## COURSE GUIDE - short form

Academic year 2024 – 2025

Course name <sup>1</sup>	PCLP 3			Course co	ode	2.EPI.04.DF			
Course type <sup>2</sup>	DF	Category <sup>3</sup>	DI	Year of study	2	Semester	3	Number of credit points	4

Faculty	Materials Science and Engineering	Number of teaching and learning hours <sup>4</sup>			ning		
Field	Mechanical engineering		L	Т	LB	Р	IS
Specialization	Specialization Equipment for Industrial Processes		14	ı	14	ı	72

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

General objective <sup>6</sup>	<ul> <li>Mastering the matrix-working mode, specific to the Matlab application.</li> <li>Writing functions and M files in Matlab.</li> <li>Mastering the use of the main predefined functions in Matlab.</li> </ul>				
Specific objectives <sup>7</sup>	Modeling complex problems and solving them using the facilities offered by Matlab.  Learn how to create a graphical interface in Matlab.  Analysis of various toolboxes in Matlab and their use for solving practical problems.				
Course description <sup>8</sup>	<ul> <li>MATLAB programming environment, graphical interface, general commands, toolboxes. Variables, operands, operators, expressions;</li> <li>Control instructions (if, elseif, switch-case, for, while).</li> <li>Predefined functions in Matlab. Script files. Function files. Control functions. 2D and 3D graphics.</li> </ul>				

	Assessment		Schedule 9	Percentage in the final grade(minimu m grade) <sup>10</sup>
A. Final	Class tests along the semester	0 %		
assessment	Home works	0 %		
form <sup>11</sup> :	Other activities	0 %		50%
Colloquium	Examination procedures and conditions: Practical examination	100%	week 14	
B. Seminar	Activity during seminar			0%
C. Laboratory	50%			
D. Project	0%			

Course organizer	Lecturer EngD Bogdan PRICOP	
Teaching assistants	Lecturer EngD Bogdan PRICOP	

<sup>&</sup>lt;sup>1</sup>Course name from the curriculum

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

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

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

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

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

<sup>&</sup>lt;sup>10</sup>A minimum grade might be imposed for some assessment stages <sup>11</sup>Exam or colloquium