Course title: Access Networks
Course code: 41075
ECTS credits: 5
Requirements: None
Basic information
Level of studies: Undergraduate applied studies
Year of study: 3
Trimester: 7
Goal: Introducing students to the basic characteristics and types of access networks in order to train them to work on maintaining and improving the connection of users with the core of the network, for the quality implementation of existing and new services.
Outcome: Upon completion of this course, students will be able to recognize and present existing access networks, as well as to describe and explain their characteristics. Students will be able to apply expert knowledge related to the operational principles of access network elements. Students will also be able to analyze and evaluate different concepts and models for the implementation of access networks in the given conditions, applying ethical standards of their profession as well as to show a positive attitude towards active monitoring and learning of innovations in technology, devices and services.
Contents of the course
Theoretical instruction
1. Characteristics of access networks
2. Signal transmission media
3. Next generation access networks
4. DSL technology
5. DSLAM / MSAN
6. ATM
7. HFC
8. FTTx
9. Wireless access networks
10. New technologies in access networks
Practical instruction (Problem solving sessions/Lab work/Practical training)

Textbooks and References
1. M. Janković, Z. Petrović, Mreže za pristup, Akademska Misao, Beograd, 2007.
2. A. Gumaste, T. Antony, First Mile Access Networks and Enabling Technologies, Cisco press, 2004.
3. M. Dukić, D. Vujić, Fiksni bežični pristup, Akademska Misao, Beograd,, 2006.
Number of active classes (weekly)
Lectures: 4
Practical classes: 0
Other types of classes: 1
Grading (maximum number of points: 100)
Pre-exam obligations: Points
Activities during lectures: 0
Activities on practical exercises: 0
Seminary work: 10
Colloquium: 2*30
Final exam: Points
Written exam: 30
Oral exam: 0
Lecturer:
Natalija Vugdelija, MSc
Associate: