

COURSE GUIDE – short form

Academic year 2017 - 2018

Course name ¹	COMPUTER PROGRAMMING AND PROGRAMMING LANGUAGES (1)					Codul disciplinei		1 SM 04	
Course type ²	DF	Category ³	DI	Year of study	1	Semester	1	Number of credit points	6

Faculty	Material Science and Engineering	Number of teaching and learning hours ⁴					
Field	Materials Engineering	Total	L	T	LB	P	IS
Specialization	SM	144	28	-	42	-	74

Pre-requisites from the curriculum ⁵	Compulsory	Not the case
	Recommended	Not the case

General objective ⁶	Initiation of students in knowing of concepts, theories and basic methods for materials design using CAD techniques (enunciation, use, application) in applying the values and ethics of engineer profession, promotion of logical reasoning and practice application by knowing, programming and use of computer by exemplifying on Windows platform and a high level programming language.
Specific objectives ⁷	There are being cultivated IT abilities by simple task applications programming in engineering.
Course description ⁸	Computer structure; personal computer; serial architecture; hardware; software; operating system - Windows; basics of programming; algorithms; programming language; structured programming; Fortran: intrinsic data type; lexical atoms; expressions; intrinsic procedures; processing instructions; Fortran programs – sequences of simple instructions; execution control; tables; functions; subroutines.

Assessment		Schedule ⁹	Percentage of the final grade (minimum grade) ¹⁰
Continuous assessment	Class tests along the semester -	week	%
	Activity during tutorials (open questions, software use)	continuous	50 %
	Assignments -	week	%
Final assessment	Final assessment form ¹¹	exam	50 % (minimum 5)
	Examination procedures and conditions: 1. Subject with closed questions ; tasks answer to closed questions ; working conditions -; percent 50 %; 2. Subject with closed questions ; tasks answer to closed questions ; working conditions -; percent 50 %; 3. Writing a program ; tasks correct use of programming instructions ; working conditions written; percent 40 %;		

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Teaching assistants	Lect.Ph.D.Eng. Vasile Manole, Lect.Ph.D.Eng. Bogdan Pricop, Tech.Assist.Ph.D.Eng. Ramona Cimpoesu

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