

COURSE GUIDE – short form

Academic year 2014-2015

Course name ¹	Internal Combustion Engines					Course code	IM.315.DO, DID-1		
Course type ²	DID	Category ³	DO	Year of study	III	Semester	7	Number of credit points	5

Faculty	Mechanical Engineering	Number of teaching and learning hours ⁴						
Field	Mechanical Engineering	Total	L	T	LB	P	IS	
Specialization	Thermal Systems and Equipment	126	42		28			56

Pre-requisites from the curriculum ⁵	Compulsory	Heat Engineering , Fluid Mechanics, Machine elements
	Recommended	Mathematics, Mechanics, Strength of Materials , CAD

General objective ⁶	Internal combustion engines is a specialized technical discipline in which future engineers acquire fundamental knowledge of thermodynamics , design construction and operation of engines and engine related systems .
Specific objectives ⁷	-Presentation of the theoretical basis of engine operation and the real processes occurring in the engine. -Obtain and shape characteristics of speed, load or advanced features. -Study of the dynamics engine speeds and accelerations presentation characteristic and connected system of forces acting on the engine. -Constructive and functional aspects of motor mechanism, power plant, gas distribution systems, lubrication systems and cooling.
Course description ⁸	Course: begins with a classification engine based on the principle functionally number of times and use. Then are presented the theoretical bases of operation, and real processes occurring in the engine, will obtain and shape characteristics of speed, load or advanced features. The course continues with the study of the dynamics engine speeds and accelerations presentation characteristic and connected system of forces acting on the engine, after which are constructive and functional aspects of motor mechanism, power plant, gas distribution systems, lubrication systems and cooling.

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		weeks 1 – 14 20%
	Assignments		weeks 1 – 14 30%
Final assessment	Final assessment form ¹¹	colloquium	week 14
	Examination procedures and conditions: 1. Thematic development written test; percent of the f. grade 50% 2. Case study; oral examination percent of the final grade 50%		50%

Course organizer	Sef lucrari dr. ing. Talif Sorinel Gicu	
Teaching assistants	Sef lucrari dr. ing. Talif Sorinel Gicu	

¹Course name from the curriculum

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

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

⁴Points 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)

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

⁶According to 7.1 from the Course guide – extended form

⁷According to 7.2 from the Course guide – extended form

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

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

¹⁰A minimum grade might be imposed for some assessment stages

¹¹Exam or colloquium