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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 | Reliability Engineering |
| Level of Study | ☐ Bachelor | ☐ Master’s | ☒ Doctoral |
| Type of Course | ☐ Obligatory | ☒ Elective |
| Semester | ☐ Autumn | ☐☒ Spring |
| Year of Study | I |
| Number of ECTS Allocated | 10 |
| Name of Lecturer/Lecturers | Dragan S. Milčić, Miroslav M. Mijajlović |
| Teaching Mode | ☒ Lectures | ☐ Group tutorials | ☐ Individual tutorials |
| ☐ Laboratory work | ☒ Project work | ☒ Seminar |
| ☐ Distance learning | ☐ Blended learning | ☐ Other |
| **Purpose and Overview (max. 5 sentences)** |
| *Students are capable to independently and based on scientific principles perform design in product development from the aspect of reliability* |
| **Syllabus (brief outline and summary of topics, max. 10 sentences)** |
| 1) Fault tree analysis (FTA), 2) Failure Mode and Effects Analysis (FMEA), 3) Testing of reliability of mechanical systems, 4) Reliability analysis, 5) System reliability, 6) Reliability allocation, 7) Reliability based design. |
| **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** | **0** | **Written Examination** | **50** |
| **Practical Teaching** | **0** | **Oral Examination** | **50** |
| **Teaching Colloquia** | **0** | **Overall Sum** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |