|  |
| --- |
| **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** |