

# COURSE GUIDE – short form

Academic year 2018-2019

Course name <sup>1</sup>	<b>FUNCTIONAL LAYERS</b>					Course code	1MATAE DA02		
Course type <sup>2</sup>	DID	Category <sup>3</sup>	DO	Year of study	II	Semester	1	Number of credit points	6

Faculty	MATERIALS SCIENCE AND ENGINEERING	Number of teaching and learning hours <sup>4</sup>					
Field	INDUSTRIAL ENGINEERING	Total	L	T	LB	P	IS
Specialization	MATAE	150	14	-	14	-	122

Pre-requisites from the curriculum <sup>5</sup>	Compulsory	Material science
	Recommended	Physics

General objective <sup>6</sup>	Assimilation of techniques for obtaining and analysis of functional layers
Specific objectives <sup>7</sup>	<ul style="list-style-type: none"> <li>• The theoretical understanding of the way in which the deposition of functional material is achieved</li> <li>• Practical assimilation of the methods and means of achieving the layers deposited by thermal spraying processes</li> <li>• Theoretical and practical assimilation of methods and means for characterization of the layers deposited by thermal spraying processes</li> </ul>
Course description <sup>8</sup>	Corrosion-resistant, wear-resistant deposits

Assesment		Schedule <sup>9</sup>	Percentage in the final grade (minimum grade) <sup>10</sup>
A. Final assessment form <sup>11</sup> :	Class tests along the semester	%	-
	Home works	20%	6 <sup>th</sup> , 12 <sup>th</sup> week
	Other activities	%	-
	Examination procedures and conditions: 1. Treating a two subjects theoretic $p_1 = 35\%$ ; $p_2 = 35\%$ ; 2. Treating a subject practice $P = 30\%$ .	80% (minimum 5)	-
B. Seminar	Activity during seminar		% (minimum 5)
C. Laboratory	Activity during laboratory		40% (minimum 5)
D. Project	Activity during project		% (minimum 5)

Course organizer	Associate Professor PhD. Eng. Stefan Lucian TOMA
Teaching assistants	Associate Professor PhD.. Eng. Stefan Lucian TOMA

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

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

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<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

<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