Topics for the entrance exam of program Communications and Networking (MPA-CAN)

- Information and communication technologies
- Wired / wireless networking
- Telecommunications
- ISO/OSI and TCP/IP networking models, description of key functions of each layer
- Communication protocols (IP, TCP, UDP, DHCP, DNS, SMTP, FTP, etc.)
- Types, structure, topology and parameters of communication networks
- Key principles of inter-networking, routing mechanisms and protocols
- Multiple utilization of transmission channels
- Optical communications
- Mobile networks (2G, 3G, 4G, 5G)
- Multimedia data transmissions in packet networks, multicast, streaming, QoS for multimedia systems

Evaluation of the entrance exam

The entrance examination consists of two parts which take place in one day. The first part is an online written test, which takes place in the morning using e-learning system. This written knowledge test shall comprise 18 questions selected from the thematic areas mentioned above. The test shall last 60 minutes, and the maximum overall score available is 70. The assignment and writing of the exam are in English.

The second part is an online oral exam (interview), which takes place on same day as the written exam. Taking part in the interview is conditional upon successfully completing the first part of the examination. This oral exam shall last up to 20 minutes, with the maximum score achievable being 30 points.

A commission consisting of academic staff of FEEC BUT is appointed for the oral part of the examination. The interview part takes the form of a professional discussion with the candidate and consists of a generic introduction of applicant's study background and motivation followed by several technical questions selected from the thematic areas mentioned above. The oral exam is in English. Candidates are expected to have a good command of English when communicating with members of the commission.

The reviewing and correction of any and all entrance tests submitted for assessment shall begin immediately after the examination has ended, and the responsibility for the entire procedure and/or its outcomes shall be with the entrance committee member(s) involved. The results will appear in the participants' e-application tables.

Please note that if you successfully pass entrance examination and you are accepted for the study you have to pass process of your university diploma recognition at BUT. Please follow the detailed information at BUT website (https://www.vutbr.cz/en/study-options/recognition).