

COURSE GUIDE – short form

Academic year 2017-2018

Course name ¹	Advanced Sintered Materials					Course code	6MATAEDI10		
Course type ²	DID	Category ³	DI	Year of study	2	Semester	3	Number of credit points	6

Faculty	Materials Science and Engineering	Number of teaching and learning hours ⁴					
Field	Materials Engineering	Total	L	T	LB	P	IS
Specialization	Advanced Materials and Experimental Analysis Techniques	28	14	-	14	-	116

Pre-requisites from the curriculum ⁵	Compulsory	-
	Recommended	-

General objective ⁶	The knowledge of the sintering process, of the mechanisms that lead to obtaining sintered materials with properties appropriate to the purpose.
Specific objectives ⁷	<ul style="list-style-type: none"> • Processes and mechanisms involved in obtaining advanced sintered materials. • Structural characterization of advanced sintered materials.
Course description ⁸	Thermodynamics and kinetics of the sintering process. Theories and models of densification. Evolution of microstructure. Liquid phase sintering. Aluminum sintered materials. Titanium sintered materials.

Assessment		Schedule ⁹	Percentage of the final grade (minimum grade) ¹⁰
Continuous assessment	Class tests along the semester		%
	Activity during laboratory works	Weeks 1-14	30 %
	Assignments		%
Final assessment	Final assessment form ¹¹	colloquium	70 %
	Examination procedures and conditions: 1. Subject with open questions; tasks: answers to open questions; working conditions: oral; percent of the final grade 100 %		

Course organizer	Prof. dr. eng. Romeu Chelariu
Teaching assistants	Prof. dr. eng. Romeu Chelariu

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