



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	<input checked="" type="checkbox"/> Bachelor	<input type="checkbox"/> Master's	<input type="checkbox"/> Doctoral
Type of Course	<input type="checkbox"/> Obligatory	<input checked="" type="checkbox"/> Elective	
Semester	<input type="checkbox"/> Autumn	<input checked="" type="checkbox"/> Spring	
Year of Study	III		
Number of ECTS Allocated	6		
Name of Lecturer/Lecturers	Dragoslav B. Janošević, Goran S. Petrović		
Teaching Mode	<input checked="" type="checkbox"/> Lectures	<input type="checkbox"/> Group tutorials	<input type="checkbox"/> Individual tutorials
	<input checked="" type="checkbox"/> Laboratory work	<input checked="" type="checkbox"/> Project work	<input checked="" type="checkbox"/> Seminar
	<input type="checkbox"/> Distance learning	<input type="checkbox"/> Blended learning	<input type="checkbox"/> 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 ema, 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			