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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 | Welding Technology |
| Level of Study | ☒ Bachelor | ☐ Master’s | ☐ Doctoral |
| Type of Course | ☐ Obligatory | ☒ Elective |
| Semester | ☒ Autumn | ☐ Spring |
| Year of Study | IV |
| Number of ECTS Allocated | 6 |
| Name of Lecturer/Lecturers | 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)** |
| *Introduce students to the basics of welding technology, conventional and non-conventional welding processes, selection of the appropriate welding process and process parameters concerning different welding positions, joint types and base materials. The course is targeting both the theoretical and practical aspects of the welding technology.* |
| **Syllabus (brief outline and summary of topics, max. 10 sentences)** |
| 1) General introduction to welding technology, 2) Oxy-gas welding and related processes, 3) Electrics- review, 4) The arc, 5) Power sources for arc welding, 6) Introduction to gas shielded arc welding, 7) TIG welding, 8) MIG/MAG welding, 9) Submerged-Arc welding, 10) MMA welding, 11) Other (non-conventional) welding processes: Laser, Electron Beam, Ultrasonic, Explosion, Diffusion, Resistance, Friction Welding etc, 12) Cutting, drilling and other edge preparation processes. |
| **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** | **50** |
| **Practical Teaching** | **10** | **Oral Examination** | **Max. 35 (depending on Teaching Colloquia)** |
| **Teaching Colloquia** | **35** | **Overall Sum** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |