



Faculty of Electrical Engineering

Electrical and Computer Engineering

at School of Electrical Engineering, 73 Bulevar kralja Aleksandra, 11000 Belgrade, www.etf.bg.ac.rs

ECTS: 60/ LANGUAGE OF INSTRUCTION: SERBIAN/ DEGREE: MASTER

Study program content

The duration of Master academic studies at the School of Electrical Engineering is one year and is equal to 60 ECTS points. The total number required for obtaining the academic title Master of Electrical Engineering is 300 ECTS points, so that these studies can be applied for only by candidates who acquired at least 240 ECTS points during their undergraduate studies, and these candidates should exclusively be either from the School of Electrical Engineering or from the other related faculty.

During the Master studies a candidate chooses 5 courses (subjects). Within each module students have obligatory and optional subjects, which are selected from among the list of optional subjects.

The instruction process is carried out through lectures and study research program. During the lectures, the professor delivers the stipulated course orally, accompanied by computers and state-of-the-art projection equipment. Within the study research work, which is exclusively related to the completion of the final (Master) thesis, the following activities are performed: practice, laboratory practice, consultations, term papers, projects, etc.

Study program goals

The basic objective of the Academic Master studies program of Electrical Engineering and Computer Science is to additionally educate engineers who are competent for analysis, maintenance, development and design of the parts of the system, as well as complex systems, and also dealing with scientific work.

Experts educated in such a way should be capable of coping with team work, as well as capable of presenting their results to the expert and scientific community and wider audience.

The second objective of the study program is to provide the fundamental knowledge necessary for following the latest scientific achievements in technical field, as well as following the fast

technological development in the field of audio and video technology, biomedical and ecological engineering, electronics, power systems, energy converters and drives, microwave technology, nanoelectronics, optoelectronics, and laser technology, applied mathematics, computer science and information theory, signals and systems, system engineering and radio communication and software engineering.

The study program objective is also aimed at providing the high competence and academic skills in the above stated fields to students. This also includes the development of creative capabilities of observing the problem and critical thinking capabilities, developing capability for team work and mastering specific practical skills necessary for successful future scientific work. In accordance with contemporary aims of education, students should acquire habits for permanent education and advancement, and especially for further scientific research in the above stated fields.

Study program outcomes

Students will be competent to:

- Apply the fundamental knowledge related to electrical engineering in scientific research.
- Apply the knowledge of mathematics, physics and engineering disciplines in problem modeling.
- Design systems, components and processes according to the given specifications.
- Use techniques, skills and up-to-date software tools in the engineering practice and detection of their application
- Design and conduct the engineering experiments and then analyze and interpret the obtained data and publish the appropriate scientific papers.
- Notice, detect, formulate and solve new engineering problems.
- Advance their knowledge and follow the development of science and technology.
- Work in a team composed of experts of various profiles.

Modules

1. Audio and video technology,
2. Biomedical and ecological engineering,
3. Electronics,
4. Power systems,
5. Power converters and drives,
6. Microwave technology,
7. Nanoelectronics, optoelectronics and laser technology,
8. Applied mathematics,
9. Computer technology and informatics,
10. Signals and systems,
11. System engineering and radio communications.
12. Software engineering.

Admission requirements

Persons with finished bachelor studies in Electrical and Computer Engineering having 240 ECTS.

Some courses may be taught in English.

Contact

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