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| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | |  | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | Electrical Power Engineering | | |
| Study Module (if applicable) | | | |  | | |
| Course title | | | | Distribution Network Management | | |
| Level of study | | | | ☐Bachelor × Master’s ☐ Doctoral | | |
| Type of course | | | | ☐ Obligatory × Elective | | |
| Semester | | | | × Autumn ☐Spring | | |
| Year of study | | | | I | | |
| Number of ECTS allocated | | | | 5 | | |
| Name of lecturer/lecturers | | | | Aleksandar Janjić, Zoran Stajić | | |
| Teaching mode | | | | ×Lectures ×Group tutorials ☐ Individual tutorials  ×Laboratory work ☐ Project work × Seminar  ☐Distance learning ☐ Blended learning ☐ Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| Introduction to the principles of operation of a distribution network, network automation and different types of control systems. Introduction to the equipment for the network control. Introducing the concept of "smart grid". Students are trained to select the optimal strategy for network management, the selection of the hierarchical levels of management. Depending on the desired functionality, students are qualified for selection of equipment and methods of communication. | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| The concept of control and automation in the distribution network. Different types of control systems. Concept and components of a "smart grid." The basic architecture of the system. The database structure and interfaces. Network Management Systems (DMS - Distribution Management System) and systems for real-time control. System for fault management in the network. Primary and secondary equipment for network management, equipment management and protection. Communication systems for the management of the distribution network. Communication interfaces and protocols. Standards for interoperability in advanced distribution networks | | | | | | |
| **LANGUAGE OF INSTRUCTION** | | | | | | |
| ×Serbian (complete course) ☐ English (complete course) ☐ Other \_\_\_\_\_\_\_\_\_\_\_\_\_ (complete course)  ☐Serbian with English mentoring ☐Serbian with other mentoring \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | | | |
| **ASSESSMENT METHODS AND CRITERIA** | | | | | | |
| **Pre exam duties** | **Points** | | **Final exam** | | | **points** |
| **Activity during lectures** | **5** | | **Written examination** | | | **20** |
| **Practical teaching** | **15** | | **Oral examination** | | | **20** |
| **Teaching colloquia** | **40** | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |