The Graduate Certificate in Information Security
Entirely Online and In Class

Department of Information Systems
Newark College of Computing Sciences

New Jersey Institute of Technology
2015
WHY PURSUE A GRADUATE CERTIFICATE IN INFORMATION SECURITY?
The need for information security specialists is expected to grow rapidly in both government and private sectors, which plan significant investments to protect computer systems and networks. A growing number of cyber attacks accentuates the need for expertise in defensive techniques against cyber threats. As larger amounts of sensitive data are being transmitted and stored electronically, and as more databases are being connected to the Internet, data security becomes increasingly important.

WHY STUDY INFORMATION SECURITY AT NJIT?
NJIT has a long history of innovation in digital communications and has been designated a Center of Academic Excellence in Information Assurance Education by the National Security Agency. With one of the most computing intensive campuses in the nation, NJIT has also pioneered new technologies as learning tools. NJIT’s College of Computing Sciences has an outstanding faculty dedicated to preparing students for exciting careers. Not coincidentally, New Jersey is one of the leading states for computing and high technology businesses. Thirty of the nation’s fastest growing technology companies are based in the state, and New Jersey ranks 7th in the nation as a cyberstate and 8th for venture capital investment - $3.5 billion - in information technology and software.

GAINFUL EMPLOYMENT DISCLOSURE
For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at: http://adultlearner.njit.edu/programs/informationsecurity-cert-ge.php

WHAT WILL I LEARN?
- Security threats in communication systems; conventional cryptography: substitution and transposition codes; distribution of secret key over the Internet; principles of public-key cryptography; RSA and other public-key cryptographic methods; and digital signature protocol.
- Existing network security technology and the various practical techniques that have been implemented for protecting data from disclosure, for guaranteeing authenticity of messages, and for protecting systems from network attacks.
- SNMP family of standards including SNMP, SNMPv2, and RMON (Remote Monitoring), OSI systems management.
- Information protection concepts, privacy impact analysis, computer crime, legal issues, controls and auditing systems, and firewall configuration.
- Conventional Encryption and Public Key Cryptology. Security services and standards (such as Kerberos, Digital Signature Standard, Pretty Good Privacy, SNMPv2 security facility).

WHAT COURSES ARE OFFERED?
Select four (4) courses from:

- CS 608: Cryptography and Security
- CS 696: Network Management and Security*
- IS 681: Computer Security Auditing*
- IS 687: Transaction Mining and Fraud Detection
- IT 620: Wireless Networks Security and Administration

Complete course descriptions can be found in the NJIT Online Catalog at http://catalog.njit.edu/graduate.

*Now or shortly available online.
Courses are subject to change.
✓ Take care to select courses in proper order. Check course descriptions, because they state if one course must be taken before (i.e.; is a prerequisite to) another.

WHERE ARE THE CLASSES OFFERED?
The credential can be studied partially online or at NJIT’s Newark campus. Customized NJIT degrees and academic certificates can be brought on-site to your company or customized and conducted at a location convenient to a consortium of companies.

IS FINANCIAL AID AVAILABLE EVEN FOR PART-TIME STUDENTS?
Yes, sources of financial aid or tax credits are available at: http://adultlearner.njit.edu/costs.

WHAT IS THE TUITION FOR GRADUATE COURSES?
Use the tuition calculator to see full costs, and the fuel saving calculator to figure how much gas money is saved by studying online, visit: http://adultlearner.njit.edu/costs. Studying ONLINE, but live out-of-state? Benefit from the new online tuition rate just for you, visit: http://online.njit.edu.

CAN THE GRADUATE CERTIFICATE BE APPLIED TO AN ADVANCED DEGREE?
Courses in the Graduate Certificate program in Project Management can be wholly applied to NJIT’s MS IT Administration and Security or MS in Cyber Security and Privacy, or MS in Information Systems, or MS in Business and Information Systems.

HOW DOES THE GRADUATE CERTIFICATE PROGRAM WORK?
In any given year, NJIT offers a new slate of Graduate Certificates, each in a specific area which is in a fast growing and employable profession. Each stand-alone credential is a milestone in its own right and can be a 12-credit springboard to a matching Masters Degree program at NJIT or elsewhere. The credential can be completed in as little as one academic year of part time study. Many can be studied in whole or in part online. The straightforward and rapid admissions process requires possession of an undergraduate degree with a satisfactory grade point average. A GRE or GMAT score is not a prerequisite. Depending on the program, courses can be taken online, on campus, or at NJIT extension sites around New Jersey. For a complete list of available Graduate Certificates, please visit http://www.njit.edu/gradcert.

BRINGING A GRADUATE CERTIFICATE TO YOUR COMPANY
Arrangements can be made to bring a Graduate Certificate or Master’s program on-site to your company. A customized Graduate Certificate can also be offered to match your company’s area of technological and managerial specialty. For more information about Company Collaborative Graduate Certificates or enrollment in any of our Graduate Certificate, Please contact Continuing Professional Education.

FOR FURTHER INFORMATION:
Division of Continuing Professional Education
1-800-624-9850 (Toll Free)
1-973-596-3060 (New Jersey)
Email: cpe@njit.edu

ON THE WEB:

APPLY ONLINE:
http://adultlearner.njit.edu/admissions