CANADIAN INSTITUTE OF TECHNOLOGY

MASTER OF SCIENCE IN TELECOMMUNICATION ENGINEERING

Short Description:

Telecommunication engineering is an specialization that's combine between electrical and computer engineering (hardware and software engineering) to design and implement telecom systems, where a student spends two years full-time of the pleasure of science, knowledge and creation in CIT. The aim of telecommunications technology to transmit information (signals, fixed images, videos, and data etc.) from Point-to-Point or from Point-to-Multipoint through the free space or cables: (fiber optics, coaxial, and twisted pair cables) while maintaining the quality of transmitted information. Master degree program in telecommunications engineering at CIT offers modern theoretical and practical knowledge such as networking IPv6-based for fixed and mobile network environment, LTE, LTEA, 5G networks, and new generations of optical communication systems, Discrete-event Simulations Methodology, Information Systems Analysis and Design.
CIT higher education teaching strategy is to prepare a new generation of MSc holders to continue their study in Ph.D. or to work in local or world telecommunications market.
These courses provide student in-depth understanding of existing and next generation telecommunication systems and extend the knowledge scope in the field of modern telecommunication engineering.
You will attend interactive lectures, tutorials, and computer laboratory, projects, assignments, and editing technical reports, prepare and present PPT presentations.
The advantages to study MSc in telecommunications engineering in CIT that's, we have high level experts and an strong links with fixed and mobile operators.

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:

- Telecommunications consultant
- Network administrator
- Network designer
- Systems developer
- Network analyst
- Network engineer for fixed or mobile environment
- Developer of telecommunications hardware and software
- Network trainer
- Researcher in telecommunications engineering

I Year				
Term	Course Title	Prerequisite (s)	Credits	ECTS Credits
Fall	Communication Skills		3	6
Fall	Database Design and Administration		3	6
Fall	Information Systems Analysis and Design		3	6
Fall	Deterministic Optimization Models		3	6
Fall	Advanced Project Management		3	6
Spring	Probabilistic Models		3	6
Spring	Advanced Data Mining for Industrial Engineers		3	6
Spring	Discrete-event Simulations Methodology		3	6
Spring	Image and Video Processing		3	6
Spring	*Electives 1 out of 3:* - Strategic Analysis - Computer and Network Security - Digital Control		3	6
TOTAL			30	60

II Year				
Term	Course Title	Prerequisite (s)	Credits	ECTS Credits
Fall	Directed Studies in Engineering		3	6
Fall	Optical and Wireless Communications		3	6
Fall	Programmable Electronic Systems		3	6
Fall	Mobile Broadband Network		3	6
TOTAL			12	24

Internship	6	12
Thesis	12	24
TOTAL	**30**	**60**
TOTAL of the Degree	**60**	**120**