

<b>Course title: Network Design</b>
Course code: 41084
ECTS credits: 6
Requirements: None
<b>Basic information</b>
Level of studies: Master applied studies
Year of study: 1
Trimester: 4
Goal: Providing system knowledge in the field of designing telecommunication networks and systems for various purposes. Practical introduction to the elements of the project and legal regulations in the process of project implementation.
Outcome: Students are able to successfully engage in the design, supervision, and operation of networks and network equipment, and other similar jobs in engineering practice upon completion of the specialization.
<b>Contents of the course</b>
Theoretical instruction
Legislation. Law on Planning and Construction. Electronic Communications Act. Telecommunications Act. Regulations and instructions of the Republic Agency for Electronic Communications. Bylaws. Act on urban conditions. Draft. Conceptual Design. Major project. Detailed design. Derived condition project. Responsible designers, responsible contractors. Standardization in TC networks and systems. Elements of the main project. Projected task. Description of the existing situation. Technical and economic conditions and solutions. Specification of materials, equipment and works. Calculation of transmission parameters on routes / networks. Power balance. Graphic documentation. Sketches, drawings and attachments of the main project. Software applications for creating graphic documentation.
Practical instruction (Problem solving sessions/Lab work/Practical training)
Preliminary design. Preparation of project documentation.
Software tools for creating project documentation. Derived state simulation.
<b>Textbooks and References</b>

Collection of rules in the field of TT lines and networks LN-IV, ZJPTT, Belgrade, 1992.
Collection of rules in the field of lines and networks, LN-VII, ZJPTT, Belgrade, 1998.
Law on electronic communications of the Republic of Serbia (The Official Gazette of the Republic of Serbia, No. 44/10).
Law on telecommunications of the Republic of Serbia (The Official Gazette of the Republic of Serbia, No. 44/10).
Law on planning and construction (The Official Gazette of the Republic of Serbia, No. 47/2003).
<b>Number of active classes (weekly)</b>
Lectures: 4
Practical classes: 2
Other types of classes:
<b>Grading (maximum number of points: 100)</b>
<b>Pre-exam obligations: Points</b>
Activities during lectures:
Activities on practical exercises: 10
Seminary work:
Colloquium: 50
<b>Final exam: 40 Points</b>
Written exam: 40
Oral exam:
<b>Lecturer</b>
Nikola Slavković, PhD