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| **UNIVERSITY OF NIŠ** | | | | | | | | |
| **Course Unit Descriptor** | | | **Faculty** | | Faculty of Mechanical Engineering | | | |
| **GENERAL INFORMATION** | | | | | | | | |
| Study Program | **Mechanical Engineering** | | | | | | | |
| Study Module (if applicable) | - | | | | | | | |
| Course Title | Design of experiment | | | | | | | |
| Level of Study | ☒Bachelor | | | ☐ Master’s | | | | ☐ Doctoral |
| Type of Course | ☐ Obligatory | | | ☒ Elective | | | | |
| Semester | ☐ Autumn | | | ☒ Spring | | | | |
| Year of Study | IV | | | | | | | |
| Number of ECTS Allocated | 5 | | | | | | | |
| Name of Lecturer/Lecturers | Miroslav R. Radovanović | | | | | | | |
| Teaching Mode | ☒ Lectures | | | ☐ Group tutorials | | | | ☐ Individual tutorials |
| ☒ Laboratory work | | | ☒ Project work | | | | ☐ Seminar |
| ☐ Distance learning | | | ☐ Blended learning | | | | ☐ Other |
| **Purpose and Overview (max. 5 sentences)** | | | | | | | | |
| Introduce students to the basics of design of experiment. The course is targeting both the theoretical and practical aspects of design of experiment. | | | | | | | | |
| **Syllabus (brief outline and summary of topics, max. 10 sentences)** | | | | | | | | |
| 1) General introduction to design of experiment, 2) Experimental investigations and methods, 3) Planning of experiment. Experimental designs, 4) Selection of factors and levels. Selection of mathematical models, 5) One factorial experiment. Multi factorial experiment, 6) Full factorial experiment. Partial factorial experiment, 7) Analysis of experimental results. Regression analysis, 8) Searching optimum experimentally. | | | | | | | | |
| **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** | | **5** | **Oral Examination** | | | **30** | | |
| **Teaching Colloquia** | | **30** | **Overall Sum** | | | **100** | | |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | | | |