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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty** | Faculty of Electronic Engineering |
| **GENERAL INFORMATION** |
| Study program  | Electrical Power Engineering |
| Study Module (if applicable) |  |
| Course title | Selected Chapters of Power System Analysis |
| Level of study | ☐Bachelor ☒ Master’s ☐ Doctoral |
| Type of course | ☐ Obligatory ☒ Elective |
| Semester  | ☐Autumn ☒Spring |
| Year of study  | 1 |
| Number of ECTS allocated | 6 |
| Name of lecturer/lecturers | Dragan S. Tasić |
| Teaching mode | ☒Lectures ☐Group tutorials ☒ Individual tutorials☒ Laboratory work ☒ Project work ☐ Seminar☐Distance learning ☐ Blended learning ☐ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *Objective of the course is that students learn the modern methods for calculating steady states and also disordered states in power systems.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| **Power flow calculation for unbalanced load. Fuzzy approach for power flow calculation. Short-circuit current calculations. Fault current distribution. Time flow of short-circuit currents. Distribution of the aperiodic component of short-circuited current throughout the network. Simultaneous faults. Multi-machine system models for stability analysis at large disturbances. Numerical methods for transient stability analysis. Voltage stability.** |
| **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** |
| **Project** | **30** | **Written examination** | **20** |
| **Practical teaching** | **10** | **Oral examination** | **20** |
| **Teaching colloquia** | **20** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |