

# COURSE GUIDE – short form

Academic year 2024-2025

Course name <sup>1</sup>	<b>SURFACE ENGINEERING</b>					Course code	TAIPM IA 109		
Course type <sup>2</sup>	DA	Category <sup>3</sup>	DI	Year of study	1	Semester	2	Number of credit points	4

Faculty	Material Science and Engineering	Number of teaching and learning hours <sup>4</sup>					
Field	Material Engineering	Total	L	T	LB	P	IS
Specialization	TAIPM	100	28	-	14	-	58

Pre-requisites from the curriculum <sup>5</sup>	Compulsory	Not applicable
	Recommended	Not applicable

General objective <sup>6</sup>	It is presented aspects about surface topography, surface characterization, surface corrosion, surface usage and method to improve the corrosion and usage resistance
Specific objectives <sup>7</sup>	Surface layers New techniques in surface engineering
Course description <sup>8</sup>	<ol style="list-style-type: none"> <li>1. Surface engineering concept</li> <li>2. Solid surface</li> <li>3. Surface layers</li> <li>4. Properties of deposited layers</li> <li>5. Treatment techniques of surface layers</li> <li>6. Emails and ceramics depositions</li> <li>7. Organic deposition layers</li> <li>8. Analysis and characterization of superficial layers</li> </ol>

Assesment			Schedule <sup>9</sup>	Percentage of the final grade (minimum grade) <sup>10</sup>
A. Final assessment form <sup>11</sup> :	Class tests along the semester	%		50% (minimum 5)
	Home works	%		
	Other activities	%		
	Examination procedures and conditions: Probe 1: working conditions oral; percent of the final grade 50%; Probe 2: working conditions oral; percent of the final grade 50%.	100% (minimum grade 5)	Exam period	
B. Seminar	Activity during seminar			% (minimum 5)
C. Laboratory	Acttivity during laboratory			50% (minimum 5)
D. Project	Activity during project			% (minimum 5)

Course organizer	Lecturer PhD. Eng. Dragoș-Cristian ACHIȚEI	
Teaching assistants	Lecturer PhD. Eng. Dragoș-Cristian ACHIȚEI	

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<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

<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