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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty** | Faculty of Electronic Engineering |
| **GENERAL INFORMATION** |
| Study program  | Electrical Engineering and Computing |
| Study Module (if applicable) | Electrical Power Engineering |
| Course title | Groundings |
| Level of study | ☒Bachelor ☐ Master’s ☐ Doctoral |
| Type of course | ☐ Obligatory☒ Elective |
| Semester  | ☐Autumn ☒Spring |
| Year of study  | 4 |
| Number of ECTS allocated | 6 |
| Name of lecturer/lecturers | Dragan S. Tasić, Nenad N. Cvetković |
| Teaching mode | ☒Lectures ☐Group tutorials ☒ Individual tutorials☐Laboratory work ☐ Project work ☐ Seminar☐Distance learning ☐ Blended learning ☐ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *The aim of the course is to familiarize students with the characteristics and types of groundings, as well as methods for the calculation and measurement of grounding systems characteristics.**Students will be trained to work on calculation of groundings EM characteristics, measurement and verification of characteristics of grounding systems realized in practice.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| **Definition of basic terms, classification and basic characteristics of earthings and groundings. Grounding electrodes types classification by shape and purpose. The electrical parameters of the ground and non-homogeneous soil modelling. Overhead lines and cable lines as parts of the grounding systems. General electrical characteristics of earthing system. Materials for producing earthing systems conductors. Dimensioning the conductors of the earthing system. Methods for calculating EM earthing systems characteristics. Methods for measurement and periodical verification of the grounding systems characteristics. Introduction with the technical recommendations of the Electric Power Industry of Serbia** |
| **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** | **25** |
| **Practical teaching** |  | **Oral examination** | **20** |
| **Teaching colloquia** | **50** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |