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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 | Metal cutting |
| Level of Study | ☒Bachelor | ☐ Master’s | ☐ Doctoral |
| Type of Course | ☐ Obligatory | ☒ Elective |
| Semester | ☐ Autumn | ☒ Spring |
| Year of Study | III |
| Number of ECTS Allocated | 6 |
| 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 metal cutting*. *The course is targeting both the theoretical and practical aspects of metal cutting.* |
| **Syllabus (brief outline and summary of topics, max. 10 sentences)** |
| 1) General introduction to metal cutting, 2) Cutting process. Kinematics of cutting. Dynamics of cutting, Vibration, 3) Energy of cutting. Power of cutting, 4) Thermodynamics of cutting. Tribology of cutting, 5) Surface quality. Machinability of materials, 6) Factors and performances of cutting, 7) Regime of cutting, 8) Economics of cutting. |
| **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** |