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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 | Drive systems | | | | | | | |
| 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 | Dragoslav B. Janošević, 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)** | | | | | | | | |
| *Analysis and calculation of the transport and traffic techniques drive systems. This course aims to introduce students to the electro-driving systems, battery drives and internal combustion engines. After completion of the subject the students are able to describe mechanical, hydrodynamic, hydrostatic transmissions and driving mechanisms.* | | | | | | | | |
| **Syllabus (brief outline and summary of topics, max. 10 sentences)** | | | | | | | | |
| 1) Defining the drive systems; 2) Analysis and calculation of functions, concepts and parameters of transport and traffic techniques driving systems; 3) Electro-driving systems and battery drives;4) Criteria defining for electro-drive selection in mobile machines and vehicles driving systems; 5) The principle of operation, sub-systems and characteristics of the diesel engines; 6) Criteria defining for diesel engine selection in mobile machines and vehicles driving systems; 7) Hydrodynamic driving systems; 8) Analysis of hydrodynamic transmissions; 9) Hydrostatic driving systems; 10) Analysis of hydrostatic transmissions 11) Regulation of hydrostatic driving systems ема, 12) Analysis of lever driven mechanisms. | | | | | | | | |
| **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** | | | **60 (depending on Teaching Colloquia)** | | |
| **Practical Teaching** | | **5** | **Oral Examination** | | | **30** | | |
| **Teaching Colloquia** | | **60** | **Overall Sum** | | | **100** | | |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | | | |