## COURSE GUIDE – short form

Academic year 2021 – 2022

Course name <sup>1</sup>	PCLP 3			Course co	ode	2ISI04DF			
Course type <sup>2</sup>	DF	Category <sup>3</sup>	DI	Year of study	2	Semester	1	Number of credit points	3

Faculty	Materials Science and Engineering	Number of teaching and learning hours <sup>4</sup>						
Field	Industrial engineering	Total	L	Т	LB	Р	IS	
Specialization	Security Engineering in Industry	75	28	-	28	-	19	

Pre-requisites from the curriculum⁵	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>	<ul> <li>Modeling complex problems and solving them using the facilities offered by Matlab.</li> <li>Learn how to create a graphical interface in Matlab.</li> <li>Analysis of various toolboxes in Matlab and their use for solving practical problems.</li> <li>The use of specific web design tools.</li> <li>To develop design and programming skills specific to interactive sites.</li> </ul>
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> <li>HTML language. Save, view, and edit an HTML document. HTML document structure. Text formatting. Tables.</li> <li>Multimedia on the web page. Image attributes. Sounds on the web page. Video sequences on the web page.</li> </ul>

	Assessment		Sche- dule <sup>9</sup>	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, Assist. Ana-Maria ROMAN	

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

 $<sup>^{2}</sup>$  DF – fundamental, DID – in the field, DS – specialty, DC – complementary (from the curriculum)  $^{3}$  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, Pproject, IS-individual study)

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

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

<sup>&</sup>lt;sup>9</sup>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>&</sup>lt;sup>11</sup>Exam or colloquium