

# International University of Logistics and Transport in Wrocław

<b>Leading</b>								
<b>Item</b>	<b>Transport accident investigation procedures and techniques</b>							
<b>Module</b>	W	<b>ECTS points</b>	4	<b>Reference number of the study program</b>			L/2024/SPS/S/P - L/2024/SPS/N/P	
<b>Direction</b>		<b>Specialty</b>			<b>Academic year</b>			
LOGISTICS		Transport safety						
<b>Term</b>		VI		<b>Year of study</b>			III	
<b>Form of studies</b>		<b>Stationary</b>			<b>Part-time</b>			
<b>Form of classes</b>	Lecture	Exercises	Laboratories	Design	Lecture	Exercises	Laboratories	Design
<b>Number of hours</b>	16	16		16	12	15		12
<b>TOGETHER</b>	48			39				
<b>Objective of the course</b>	The aim of this course is to familiarize students with the methods and procedures used in transport accident investigation, including identifying the causes and consequences of incidents. Students will learn how to collect and analyze data, conduct a scene examination, and interpret research findings in the context of traffic safety and legal liability.							
<b>Minimum knowledge required from the student before starting classes</b>								
Students should possess basic knowledge of transportation and logistics, including familiarity with the types of transportation and road and rail safety regulations. They should understand basic concepts of transportation law, environmental protection, and accident liability. Additionally, they are expected to possess basic knowledge of data analysis and the ability to work with technical documentation and operational procedures.								
<b>Recommended literature to study before starting classes</b>								
D'Acunto E. 2017: Flash on English for Transport and Logistics, Wydawnictwo ELI, Kraków								
<b>SUBJECT-SPECIFIC LEARNING OUTCOMES (SLE)</b>					<b>KEU</b>	<b>EVALUATION METHODS</b>		
	<b>CODE</b>	<b>FORM</b>			<b>CODE</b>	<b>CODE</b>	<b>FORM</b>	
<b>KNOWLEDGE</b>	W01	Possesses basic knowledge of methods, tools and techniques for collecting and analysing data, as well as the principles of applying scientific achievements, including computer techniques and information systems used in logistics.			K1_W03_L_P	MO2	Written exam in the form of a closed, single-choice test	
	W02	Possesses basic knowledge of mathematics and statistics necessary to formulate and solve simple logistical problems.			K1_W05_L_P	MO2	Written exam in the form of a closed, single-choice test	
<b>SKILLS</b>	U01	Is able to correctly analyse and interpret phenomena and processes occurring in the enterprise and its environment, as well as forecast the practical effects of specific social processes and phenomena using standard scientific methods and tools appropriate for logistics.			K1_U01_L_P	MO8 MO9	Written test in the form of open-ended tasks Written test in the form of practical tasks	
	U02	Is able to apply basic mathematical tools, including probabilistic methods, to describe logistical problems and use modern computer and digital technologies to organize, plan, forecast, analyze and evaluate logistical processes, systems and projects.			K1_U04_L_P	MO8 MO9	Written test in the form of open-ended tasks Written test in the form of practical tasks	
	U03	Is able to identify problems, collect and analyze data and use knowledge to describe, analyze and evaluate processes and tasks typical of the specialty studied, as well as develop solutions to specific problems in accordance with the relevant technical, legal and organizational standards and principles, presenting them both orally and in writing in Polish and a foreign language.			K1_U07_L_P	MO8 MO9	Written test in the form of open-ended tasks Written test in the form of practical tasks	
<b>SOCIAL COMPETENCES</b>	K01	Is prepared to properly recognize and resolve professional dilemmas, acting in a professional manner and in accordance with the principles of professional ethics.			K1_K02_L_P	MO8 MO9	Written test in the form of open tasks	

<b>Subject content</b>	Lecture	Introduction to transport accident investigation, Legal and regulatory basis in transport accident investigation, Types of transport accidents and their classification, Data collection methods in accident investigation, Scene inspection techniques, Analysis of the causes and effects of transport accidents, Application of mathematics and statistics in accident investigation, Use of digital technologies and information systems in research, Documentation and reporting of research results, Simulations and reconstructions of transport accidents, Risk assessment and preventive conclusions, Practical case studies and analysis of real accidents.
	Exercises	Analysis of transport accident documentation, Exercises in collecting and verifying data from the scene of the accident, Practical inspection and measurements at the scene of the accident (simulation), Identification of accident causes and preparation of preliminary reports, Application of statistical methods to the analysis of accident data, Reconstruction of selected transport accidents based on available information, Development of preventive recommendations and final reports from accident investigations.
	Laboratories	
	Projects	Preparation of a comprehensive report on the investigation of a selected transport accident, analysis of the causes and consequences of accidents using statistical and IT tools, simulation and reconstruction of a selected transport accident along with preventive recommendations, development of emergency procedures based on case studies of actual accidents, development of an accident investigation scenario taking into account legal and safety aspects, comparative analysis of accident investigation methods used in various modes of transport, preparation of instructions for research teams on collecting and documenting accident evidence, risk assessment and proposal of preventive measures for selected types of transport accidents.

<b>Teaching methods</b>		
	<b>CODE</b>	<b>FORM</b>
	<b>MD2</b>	Informative lecture using multimedia techniques
	<b>MD10</b>	Case method (e.g. teaching scenes)
	<b>MD16</b>	Exercises - solving tasks and problems
<b>Compulsory literature</b>	<b>1</b>	Stranks J. 2016: Health and Safety at Work, Wydawnictwo Kogan Page Ltd, Londyn
<b>Additional literature</b>	<b>1</b>	Zieger S. 2025: Logistics and Power: Supply Chains from Slavery to Space, Wydawnictwo University of California Press, Kalifornia

<b>Conditions for passing the course</b>	
The course is graded as a whole (E) – with a single grade taking into account all coursework. The requirement for admission to the lecture exam (Written exam in the form of a closed, single-choice test – MO2) is passing the labs – based on: a written test in the form of practical assignments MO9 and/or open-ended assignments MO8, and passing the lab based on practical assignments performed on computers (M010 – Project Assessment).	