CIT
CANADIAN INSTITUTE
OF TECHNOLOGY

BACHELOR PROGRAM

ELECTRONICS ENGINEERING

www.cit.edu.al

OUR **BACHELOR** PROGRAMS

Canadian Institute of Technology offers high quality educational programs ranging from Bachelor in Business Administration, Business Administration and IT, Finance & Accounting, Software Engineering, Telecommunication Engineering, Computer Engineering & IT, Robotics & Mechatronics Engineering and Electronics 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

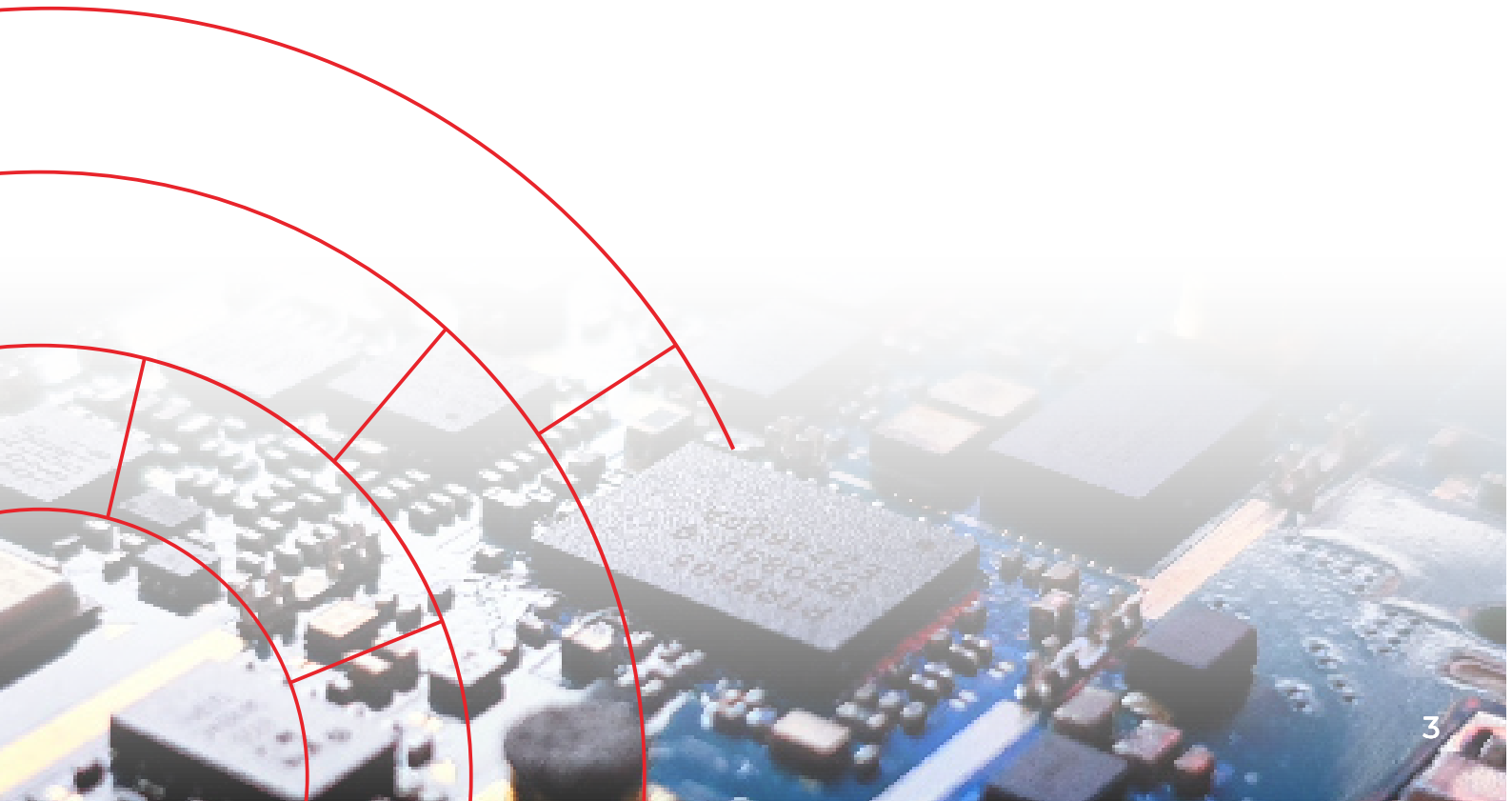
Teaching process is based on the best international educational practices, empowering graduates with creative, innovative, entrepreneurial skills, and a passion for knowledge.

WHY BACHELOR IN **ELECTRONICS ENGINEERING**

The Electronics Engineering program is a field of study that focuses on the design, analysis, and implementation of electronic systems, including hardware and software components. Students in this program learn about the principles and techniques used in electronic engineering, such as analog and digital circuits, microprocessors, communication systems, control systems, and signal processing. The program typically begins with foundational courses in mathematics, physics, and basic circuit analysis. Students then move on to more advanced coursework in areas such as electronics, digital signal processing, communication systems, control systems, and computer engineering. The curriculum also includes laboratory courses that give students hands-on experience with designing, building, and testing electronic systems.

Throughout the program, students are encouraged to engage in research and development in the field of electronic engineering. They have the opportunity to work on projects that address real-world problems and challenges, such as developing medical devices, designing communication systems for remote areas, and improving energy efficiency in electronic devices.

The purpose of this study program is to ensure the preparation of specialists in the field of computer engineering based on the most advanced programs of the time. The degree program has a unique course of study that gives students basic engineering concepts offering the opportunity to delve into the world of electrical circuits, microelectronics, communication systems, and much more.



TARGET SKILLS

Faculty of Engineering expects students who complete this program to be able to:

- Understand all aspects of basic Electronic Circuits and Systems.
- Investigate practical problems that may occur in electrical engineering and choose appropriate methods to solve those problems.
- Design new ways to use electrical power to develop or improve products.
- Solve problems and think critically.
- Communicate well verbally and in writing.
- Research and develop new solutions to problems in electronic/electrical engineering.
- Implement and operate electric engineering systems.
- Analyse and solve complex problems related to electrical systems.
- Prevent and avoid accidents in industry and complete the industrial Safety Skills Certification.

TYPICAL CAREER OPPORTUNITIES

Graduates of the Electronics Engineering program have a wide range of career opportunities available to them. Some of the most common career paths for Electronics Engineering graduates include:

- Electronics Engineer
- Manufacturing Systems Engineer
- Systems Engineer
- Electrical Engineer
- Electro-Mechanical Technician
- Network & Systems Engineer
- Aerospace Engineer
- Electronic Design Automation
- Electronic Design Engineer
- Control System Engineer

BACHELOR IN **ELECTRONICS ENGINEERING**

First Year

FIRST SEMESTER COURSES

- Academic Reading and Writing
- Introduction to Economics
- Calculus I
- Computer Applications

Elective subjects E1 (one of 4)
- Internet Technologies
- Engineering Chemistry
- E-commerce and Innovation
- Digital Society

SECOND SEMESTER COURSES

- Computer Science Fundamentals
- Introduction to Statistics
- Linear Algebra
- Computer Communications and Networks, I
- Physics I

Second Year

THIRD SEMESTER COURSES

- Fundamentals of Programming I
- Physics II
- Electronic Circuits
- Electronic Device
- Calculus II

FOURTH SEMESTER COURSES

- Fundamentals of Programming II
- Digital Logic and Microcontrollers
- Probability and Random Processes
- Sensors Technologies
- Signals and Systems

Third Year

FIFTH SEMESTER COURSES

- Antenna and Wave Propagation
- Digital Signal Processing
- Electronic Measurements
- Research Methods

Elective subjects E2 (one of 3):
- Algorithms and Web-based Systems
- Microprocessor Systems
- Project Management

Third Year

SIXTH SEMESTER COURSES

- VHDL and FPGA Systems
- Information and Quantum Computing
- Automatic Control Systems

- **Internship**

The Internship Course takes place in the third year of bachelor studies, spanning 4 weeks (120 hours) and earning 6 ECTS credits. It offers practical experience in real-world scenarios, enhancing critical thinking, innovation, and design skills. Through collaboration with professionals, students learn to address challenges, meet objectives, and explore novel ideas in commercial devices, systems, or software. The internship should align closely with their field of study.
Objectives of the Internship Course:

a. Bridge the gap between theory and practical implementation.
b. Cultivate skills within a professional work environment.
c. Provide valuable job market experience.
d. Contribute to market-related opportunities.

- **Thesis**

The undergraduate diploma thesis is an integral part of the final semester of the program. It is valued at 6 credits in the first cycle academic and professional higher education study program in Electronics Engineering. The diploma thesis can be prepared at the same time as other study requirements are completed in the third year, and the submission and defence of the diploma thesis is the final component of first cycle studies.

Theses is the ultimate obligation of the student to get a diploma at the end of the study program. It is an individual research work, which the student performs during the last year of the studies. The thesis can guide their master's studies and career as well.

HOW TO APPLY

Bachelor's Programs (National Students)

The first step to become a student 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.

NOTE: Completing the A1/A1Z form on e-Albania portal and the online form in U-Albania portal are fundamental steps for your enrollment.

Admission Criteria

To be admitted to the bachelor's study programs, the candidate must have:

- Successfully completed high school;
- A high school GPA of 6.5 and above;
- Demonstrated English language proficiency at the B1 level or higher.

All high school students must include University College "Canadian Institute of Technology" as one of their 10 choices in the U-Albania System to register at our university.

SCAN ME

Bachelor's Programs (International Students)

The first step to become a student 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

To be admitted to the bachelor's study programs, international candidates must meet the following requirements:

- Hold a high school diploma recognized by the Albanian Education Service Center;
- A high school GPA of 6.5 and above;
- Demonstrated English language proficiency at the B1 level or higher.

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

SCAN ME

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OPEN YOUR **DOOR** TO THE **WORLD**

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