

COURSE GUIDE – short form

Academic year 2014-2015

Course name ¹	Automotive Mechatronic Equipment					Course code	MMCTA.D 210		
Course type ²	DID	Category ³	DI	Year of study	II	Semester	III	Number of credit points	7

Faculty	Mechanical Engineering	Number of teaching and learning hours ⁴						
Field	Mechatronics and Robotics	Total	L	T	LB	P	IS	
Specialization	Advanced Mechatronics	42	28	-	14	-	-	

Pre-requisites from the curriculum ⁵	Compulsory	Machine Design, Sensors and Actuators, Mechatronic Systems
	Recommended	Electrotechnics and Electrical Machines

General objective ⁶	The lecture presents a general view on the vehicles design, their main mechatronics devices.
Specific objectives ⁷	Sensors and actuators for automotive applications. Autovehicles mechatronic systems and safety devices
Course description ⁸	Autovehicles. General presentation. Basic components. Automotive mechatronic systems. Sensors and actuators in the automotive technology- design and operation. Injection systems. Braking systems- ABS. Chassis stability-ESP. Active dampers. Automotive safety systems. Automotive comfort and ergonomoy.

Assessment			Schedule ⁹	Percentage of the final grade (minimum grade) ¹⁰
Continuous assessment	Class tests along the semester			20 %
	Activity during tutorials/laboratory works/projects/practical work			20 %
	Assignments			10 %
Final assessment	Final assessment form ¹¹			50 %
	Examination procedures and conditions: 1. written test ; percent of the final grade 60% 2. practical skills ; percent of the final grade 40%			

Course organizer	Prof.eng. Flavian FARCAS ME Ph.D.	
Teaching assistants	Prof.eng. Flavian FARCAS ME Ph.D.	

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