UNIVERSITÀ DI TRENTO

Bachelor's Degree in
Computer, Communications and Electronic Engineering - ICE

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The Bachelor's Degree in Computer, Communications and Electronic Engineering (ICE) is a three-year program and combines three main disciplines in the broad area of Information Engineering: **Computer Engineering, Information and Communications Engineering and Electronic Engineering**. The program shares an interdisciplinary core of subjects and offers **two different curricula,** one in Italian and **one in English**.

Programme overview

Degree awarded
Bachelor - "Laurea" - in Computer, Communications and Electronic Engineering

Language
English

Class size
Up to 60 students

Workload
The total workload for each student is 180 ECTS (European Credit Transfer System)

Intake
September each year

Duration
3 years full-time

Fees and funding (approximate range)
- EU: 340€ - 2.400€ (based on income/merit)
- Non-EU: 1.000€ - 4.500€ (based on merit)
- Income/merit-based scholarships and tuition waivers available

Admission

Selection criteria
- Achieve at least the minimum required score on the on-line English TOLC-I CISIA test
- Assessment of the on-line application

Requirements
- Hold a secondary school diploma awarded in Italy, or other qualifications recognized as equivalent if obtained abroad, and at least 12 years of schooling
- Pass the on-line English TOLC-I CISIA admission test
- Before the beginning of the second year it is mandatory to pass an English exam - level B2 (CEFR) or to provide a certificate proving the required level

Application deadlines
(check online for updates)
- Non-EU citizens living outside Italy: (www.international.unitn.it/ict/applying-for-ice)
  » February each year
- EU citizens and non-EU citizens regularly living in Italy (www.offertaformativa.unitn.it/en/l/ice-computer-communications-electronic-engineering/application)
  » First session: February each year
  » Second session: April each year
  » Third session: July each year

How to apply
- Access the online application form
- Upload the required documents
- Submit your online application by the deadline
- Check online for more information and updates: www.unitn.it/ict/ice

Study Plan

The ICE curriculum in **English** includes the three core areas of Computer Engineering, Information and Communications Engineering and Electronic Engineering and is comprised of:

- Compulsory common courses
- Compulsory cross-disciplinary courses
- Courses chosen by the student across the three core areas
- Elective courses
- Internship
- Foreign languages (English or Italian for international students)
- Final exam

The ICE curriculum in **Italian** is slightly different and includes:

- A first sequence of common and basic courses
- Cross-disciplinary training in the three core areas of Computer, Communications and Electronic Engineering
- A specific curriculum path chosen by the student with specialization in one of the three areas
- Elective courses
- Internship
- English language
- Final exam

Career opportunities

The Bachelor's degree in Computer, Communications and Electronic Engineering (ICE) aims to train engineers with specific skills in the fields of Information and Communications Technology (ICT). ICT is an engine of economic growth and employment opportunities increase at a much higher rate than in the total industry. ICE graduates will add value to this sector and will be able to work in a team and solve problems creatively in the fields of information technology, telecommunications and electronics using skills, techniques and innovative tools acquired during the Bachelor's program.

Graduates will be highly capable of responding to the needs of the labor market, which often does not require specialization limited to a single sector, but rather an in-depth understanding of the systems, methodologies, and technologies within the entire ICT area. They will also understand the relations between the various disciplines in the area and will be able to deal professionally with interdisciplinary problems.

ICE graduates are prepared for the following professions:

• Software systems technicians
• Information processing systems technicians
• Telecommunications technicians
• Designers of systems for processing and receiving transmission of information
• Electronic technicians
• Digital architectures and systems designers
• Analogue and signal conditioning circuit designers
• Hardware/software developers of embedded and integrated systems.

If they would prefer to continue their studies, in Italy graduates can also access Master's degree programs in Computer Engineering and Electronic Engineering.