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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Electronic Engineering |
| **GENERAL INFORMATION** |
| Study program  | Electrical Power Engineering |
| Study Module (if applicable) |   |
| Course title | Special Electrical Installations |
| 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 |
| 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 advanced techniques of electrical installationdesign and lighting of more complex and non-standard objects, installations with distributed powergeneration, the concept of "intelligent" buildings, as well as regulation about the impact of thedistributed generation on the quality of power and lighting. Students will be trained to work on the project documentation and verification of implementedinstallations with distributed generation as well as "intelligent" building. Flood lighting of objects withdifferent purposes and complexity, Design of electrical installations for outdoor lighting of roads andbuildings. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Autonomous sources of electrical energy. Static devices for uninterruptible power supply. Dieselelectric engines. Battery charger. Systems for uninterrupted supply . Solar generators - different waysof generating electricity, technical characterstics and types of solar panels and inverters. Windturbines. Sizing elements of the hybrid power supply.Electric light sources. Incandescent sources. Sources of electrical discharge. LED sources. Projectinglight industrial space. Lighting of roads. Lighting of tunnels. Flood lighting. Lighting of sports facilities.Lighting installation in "intelligent" buildings. Regulations relating to the power qual |
| **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** | **30** |
| **Practical teaching** | **15** | **Oral examination** | **20** |
| **Teaching colloquia** | **30** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |