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| **UNIVERSITY OF NIŠ** | | | | | | | | |
| **Course Unit Descriptor** | | | **Faculty** | | Faculty of Mechanical Engineering | | | |
| **GENERAL INFORMATION** | | | | | | | | |
| Study Program | **Manufacturing & Information Technologies** | | | | | | | |
| Study Module (if applicable) | - | | | | | | | |
| Course Title | Maintenance management | | | | | | | |
| Level of Study | ☐Bachelor | | | ☒ Master’s | | | | ☐ Doctoral |
| Type of Course | ☐ Obligatory | | | ☒ Elective | | | | |
| Semester | ☐ Autumn | | | ☒ Spring | | | | |
| Year of Study | I | | | | | | | |
| Number of ECTS Allocated | 6 | | | | | | | |
| Name of Lecturer/Lecturers | Pedja M. Milosavljević, Goran S. Petrović | | | | | | | |
| Teaching Mode | ☒ Lectures | | | ☐ Group tutorials | | | | ☐ Individual tutorials |
| ☒ Laboratory work | | | ☒ Project work | | | | ☒ Seminar |
| ☐ Distance learning | | | ☐ Blended learning | | | | ☐ Other |
| **Purpose and Overview (max. 5 sentences)** | | | | | | | | |
| *This course aims to provide students with a basic theoretical and practical knowledge in the field of maintenance management. After completion of the subject the students are able to apply the acquired knowledge in engineering activities and theoretical work.* | | | | | | | | |
| **Syllabus (brief outline and summary of topics, max. 10 sentences)** | | | | | | | | |
| 1) Introduction to maintenance management of technical systems - terminology, scientific approach; 2) Theoretical basis of systematic approach to maintenance management; 3) Approaches and techniques for maintenance performance measurement - Pareto, Ishikawa diagram; 4) Statistical process control - failure rate, mean time between failures, FMEA, reliability, availability, maintainability, safety, RAMS&C concept; 5) Modern strategies of technical systems maintenance; 6) Reliability Centered Maintenance; 7) Risk based maintenance; 8) Total productive maintenance (TPM); 9) Lean maintenance; 10) World-class Maintenance; 11) Information Systems in Maintenance & e-Maintenance | | | | | | | | |
| **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** | | | **0** | | |
| **Practical Teaching** | | **5** | **Oral Examination** | | | **30 (oral exam) and 30 (project presentation)** | | |
| **Teaching Colloquia** | | **30** | **Overall Sum** | | | **100** | | |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | | | |