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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | **Faculty of Electronic Engineering of Niš** |
| **GENERAL INFORMATION** |
| Study program  | Electrical Power Engineering |
| Study Module (if applicable) |  |
| Course title | Static Electricity in Technological Processes |
| Level of study | [ ] Bachelor [x]  Master’s [ ]  Doctoral |
| Type of course | [ ]  Obligatory [x]  Elective |
| Semester  |  [x]  Autumn [ ] Spring |
| Year of study  | I |
| Number of ECTS allocated | 5 |
| Name of lecturer/lecturers | Javor L. Vesna |
| Teaching mode |  [x] Lectures [x] Group tutorials [ ]  Individual tutorials [ ] Laboratory work [x]  Project work [ ]  Seminar [ ] Distance learning [ ]  Blended learning [ ]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| Introduction to problems of static electricity in technological processes, static electricity elimination and protective measures. Overview and application of analytical and numerical methods for solving problems of static electric fields. Gaining ability to assess various problems in industry and to use techniques for elimination of static electricity. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Phenomenon of static electricity in various processes. Theory of static electricity discharges from conducting and dielectric surfaces. Analytical and numerical methods for solving problems of static electric fields. Some applications of static electricity. Modeling of industrial and electrostatic filters. Theory of ignition of flammable mixtures. Dangers from static electricity during transportation and storage of flammable and explosive materials. Techniques for measuring electrostatic charges, fields and potentials. Protective measures and elimination of static electricity in technological processes.  |
| **LANGUAGE OF INSTRUCTION** |
| [x] Serbian (complete course) [x]  English (complete course) [ ]  Other \_\_\_\_\_\_\_\_\_\_\_\_\_ (complete course)[x] Serbian with English mentoring [ ] Serbian with other mentoring \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **ASSESSMENT METHODS AND CRITERIA** |
| **Pre exam duties** | **Points** | **Final exam** | **points** |
| **Activity during lectures** | **10** | **Written examination** | **20** |
| **Practical teaching** | **10** | **Oral examination** | **20** |
| **Teaching colloquia** | **40** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |