RIT جامعة روتشستر الأمريكية للتكنولوجيا في دبي
A Global American University in Dubai

AMONG THE TOP 100 U.S. UNIVERSITIES

MASTERS OF SCIENCE IN COMPUTING SECURITY

PROGRAM OVERVIEW

The Master of Science in Computing Security at Rochester Institute of Technology gives students an understanding of the technological and ethical roles of computing security in today's society and its importance across the breadth of computing disciplines. The degree enables students to develop a strong theoretical and practical foundation in secure computing, preparing them for leadership positions in the computing security industry, academia, or research careers, or to pursue a more advanced degree in a computing discipline.

The courses offered by this degree are suited to the opportunities available in both private and public sectors. In the private sectors, a considerable number of opportunities exist with banking institutions, cyber-social applications and private investigation professional service vendors. The courses we offer around web and application security, audits and forensics will be significant for these areas. In the public sector, the law enforcement and healthcare verticals will benefit significantly from the network security, forensics and cryptography modules we have on offer. To highlight this point further, our experience from engaging with government entities shows that there is a strong demand for home grown cryptography solutions, especially in the hardware encryption and decryption space. Similarly, with the rapid adoption of smart city technologies, offering a course related to big data and sensor security will be significant. The use of AI tools and techniques which are covered in the courses will empower individuals with the skills and approach needed to successfully contribute to the transformation of their organizations.

Offering the degree program in concert with local private and public institutions and fulfilling their research appetite, developing their workforces and enhancing the competence in selecting and deploying security solutions is an important consideration for Rochester Institute of Technology Dubai.

Program Learning Outcomes

Upon completion of the degree, students will be able to

- Evaluate the current and emerging technologies in the field of computing and computing security and their impact on large organizations.
- Demonstrate a mastery of knowledge and skill to work independently, manage complex activity streams and synthesize both technical and non-technical information for people at all levels of an organization.
- Apply research, analytical, design, and problem-solving skills to develop effective computing security solutions and policies that meet the operational and business goals of multi-cultural and multi-national organizations.

CURRICULUM

TYPICAL COURSE SEQUENCE

CONTACT US

PHONE: +971 4 371 2000 | FAX: +971 4 320 8819 | EMAIL: DUBAI@RIT.EDU
ADDRESS: RIT DUBAI, SILICON OASIS, P.O. BOX 341055, DUBAI, U.A.E.

COURSE	Course Code	Course Title	Credits
Core Students are required to take both core courses which are 3 credits each	CSEC - 604	Cryptography and Authentication	3
	CSEC-742	Computer System Security	3
Research Electives Students are required to choose two research elective courses which are 3 credits each	CSEC - 659	Trusted Computing and Trusted Execution	3
	CSEC - 759	Advanced Topics in Wireless Security	3
	CSEC - 720	Deep Learning Security	3
	CSEC - 745	Internet of Things Security	3
Advanced Courses/ Focus Areas Students are required to choose 4 advanced electives courses for the thesis option or 5 advanced electives courses for the project/capstone option	CSEC - 603	Enterprise Security	3
	CSEC - 730	Advanced Computer Forensics	3
	CSEC - 731	Web Server and Application Security Audits	3
	CSEC - 620	Cyber Analytics and Machine Learning	3
	CSEC - 732	Mobile Devices Forensics	3
	CSEC - 744	Network Security	3
	CSEC - 743	Computer Viruses Malicious Software	3
Thesis (6 credits) **Project/Capstone** (3 credits)	CSEC - 790	MS Thesis	6
	CSEC - 792	MS Computing Security Project	3
	CSEC - 793	Capstone for Computing Security	3
Total Credits			**30**