## **About the program:**

The program is recommended especially for talented students. It provides a general theoretical education based broadly on mathematics, physics and theoretical professional fundamentals of electronic systems. It covers the area of modern electronics, communications technology, radio and electronic systems, and advanced electronic technologies.

#### Why study OES:

- you acquire excellent background knowledge and skills for your master's and doctoral studies
- this universal bachelor's degree will allow you to continue in any engineering master's program
- the knowledge and skills that you acquire from leading experts will serve you for your whole life
- you can customize your own master's program by selecting optional courses according to your interests.

## **CZECH TECHNICAL UNIVERSITY IN PRAGUE FACULTY OF ELECTRICAL ENGINEERING**

Technicka 2 166 27 Prague - Dejvice

www.fel.cvut.cz www.budlT.cz www.facebook.com/cvutfel www.youtube.com/cvutfel twitter.com/CVUTFEL

communication

information







MSc. BSc.



# Open Electronic Systems







### **Admission procedure**

Applications for a bachelor program Applicants must send:

- an application form for admission to the bachelor study program
- a transcript of studies (a list of their study grades) or a notarized copy of their secondary school leaving certificate; Bachelors/Masters applying a bachelor program can submit a notarized copy of their bachelor/master diploma instead
- proof of payment of the admission procedures fee (CZK 500)

Applications for a master program Applicants must send:

- an application form for admission to a master study program
- a transcript of studies (list of study grades) or a notarized copy of their bachelor/ master diploma (graduates only)
- proof of payment of the admission procedures fee (CZK 500)

All documents are to be submitted not later than the end of May, for enrolment in September.

#### Address:

Czech Technical University in Prague Faculty of Electrical Engineering Study Department Technická 2, 166 27 Prague 6 Czech Republic

Account No.: 19-5504540257

bank sorting code: 0100 payment identification: 902 variable symbol: 85500 SWIFT code: KOMB CZ PP

IBAN CZ9401000000195504540257

The tuition fee is CZK 55 000 (approx. EUR 2200, USD 3000) per one semester, and must be paid before enrolment. The academic year consists of two semesters.

Details of admissions see http://www.cvut.cz/incomers/regulations.

The gateway to a mathematical and physical understanding of the world will be opened up for you.

How to communicate with spacecraft on Mars? You'll find the answer in information and communication theory.

How to scale down the electronic world into a grain of sand? You will learn this in integrated electronic systems.

How to save a million movies to a mobile device? You will learn this in digital signal processing.

#### Bachelor's program

Mathematics Programming Introduction to Electronic Systems

1st year

Solid State Physics Statistics, Information Theory and Optimization

Theory of Systems, Circuits and Electromagnetic Field

Discrete and Statistical Signal Digital Communications and **Networks Theory** 

Electronic and Optoelectronic

Analog and Active Circuits

3<sup>rd</sup> year

## Brief description of the study pro-

The Open Electronic Systems bachelor program provides a deep understanding of mathematics, physics mentals in electronic systems.

Students who complete this programme will be well prepared to study successfully in master's level programs at the Faculty of Electrical Engineering, or at another university in the Czech Republic or abroad. Students will learn how to solve technical problems in a rigorous mathematical and engineering manner.

#### Master's program

#### Communications and Signal Processing

You will learn the mathematical algorithms used in signal processing:

- · Coding in digital communications, Network optimization
- · Radio systems, audio and video processing and encoding

Specialization

#### RF and DSP Engineering

You will learn how to design analog and digital hardware for RF and

- RF technology, Antennas, Microprocessor technology
- Radio signals, Propagation, Tx-Rx architectures, RF measurement

Specialization

#### Solid State Systems

You will learn how to create complex systems with the use of physical

- Integrated structures and systems
- Nanoelectronics and optoelectronics

Form your own field of specialization by selecting from a wide range of optional courses.

Projects led by specialists in the field.

You can become a member of an international research team.

You can participate in international competitions.

