

COURSE GUIDE – short form

Academic YEAR 2014 – 2015

Course name ¹	Unconventional propulsion systems and transport					Course code	MSPCR.DI.DS. 201		
Course type ²	DS	Category ³	DI	Year of study	II	Semester	3	Number of credit points	9

Faculty	Mechanical Engineering	Number of teaching and learning hours ⁴						
Field	Automotive Engineering	Total	L	T	LB	P	IS	
Specialization	Traffic safety and performance	140	28			28	84	

Pre-requisites from the curriculum ⁵	Compulsory	
	Recommended	Genesis and combating environmental pollution, current systems in the construction of road vehicles

General objective ⁶	Unconventional propulsion systems and transport is a relatively new discipline that seeks constructive and functional knowledge of the most modern and unconventional means of transport reviewing their evolution in time.
Specific objectives ⁷	Course and pursue applications of assimilation by master basic knowledge of major unconventional fuels and power systems with these types of fuel internal combustion engines, vehicles using turbine engine powered, fuel cell, electric traction, the magnetic cushion, air cushion vehicles or suspended inland transport systems, etc. These systems are analyzed and specific factors that contribute to enhancing road safety and the environment.
Course description ⁸	<p>The course includes the following major sections:</p> <ul style="list-style-type: none"> - Performance and limitations of internal combustion engines fueled unconventional, -Drive vehicles through gas turbine engines, -Propulsion heat engine piston motor through free -Fuel cells, -Electric traction vehicles, -Air cushion vehicles, -Inland suspended -Propulsion vehicles using magnetic cushion.

Assessment			Schedule ⁹	Percentage of the final grade (minimum grade) ¹⁰
Continuous assessment	Class tests along the semester			%
	Activity during tutorials/laboratory works/projects/practical work		Week 1 – week 14	20%
	Assignments		Week 1 – week 14	30%
Final assessment	Final assessment form ¹¹	Exam	Session	50%
	Examination procedures and conditions: 1. ; tasks ; working conditions ; percent of the final grade 50% 2. ; tasks ; working conditions ; percent of the final grade 50%			

Course organizer	Edward RAKOSI
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Teaching assistants	Edward RAKOSI	
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¹Course name from the curriculum

² DF – fundamental, DID – in the field, DS – specialty, DC – complementary (from the curriculum)

³ DI – imposed, DO –optional, DL – facultative (from the curriculum)

⁴ Points 3.8, 3.5, 3.6a,b,c, 3.7 from the Course guide – extended form (L-lecture, T-tutorial, LB-laboratory works, P-project, IS-individual study)

⁵ According to 4.1 – Pre-requisites - from the Course guide – extended form

⁶ According to 7.1 from the Course guide – extended form

⁷ According to 7.2 from the Course guide – extended form

⁸ Short description of the course, according to point 8 from the Course guide – extended form

⁹ For continuous assessment: weeks 1 – 14, for final assessment – colloquium: week 14, for final assessment-exam: exam period

¹⁰ A minimum grade might be imposed for some assessment stages

¹¹ Exam or colloquium