can be captured in one brochure. Visit www.jjay.cuny.edu/academics/5130.php to learn about the program, its courses, requirements and more.

To schedule a meeting and visit our campus, please contact:

Office of Admissions at **212.237.8863** or **Professor Richard Lovely** at **212.237.8685**.

With John Jay's MS program in Digital Forensics and Cybersecurity, you will make a world of difference. Come explore the possibilities.



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