

# COURSE GUIDE – short form

Academic year 2016-2017

Course name <sup>1</sup>	INTELLIGENT MATERIALS					Course code			
Course type <sup>2</sup>	OD	Category <sup>3</sup>		Year of study	iv	Semester	7	Number of credit points	3

Faculty	Materials Science and Engineering	Number of teaching and learning hours <sup>4</sup>					
Field	Materials engineering	Total	L	T	LB	P	IS
Specialization	Materials science	42	28		14		

Pre-requisites from the curriculum <sup>5</sup>	Compulsory	not necessary
	Recommended	Physical Metallurgy

General objective <sup>6</sup>	Understanding the science of shape memory materials properties and the technology of obtaining them.
Specific objectives <sup>7</sup>	<ul style="list-style-type: none"> <li>• Learning theoretical knowledge related to physical and chemical phenomena, based on intelligent materials proprieties.</li> <li>• Achieving the ability to research and analyze intelligent materials using a variety of research methods.</li> </ul>
Course description <sup>8</sup>	Phase transformations in shape memory alloys Characteristics and properties of shape memory alloys Obtaining shape memory alloys Applications of shape memory alloys

Assessment		Schedule <sup>9</sup>	Percentage of the final grade (minimum grade) <sup>10</sup>
Continuous assessment	Class tests along the semester		%
	Activity during tutorials/laboratory works/projects/practical work	Practical test – 1h	50%
	Assignments		%
Final assessment	Final assessment form <sup>11</sup>		50%
	Examination procedures and conditions: 1. ; tasks ; working conditions ; percent of the final grade % 2. ; tasks ; working conditions ; percent of the final grade % 3.		

Course organizer	Prof.dr. eng. Sergiu STANCIU	
Teaching assistants	Prof. dr. eng. Sergiu STANCIU	

<sup>1</sup>Course name from the curriculum

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

<sup>3</sup> DI – imposed, DO – optional, DL – facultative (from the curriculum)

<sup>4</sup> 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)

<sup>5</sup> According to 4.1 – Pre-requisites - from the Course guide – extended form

<sup>6</sup> According to 7.1 from the Course guide – extended form

<sup>7</sup> According to 7.2 from the Course guide – extended form

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

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

<sup>10</sup> A minimum grade might be imposed for some assessment stages

<sup>11</sup> Exam or colloquium