Communication Technology

Generated: 19. 11. 2026

Faculty	Faculty of Electrical Engineering and Computer Science
Type of study	Doctoral
Language of instruction	English
Code of the programme	P0714D060002
Regular period of the study	4 years
Coordinating department	Department of Telecommunications
Coordinator	prof. Ing. Miroslav Vozňák, Ph.D.
Keywords	Radio Communications, Computer Systems and Networks, Information and Communication Security, Optical Communications and Photonics, Communication Technology

About study programme

The Ph.D. study program Communication technology is focused on the scientific and academic education of experts who make their careers in the fields of research and development or in academia. Throughout their study, the Ph.D. students are an integral part of ongoing R&D projects. They actively publish the findings of their scientific work and are introduced to the scientific community by their mentors. The study requires a minimum of four academic years of study. After the successful defense of the thesis, the students are awarded the Ph.D. degree.

Graduate's employment

The graduates of the Communication technology study program is a highly skilled expert capable of creative research work in telecommunications with the insight into the closely related areas of electronics and computer science. They can find employment in the scientific institutions and academia in the positions such as R&D specialist, chief of company R&D department, assistant professor or lecturer.

Study aims

The aim of the study program Communication technology is to train highly skilled scientific experts in the fields of radio, optical or application-oriented sensor and computer networks. During the course of study, the attention is paid to the information and communication security as well. The graduates are capable of inventing novel and innovative solutions, use unconventional approaches to solve the problems, develop new technologies and enhance the current ones. This aim is imprinted on both the student selection process and the study course itself.

Graduate's knowledge

The graduates gain deep and systematic knowledge of communication technology. They understand the theoretical basis and the concepts that form the centerpiece of this scientific field. The graduates actively work in the scientific community on the international level and gain the wide understanding the topic and the overlapping scientific and engineering fields of interest. They are capable of conducting the interdisciplinary research and reach the internationally recognized results.

Graduate's skills

The graduates are also capable of harnessing state-of-the-art knowledge. They can design and use advanced solutions to the challenges of the communication technologies and take responsibility for the management of research teams and solving of scientific problems.

Graduate's general competence

The graduates are also prepared for the continuous learning and are able to gain and use new knowledge and expertise. They can prepare and lead research projects, find and state the crucial and long-term questions of the field of communication technology. The graduates are trained in conceptual and resource planning and their communication skills are cultivated so that they can present and successfully defend their ideas on the international stage.

Professions

- Communications network designer
- Research and development
- Academic staff member

Hard skills

- Knowledge of technical English
- IP communication protocols
- Cyber security
- Optical sensors and networks

Study curriculum

- form Full-time (en)
- form Part-time (en)
- form Distance (en)