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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 | Boilers |
| 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 | Branislav V. Stojanović, Jelena N. Janevski, Dragica R. Milenković |
| Teaching Mode | ☒ Lectures | ☐ Group tutorials | ☐ Individual tutorials |
| ☐ Laboratory work | ☒ Project work | ☒ Seminar |
| ☐ Distance learning | ☐ Blended learning | ☐ Other |
| **Purpose and Overview (max. 5 sentences)** |
| *Introduction to boilers used in the energy sector and industry, furnaces and combustion, mass and energy balances, basic elements and calculations, problems at work.* |
| **Syllabus (brief outline and summary of topics, max. 10 sentences)** |
| 1) Division of boilers, 2) Fuels and Combustion, 3) Material and heat balance of the boiler, 4) Firebox and devices for combustion, 5) Heating surface, 6) The thermal calculation of the boiler, 7) Heat transfer in the boiler, 8) Aerodynamics air and gas tract, 9) Hydraulic processes in boiler, 10) Boiler steels and calculating strength. |
| **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** |