

MASTER OF SCIENCE IN COMPUTER ENGINEERING AND INFORMATION TECHNOLOGY

“NETWORK AND CYBERSECURITY” PROFILE

Short Description:

The study program Master of Science in “Computer Engineering and Information Technology”, “Network and Cybersecurity” Profile, provides graduates with in-depth theoretical knowledge, as well as training for scientific research in this particular area. This study program is designed to prepare students in accordance with the technical requirements of the telecommunications industry, financial institutions and post-graduate master studies in Computer Engineering or other related fields. The basis of the program is focused on building critical thinking so that professionals can take proper decisions.

At the end of the study program, students will be prepared on the challenges and safe operating systems, applications, and safe secure networks, the use of cryptography and key management and understand how to develop a security policy as well as governing policies and technological decisions.

Access Requirement(s):

Students holding a Diploma of the first cycle of studies (Bachelor) or an equivalent degree, recognized by the Ministry of Education and Sports.

To meet the English language criteria according to the paragraph 4 of the Article 76 of the Law No. 80/2015 "For the Higher Education and Scientific Research in the Republic of Albania" and the Guideline No. 52 dated 03.12.2015 of the Ministry of Education and Sport.

Typical Career Opportunities:

- Technical professional to large companies in the field of security
- Information security professional/officer
- Intelligence analyst
- Critical information professional/officer
- Cybersecurity specialist
- Security technology professional
- Information system auditor
- Forensics and ethical hacking professional
- Information security consultant
- Network Manager
- IT Administrator
- CIO (Chief Information Officer)
- And other positions related to information security and network management

I Year

Term	Course Title	Prerequisite (s)	Credits	ECTS Credits
Fall	User Interface Design		3	6
Fall	Advanced Research Methods		3	6
Fall	Database Design and Administration		3	6
Fall	Advanced Java Programming		3	6
Fall	Network Programming		3	6
Spring	Cybersecurity		3	6
Spring	Computer and Network Security		3	6
Spring	Advanced Cryptography		3	6
Spring	Information and Communication Security		3	6
Spring	Web Engineering		3	6
TOTAL			30	60

II Year

Term	Course Title	Prerequisite (s)	Credits	ECTS Credits
Fall	Advanced Project Management		3	6
Fall	Mobile Computing		3	6
Fall	Cloud Computing and Business		3	6
Fall	<i>Electives 1 out of 3:</i> - Interconnection Networks for Multi-Computers - Pattern Recognition - Wireless Communications		3	6
TOTAL			12	24

Internship		6	12	
Thesis		12	24	
TOTAL		18	36	
TOTAL of the Degree		60	120	