

**COURSE GUIDE – short form**  
Academic year 2021 - 2022

Course name <sup>1</sup>	<b>Computer programming and programming languages (2)</b>					Course code	1IS110DF			
Course type <sup>2</sup>	DF	Category <sup>3</sup>	DI	Year of study	1	Semester	2	Number of credit points	6	

Faculty	Material Science and Engineering	Number of teaching and learning hours <sup>4</sup>					
Field	Industrial Engineering	Total	L	T	LB	P	IS
Specialization	Security Engineering in Industry	150	28		28		94

Pre-requisites from the curriculum <sup>5</sup>	Compulsory	
	Recommended	- Computer programming and programming languages (1)

General objective <sup>6</sup>	Knowledge and learning the concept of the mathematical statistics calculus with applications assisted by computer in the industrial engineering. These techniques allow the construction of mathematical models through empirical methods in order to optimize the technological processes in the science of materials and engineering.
Specific objectives <sup>7</sup>	Elements of the probability theory. The probability of random events. Random variables and distributions. Mathematical statistics. Quality, reliability, maintainability and availability of technological equipment through statistical methods.
Course description <sup>8</sup>	Elements of the probability theory. The probability of random events. Random variables and distributions. Mathematical statistics. Quality, reliability, maintainability and availability of technological equipment through statistical methods.

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	25%	Week 7	70%
	Home works	10%	Week 9	
	Examination procedures and conditions: Colloquium, Oral examination; Two subjects; percent of the final grade 50% per subject;	65%	Week 14	
C. Laboratory	Activity during laboratory: Weeks 1-14			30%

Course organizer	Lecturer PhD. Eng. Vasile MANOLE
Teaching assistants	Lecturer PhD. Eng. Vasile MANOLE

<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