C O U R S E G U I D E – s h o r t f o r m

Academic year 2024-2025

Course name[1]	Statistical Methods used for Industrial Security Analysis					Course code		3ISI06DS	
Course type[2]	DS	Category[3]	DI	Year of study	3	Semester	6	Number of credit points	5

Faculty	Materials Science and Engineering	Number of teaching and learning hours[4]					
Field	Industrial Engineering	Total	L	T	LB	P	IS
Specialization	Industrial Security Engineering	125	28	-	-	28	94

Pre-requisites from the curriculum[5]	Compulsory	
	Recommended	

General objective [6]	Students will be familiar with the basic principles of probability theory and their application in statistical data analysis. At the end of the course, the student must be able to design a simple statistical study, perform a descriptive analysis of the data and formulate statistical hypotheses. The student must also understand the principles underlying stochastic processes. The main statistical clustering and classification techniques will also be introduced. During the laboratory hours, the student will learn to use a specialized statistical analysis software package (SPSS) and will perform several case studies, based on different analysis methods (ANOVA, etc.)
Specific objectives[7]	Knowledge phenomena based industrial engineering, considering aspects of intellectual activity and economic factors.
Course description[8]	Experimental data interpretation, The laws of frequencies repartition, Nonlinear models, Central compositional rotating programming, Experimentation of statistic hypothesis.

Assesment			Sche-dule[9]	Percentage in the final grade (minimum grade)[10]
A. Final assessment form [11]: Exam / ~~Colloquium~~	Class tests along the semester: S5; S10	20%		70% (minimum 5)
	Home works	%		
	Other activities	%		
	Oral exam	80% (mini-mum 5)	Sesion	
B. Seminar	Activity during seminar			% (minimum 5)
C. Laboratory	Acttvity during laboratory			% (minimum 5)
D. Project	Activity during project			30% (minimum 5)

Course organizer	Lecturer PhD. Eng. Alin Marian CAZAC	
Teaching assistants	Asist PhD. Ștefana Dochița-Agop	

[1]Course name from the curriculum
[2] DF – fundamental, DID – in the field, DS – specialty, DC – complementary (from the curriculum)
[3] DI – imposed, DO –optional, DL – facultative (from the curriculum)
[4] 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)
[5] According to 4.1 – Pre-requisites - from the Course guide – extended form
[6] According to 7.1 from the Course guide – extended form
[7] According to 7.2 from the Course guide – extended form
[8] 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
[10] A minimum grade might be imposed for some assessment stages
[11] Exam or colloquium