

Politehnica University Timișoara
Faculty of Electronics and Telecommunications

Bachelor's degree program: Techniques and Systems for Telecommunications
Domain: Electronics and Telecommunications

General information

Requirements: Baccalaureate (or equivalent) and admission contest based on tests

Duration: 4 years (8 semesters); 240 ECTS credits

Teaching language: English

Form of studies: Full time

Professional title for the graduates: Bachelor Diploma and the title of Engineer

Electronics and Telecommunications

Electronics and Telecommunications Faculty provides training for engineers in Electronics and Telecommunications in areas of specialization: Telecommunications.

The faculty has three departments:

- Applied Electronics;
- Communications;
- Measurements and Optical Electronics,

and cooperates with other faculties and departments like Mathematics, Physics, Electrical Engineering, Computer Science, Mechanical Engineering, Management, etc.

Teaching and learning are based on modern methods, especially with respect to practical activities. Special attention is paid to applied computer studies.

Competences and knowledge acquired

The educational goals are:

- to give students comprehensive theoretical and practical knowledge in the field of electronic engineering;
- to provide students with practical skills for manufacturing electronic equipment and to introduce them to the most recently developed techniques and devices in the design of electronic equipment;
- to habituate students with permanent intellectual work;
- to accustom students to information and computer technology with the purpose of enabling them to use Computer Aided Design;
- to supply adequate knowledge in economics and business management, enabling graduates to take part directly in industrial activities or to work as managers;
- to teach students foreign languages, so as to prepare them for the mobility programmes promoted by the European Community and to foster their participation in international cooperation and research programmes;
- to provide students with knowledge in humanities for professional inter-communication skills.

Courses

First and second year fundamentals and general training

- Mathematics, Physics, Mechanical engineering fundamentals
- Computer practice and programming
- Computers Networks Architecture
- Signal processing and Systems, Digital processing systems
- Optoelectronic and electronic devices
- Analogue and digital integrated circuits
- Electrical circuits, High frequencies techniques and electromagnetic wave

For third and fourth years there are disciplines for specializations Technique and systems for communication:

The main disciplines are: Radio communications, Programmable Logic Systems, Electronic equipment testing, Power electronics, Virtual instrumentation, Electronic instrumentation, Information theory and coding, Digital Telephony, Embedded systems, Audio and Video systems, Microelectronics, Modelling and simulation, Electronic packaging, Image processing, Wireless communications



Technique and systems for communication in Politehnica University Timișoara

The late Prof. Remus Răduleț, member of the Romanian Academy, introduced the study of Electronics at the "Politehnica" University of Timișoara in 1931. In 1970, the specialization on "Electronics and Telecommunications" was established within the Faculty of Electrical Engineering, and four years later, in 1974, a new department, "Electronics, Automation and Measurements" was founded. In 1976, the Faculty of Electrical Engineering moved its headquarters to the present building where the number of laboratories and other facilities increased substantially and a new specialization was created, Communications.

The former specialization "Electronics and Telecommunications" became the "Faculty of Electronics and Telecommunications" in 1990. Starting with the 2005-2006 a new curriculum has been introduced, for the License-Master-Doctorate system, according to the Bologna Declaration. Also, since 2006, a study in English has been introduced.

Career opportunities

The field is in top and has good perspectives in the future.

The courses and curricula were designed in partnership with companies, adapted to their requirements in relation to the scope of the employees, mostly graduates of the Faculty of Electronics and Telecommunications.

Classes meet mandatory requirements and provide compatibility with the national qualifications and curricula is similar with EU countries and other countries worldwide.

There are also large companies that require specialists in this field (Continental, Flextronics, Alcatel, Hella, Elster, OCE, Saguaro, Lasting) as well as over 350 small and medium-sized with electronic profile.

The labour market has an acute demand on specialists in the field (it is estimated that only 80% of this demand is covered at the moment).

Our students have various offers of recreation, health and welfare such as:

- The Students' House with several departments for different activities, artistic groups and a writers' club.
- The "Politehnica" Sport Association which always reached high sports performance.
- Two sports arenas with: tennis courts, basketball, football and handball grounds, gym, nautical and horse racing bases.
- Medical assistance is provided in a consistent number of consulting rooms.

Contact

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