GEII | GÉNIE ÉLECTRIQUE ET INFORMATIQUE INDUSTRIELLE

University Bachelor of Technology (B.U.T.) Electrical Engineering & Industrial IT.

The University Bachelor of Technology in Electrical Engineering and Industrial IT (GEII) is a three-year degree focusing on innovation and technological development. It trains the IT players of the future in developing the skills required for working within varied fields such as smart cities and industry 4.0, smart and connected networks, transportation and electromobility, aeronautics, renewable energies, energy management and distribution, health, audio-visual, robotics, space, etc.

The B.U.T GEII is a multipurpose degree designed to train the students as middle managers capable of setting up and managing electrical installations, designing, producing, programming and maintaining fixed or embedded electronic boards (automotive, avionics, robotics, etc.), and also implementing the automation and the control of industrial processes. Graduates will also be able to manage and maintain industrial computer networks, analyse and develop data processing and transmission systems.

The course can also lead graduates to further studies via enrolment in a Master's Degree.

Competence-based learning.

The Electronics and Embedded Systems study programme aims to develop the required skills to analyze, design and develop electronic systems, including embedded systems and connected objects.

On the job, the graduates will be required to collaborate with engineers in order to program, integrate, install, connect and maintain all electronic equipment and embedded software related to Electrical Engineering related fields.

Skills / learning units:
This course aims to develop 4 core graduate skills called UEs (*unités d'enseignement / learning units*):

- UE1: Designing the electrical and IT part of an embedded system
- UE2: Verifying the electrical & IT part of an embedded system
- UE3: Ensuring the maintenance in operational condition of a system
- UE4: Implementing a hardware or software system

Every class of a semester is **mandatory**. Each learning unit (UE) accounts for 5 to 10 ECTS ; validating all the semester units is required to validate a full semester.

Pre-requisites:

120 ECTS in EE
French : C1

French-taught programmes.
Attending all classes is mandatory.

Semester open to international students.

Programme of studies:
Electronic and Embeded Systems (ESE)

- **Semester 5** (Autumn)
  - Requirements : 120 ECTS in Electrical Engineering
- **French:** B2/C1

F CHAMBER 01
Annecy-le-Vieux
campus

071 - EE | 061 - IT
Practical
teaching & learning

30-35 hrs a week
of study & projects
in lab

Semester 5 - Courses, Skills (UE) & ECTS.

Course List	UE1	UE2	UE3	UE4	Weight
English	•	•	•	•	0.6
Culture and Communication	•	•	•	•	0.6
Corporate Life	•	•	•	•	1
Mathematical and software tools	•	•	•	•	0.6
Guidance	•	•	•	•	0.4
Maintenance			•		0.4
Databases	•	•	•	•	0.6
Applied Physics: EMC	•	•			0.6
Specialised Electronics	•	•	•	•	4.6
Embedded Systems	•	•	•	•	2.6
Project (Group Work)	•	•	•	•	9
ECTS	7.5	7.5	7.5	7.5	30