

COURSE GUIDE – short form

Academic year 2024-2025

Course name ¹	TECHNOLOGICAL RISK					Course code	2.ISI.17.DS-2		
Course type ²	DC	Category ³	DO	Year of study	2	Semester	4	Number of credit points	4

Faculty	Material Science and Engineering	Number of teaching and learning hours ⁴					
Field	Industrial Engineering	Total	L	T	LB	P	IS
Specialization	Safety Engineering in Industry	100	14		14		72

Pre-requisites from the curriculum ⁵	Compulsory	-
	Recommended	-

General objective ⁶	The creation of an own culture in the field of safety and health at work, the development of practical sense and logical technical thinking in order to integrate the principles of safety and health in the work processes specific to certain technologies, based on a thorough theoretical training and knowledge of the legal and technical provisions
Specific objectives ⁷	The development and deepening of technical knowledge in the field of safety and health at work with the aim of preventing risks. Identifying the legal provisions in the field of occupational safety and health applicable to an economic activity/workplace and integrating them into the technological processes in a un
Course description ⁸	1. Risk management concepts: definitions, terms, generalities. 2. Analyzes of technological accidents: causal chain, determining factors, measures for prevention. 3. Technological design. Information analysis. Sources for providing design data. Scheme of operations, technological scheme, process scheme and control scheme. 4. Process control. Types of control. Security and technological risk. 5. Methods of modeling accidents/risks of possible technological accidents: 6. Analysis of the financial and social impact of technological accidents.

Assesment			Schedule ⁹	Percentage of the final grade (minimum grade) ¹⁰
A. Final assessment form ¹¹ :	Class tests along the semester	%	sesion	50% (minimum 5)
	Home works	%		
	Other activities	%		
	Examination procedures and conditions: Oral exam	100% (minimum grade 5)		
B. Seminar	Acttivity during seminar			50% (minimum 5)

Course organizer	Şef lucr.dr.ing. Mihai Adrian BERNEVIG	
Teaching assistants	Şef lucr.dr.ing. Mihai Adrian BERNEVIG	

¹Course 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