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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 | Driers |
| Level of Study | ☒Bachelor | ☐ Master’s | ☐ Doctoral |
| Type of Course | ☐ Obligatory | ☒ Elective |
| Semester | ☐ Autumn | ☒ Spring |
| Year of Study | IV |
| Number of ECTS Allocated | 5 |
| Name of Lecturer/Lecturers | Mladen M. Stojiljković, Jelena N. Janevski |
| 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 drying technology, conventional and non-conventional drying processes, selection of the appropriate type of dryer and process parameters concerning on different types of drying materials. The course is targeting both the theoretical and practical aspects of the drying technology.* |
| **Syllabus (brief outline and summary of topics, max. 10 sentences)** |
| 1) General introduction to moist air, 2) Basic theory of the drying process. The moist material, 3) Mechanical properties of wet materials., 4) Static of drying process, 5) The kinetics of the drying process, 6) Heat and mass transfer in the drying process, 7) heat balance, 8) material balance, 9) Determination of the flow of the drying agent and fuel consumption, 10) Different types of dryers, 11) Auxiliary devices for drying installations. 12) Measuring instruments, control and automation of the dryers. |
| **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** |