

## MASTER OF SCIENCE

# COMPUTER ENGINEERING & INFORMATION TECHNOLOGY MULTIMEDIA DESIGN PROFILE

www.cit.edu.al

# OUR MASTER PROGRAMS

Canadian Institute of Technology offers high quality educational programs ranging from Master of Science in Business of Information Technology, Digital Marketing, Business Administration, Finance & Accounting, Computer Engineering & IT and Software Engineering. Designed for students interested in pursuing a career in these fields, you will get a start in the job market, and may gain exemptions from professional qualifications.

You will develop a professional understanding of these programs, applicable to real world jobs.

Canadian Institute of Technology commits on delivering quality education through its highly qualified domestic academic staff with teaching experience abroad as well as international academic staff.



Study with McGraw Hill, one of the biggest educational publishers in the world.

Improve your English skills and increase employment opportunities by gaining access to an international career.

A connected and supportive network.

Teaching process is based on the best international educational practices, empowering graduates with creative, innovative, entrepreneurial skills, and a passion for knowledge.

## WHY MASTERS IN COMPUTER ENGINEERING & INFORMATION TECHNOLOGY "MULTIMEDIA DESIGN" PROFILE

The Master of Science in "Computer Engineering and Information Technology" with the profile "Multimedia Design" program, is a highly Industrial 4.0 relevant and up-to-date program offered by the Canadian Institute of Technology (CIT). Its designed to equip students with the skills and knowledge needed to become future architects of Web 3.0 and Web 4.0 as Multimedia Engineers, Content Creators and Network Designers as well as general Computer Engineers finding employment in a myriad of industries. The program prepares students to address the shortage of multimedia engineers while also equipping them with additional skills in network engineering, database management, programming, and advanced project management.

The course is designed by CIT's academic experts and industry professionals to rigorously prepare students by offering a focused blend of modules. Students commence on this interesting and intensive program by studying modules taken from the fields of multimedia engineering, UI (User Interface) design, 3D animation, computer networking, web engineering, advanced JAVA programming, database design and administration. Strategically important modules, such as Advanced Research Methods and 3D Animation, are also included. Industrial practices are taught including the latest approaches adopted by industry to design responsive web sites following W3C (World Wide Web Consortium) design principles.

The essence of this program is built upon understanding how the end user (the public) actually interacts with computers. This is achieved by the first semester module, "User Interface Design". There is also an elective related to mobile applications, the "Mobile App Interface Design and Accessibility". This aim is further reinforced by the second-year compulsory module on "Web Engineering".

Regardless of the chosen specialization, students must cultivate an understanding and appreciation for the end user and project stakeholders. This is fostered through critical thinking and reflective content design to make informed, ethical, cost-effective, and rational professional judgments. The significance of successful project completion in the workplace is well-recognized in this course, as demonstrated by the inclusion of the compulsory module 'Advanced Project Management'.

To help the student seamlessly step into industry, internship opportunities are offered and built into this graduate program. This enables students to work with real-world problems utilizing emerging technologies and solutions alongside fellow software professionals. Teamwork is highly valued in the industry, and this is encouraged, with a strong emphasis on providing proper attribution and credit to the creators of the work that complete the assignment. Students on this program at CIT are encouraged to form lifelong networks as they are our future industrialists and entrepreneurs.

# **TARGET SKILLS**

**Multimedia Engineering:** Mastery in designing and creating multimedia content encompassing various formats such as text, images, audio, and video for web applications and digital platforms.



**User Interface (UI) Design:** Proficiency in creating intuitive and visually appealing user interfaces to enhance user experience in web and mobile applications.



**3D Animation and Graphics:** Competence in utilizing 3D animation techniques and graphics to develop engaging multimedia content and applications.



**Computer Networking:** Profound understanding of computer networking principles and techniques for effective communication and data transfer in digital environments.



**Web Engineering and Web 3.0/4.0 Technologies:** In-depth knowledge of web development, including the latest technologies and frameworks for building modern, responsive, and feature-rich websites following W3C design principles.



**Database Design and Administration:** Skills in designing efficient and secure databases, along with proficient administration to manage and manipulate data effectively.



**Advanced Java Programming:** Advanced proficiency in Java programming, focusing on building complex applications and systems using the Java programming language.



**Advanced Project Management:** Expertise in project management methodologies, techniques, and tools, with an emphasis on managing multimedia-related projects efficiently, effectively, and ethically.



## TYPICAL CAREER **OPPORTUNITIES**

Multimedia Engineer

UI and UX Designer

Network Solutions Architect

Network Technician

Network Manager

Network Analyst

Network Programmer

Defence and Aerospace Sector

Motion Designers

Gameplay Animators

Motion Graphics Designers

VFX & Special Effects Artists

Multimedia Professional/Consultant () Advanced Java Programmer

Multimedia Designer

Audio & Video Producers

Content Creator and Publisher

Web Marketer and Publisher

Multimedia Animator

Multimedia Artist

Digital Advertising Specialist

Internet Marketing Specialist

eCommerce Specialist

Database Manager/Administrator

Database Developer

Mobile App Developer

Web Design Engineer

3D Modeller & Animator

Responsive Web Designer & Programmer

Data Visualisation Engineer

**IT Professional** 

NGO, Defence & Aerospace Employment

**Digital Advertising Professional** 

TV and Creative Studio Specialist 5

## MASTER OF SCIENCE IN COMPUTER ENGINEERING & INFORMATION TECHNOLOGY "Multimedia Design" Profile

## **First Year**

## FIRST SEMESTER COURSES

- Advanced Java Programming
- User Interface Design
- Advanced Research Methods
- Advanced Project Management
- Database Design and Administration

### SECOND SEMESTER COURSES

- Data Visualization
- Network Programming
- · Design Principles for Multimedia
- Multimedia Theory
- Elective Subject

### Elective one of:

- · Digital and Internet Marketing
- Mobile App Interface Design and Accessibility
- Cloud Computing and Business

## Second Year

### THIRD SEMESTER COURSES

- Web Engineering
- $\cdot$  3D Animation and Virtual Space
- Introduction to Multimedia
  Imaging
- Responsive Web Design

## FOURTH SEMESTER COURSES

- Internship
- Thesis

## HOW TO APPLY

### Master of Science Program (National Students)

The first step to admission in a Master's program at CIT is to complete the application form, which is available at **www.cit.edu.al**. An Admissions Officer will then contact you to provide further details about the pre-registration process and the required documents for this stage.

### **Admission Criteria**

The Canadian Institute of Technology requires all candidates to fill out an application form in order to be accepted in one of the Master of Science programs. This form can be filled out on-line or in the premises of the Admission Office.

Students will be eligible for admission to one of the Master's programs if they meet the following criteria:

- Have successfully completed their studies in the Republic of Albania and obtained the relevant diploma, from a first study cycle "Bachelor" program or an integrated second study cycle program, accredited at the moment of the student graduation;
- Have an average GPA, preferably, no lower than 7.5;
- Demonstrate English language proficiency at the B1 level or higher.

Applications are open throughout the year, and registration takes place during September and October.



## Master of Science Program (International Students)

### Admission Criteria

The Canadian Institute of Technology requires all international candidates to fill out an application form in order to be accepted in one of the Master of Science programs. An Admissions Officer will then contact you to provide further details about the pre-registration process and the required documents for this stage.

International students will be eligible for admission to one of the Master's programs if they meet the following criteria:

- Have successfully completed their studies and obtained the relevant 'Bachelor' program diploma from an accredited program at the time of their graduation;
- · Have an average GPA, preferably, no lower than 7.5;
- Demonstrate English language proficiency at the B1 level or higher.

Applications are open throughout the year, and registration takes place during September and October.

International students are required to apply to the Albanian Education Service Center (QSHA) for the recognition of their diplomas.





# OPEN YOUR DOOR TO THE WORLD

### **Canadian Institute of Technology**

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