

Faculty of Civil Engineering

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Course	ECTS	Course description	Autumn	Spring
Introduction to Lithuania	3	The course is intended for international students who wish to gain comprehensive understanding of Lithuanian society and culture. The course is aimed to familiarise the students with the cultural background of Lithuania as well as its historical development to help them to make their exchange period more integral by an increased understanding of Lithuanian customs, culture, and contemporary issues. During the course students will learn some basic phrases in Lithuanian, will gain basic knowledge of Lithuania's societal and cultural background from thematically various perspectives.	yes	yes
Business English	3	The course is aimed at familiarising students with the use of English in business communication. The course deals with various areas of business activities: communication in business English in various real situations, writing and filling in business documents, business communication and presentations, business meetings and trips also formation, systemizing and deepening of business terminology and grammar. The course is taught during the fifth semester of studies.	yes	yes
Information Technologies	3	The course is aimed at strengthening knowledge of information technologies, of basic PC hardware and software, to develop ability to apply computer methods to solve engineering methods, to design, create and manage databases, to use information systems and networks for data mining, processing and management. The course is taught during the first semester.	yes	yes
Applied Research	3	The course is aimed at familiarising the students with fundamental methodologies of applied research. Skills necessary to complete term papers, independent work, and the Final project and/or publications will be developed throughout the lectures. The subject is about the application of research methods, planning the applied research process, organization, and completion specifics. Throughout the course literature is studied, topics formulated, problems, relevance, objective, and tasks are described, data collected, analysed, and conclusion completed.	yes	yes

Project Management	6	This subject will equip the students with traditional and advanced techniques necessary to manage projects in organisation and business context. It will introduce students to the key management processes. Topics covered include construction project planning, analysis and monitoring, project delivery methods, strategic project management, project risk management, role of the project manager regarding human aspects of project management, including team skills and leadership, stakeholder analysis, project value management, project risk and uncertainty management.	yes	yes
Fundamentals of Business	6	The subject is designed for introducing students to business and entrepreneurship systems, business development, globalization factors, which affect business. The subject content is based on the analysis of conventional and unconventional business organization forms, analysis of business development possibilities, ability to find out the main principles and functions of enterprise performance and use them in practice.	yes	yes
Sustainable Environment and Human Safety	3	The course is designed for the students to understand the structure of civil and labor safety systems, its elements, control and the influence of human factors. During the studies of the course the students review the fundamentals of civil protection and rescue systems, ways for protection of humans, their property and means in the case of extreme situations, get introduced to the principles of employees' safety and healthy work, the main ergonomic requirements, the impact of hazardous factors and the ways of their elimination or reduction.	yes	yes
Sustainable Development	3	The course is designed to understand the concept of sustainable development, sustainable development policy, and its implementation. While studying the subject, students review the principles and significance of sustainable development, national responsibility, implementation of the principles of sustainable development and obstacles. The economic, ecological / environmental, social / cultural environments are analysed, and the transport sector is singled out in the context of sustainable development.	yes	yes
Building Engineering Systems	6	The course analyses the heating, cooling and air conditioning, cold and hot water supply and wastewater systems in buildings: the principal schemes, used equipment, its functioning. The module teaches how to design simple heating, water supply and wastewater systems.	yes	yes
Engineering and Computer Graphics	6	The course presents the basics of construction drawing, detail and product design rules, and their application in blueprints; students are taught to analyse construction blueprints, apply valid standards in construction blueprints, and draft construction blueprints based on design rules; and knowledge is imparted about the main drawing, design, and editing commands and the application of the AutoCAD system in the preparation of graphic documents (blueprints). During practical tasks, spatial and logical thinking is cultivated, the ability to draft and read various blueprints is developed, and using drawing tools and means is taught.	yes	no

Applied Mechanics	6	The course is aimed at familiarising the students with the basics of applied mechanics, the main concepts of statics, axioms, and links. Throughout the activities an understanding of flat systems of intersecting forces is developed, and the equilibrium condition and equations are analysed. A reduction of a flat system of forces and force system equilibrium are analysed. Basic concepts of material strength and the stress operating in cut sections are introduced. Tension and compression rod deformations, material tension and compression trial results are analysed. The concepts of warping, stretching, cutting, and splitting deformations are made clear. Types of building constructions, connections, and supports are examined. Structure calculation schemes are analysed.	yes	no
Building Information modelling	6	The course is aimed at familiarising the students with the possibilities of application of computer-aided design software "Revit" in preparing the construction schemes. The course establishes the skills of the design of buildings, their sections, facades, units, forms the specific knowledge on the formation of the measurement modular system.	yes	no
Building Materials	3,6	The course is aimed at providing knowledge on the raw materials of building materials and their use to produce building materials. During the course the students are familiarised with the production technologies of the main building materials and properties of the obtained materials according to the European Union (EU) technical requirements applicable to building materials.	yes	yes
Building Architecture and Structures	6	The subject is aimed at familiarising the students with the classification of buildings, applicable requirements, normative construction technical documents; The subject programme analyses the structural systems of low-rise and multi-storey buildings; the partition structures are analysed in terms of thermal technique; structural solutions of walls, overlays, floor, partitions, roofs, windows and doors as well as stairs; discusses the types and constructions of wooden buildings; describes the design stage and composite project parts; teaches on the preparation of constructional part of building designs.	no	yes
Sales Management	6	The subject is designed to introduce students to marketing components, teach them to analyse situations which affect company performance, having studied marketing mix elements and having done market research, be able to write a marketing plan.	yes	yes
Fundamentals of Accounting	3	The subject is designed to introduce students to financial accounting and audit, teaching to account company production activities and financial indicators of company performance and present them to internal and external users.	yes	yes

Quality Management	3	The subject is designed for providing systematic and practical information about advanced management principles used in the world as well as in Lithuanian companies, highlighting the role and objectives of quality management when aiming at competitive performance in globalization process; providing theoretical knowledge and practical skills to solve quality problems via projects, quality management system implementation, planning and realising quality improvement actions.	yes	yes
Engineering and Computer Graphics	3	The course is aimed at familiarising the students with the basics of construction drawing, detail and product design rules, and their application in blueprints; students are taught to analyze construction blueprints, apply valid standards in construction blueprints, and draft construction blueprints based on design rules; and knowledge is imparted about the main drawing, design, and editing commands and the application of the AutoCAD system in the preparation of graphic documents (blueprints). During practical tasks, spatial and logical thinking is cultivated, the ability to draft and read various blueprints is developed, and using drawing tools and means is taught.	yes	no
Buildings Maintenance	3	The course is aimed at familiarising the students with the maintenance of buildings. During the course, the students are familiarised with the requirements and normative documents of the maintenance of buildings, the methodologies of the evaluation of the condition of building structures, taught on the evaluation of buildings and planning of the resources, analysis of the periodicity of building repairs, calculation of the payoff of the reconstructed partition constructions. The concepts of the low-energy and zero-energy house and the importance of the generation of energy from the renewable energy sources are analysed.	yes	yes
Geodesy and Practice	6	The course is aimed at providing students with the fundamental information on geodesy, at teaching on how to perform measurement and marking works in the locality by using modern geodesy devices, to control the quality of construction works and compliance with the project.	no	yes
Transport System	6	The course unit is aimed at analyzing the main constituent parts of the transport system, technical infrastructure of the transportation, natural and urban transport environment, traffic regulation and management, to analyze development tendencies of the transport system, interoperability of different transport modes, their coordination, transport policy, to make an overview of the Lithuanian transport system.	yes	yes
Freight and Passenger Transportation	6	The subject is designed for mastering the organization of cargo passenger transportation by road, railway, waterway (sea and inland) transport. Analysing cargo qualities, their classification, grouping as consignment, packaging, marking, fixing, analysing road network, and designing routes. Calculating technical – exploitation indicators and using them for traffic timetables.	yes	yes

Applied Software in Business	6	The subject is designed for providing theoretical and practical knowledge about customer service, storage, transportation and other information systems, familiarizing with the most popular computer programs in logistics.	yes	yes
Transport Economics	6	The subject is designed for providing systematized knowledge about economics of different transport modes and its peculiarities developing logical thinking, teaching to analyse economic processes in transport sector, identify the effects of different external and internal factors on transport company performance, evaluate transport company performance results.	yes	yes
Transport Management and Business Organization	6	The subject is designed for introducing students to establishment peculiarities of transport companies with different transport modes, fundamentals of running them, organizing and planning performance, influence of innovations on launching new services, calculating and analysing transport company operation indicators.	yes	yes
Logistics	6	The subject is designed for familiarizing with logistics, its structural parts, teaching to analyse situations which influence transport company performance, teaching to apply business logistics principles when making decisions in transport operations, understand logistics chain.	yes	yes
The Basics of Freight Forwarding	3	The subject is designed for analysing organizational and legal basics of forwarding company performance; learning to work out the documents necessary for cargo forwarding, familiarizing with customs procedures, key points and functions of insurance policy.	yes	yes
Green Logistics	3	The subject is designed for familiarizing with green logistics, its peculiarities, teaching to analyse green logistics management peculiarities and to use in transport and logistics company performance.	yes	yes
EU Policy	3	The course focuses on the EU transport policy aims and strategy for every means of transport; introduces the EU legal system fundamentals; analyzes collaboration of international organizations with the EU states and their influence on creating the common road network system. The course is completed with a student's individual work (assignment). Upon completion of the course, students will be able to analyze transport development tendencies considering the EU transport policy aims; will be aware of the EU transport policy provisions, outlined in the "White Book"; analyze logistics processes considering the LR national transport program, prepared according to the EU transport policy aims and strategy	yes	yes
Warehouses and Terminals	6	The course aims at familiarizing students with the purpose of warehouse and terminals, their meaning in logistics, processes taking place in warehouses and terminals. Upon completion of the course studies, students will know the purpose and classification of warehouses and terminals; will know how to prepare warehousing system and the terminal plan; will be able to organize processes taking place in warehouses and terminals. The course is completed with examination.	yes	yes

Freight Transportation Organization and Management	6	The subject is intended to provide students with structured knowledge about cargo transportation services provided on the international and local market, to familiarize them with the principles of planning and organization of local and international routes, the multimodal transport cargo transportation process, the rules of interaction of road, railway, water and air transport systems, international transport corridors, multimodal transport infrastructure and multimodal transport infrastructure.	yes	yes
Regulation of Transport and Customs Activities	6	The subject is intended to introduce students with the basics of law, principles of law, different branches of law: constitutional, civil, contract, administrative, criminal and intellectual property law. The subject is also designed to introduce students with the legal regulation of transport and customs activities, international conventions, EU directives, EU regulations, national legislation regulating all modes of transport: road, rail, sea, inland waterways and air transport.	yes	yes
Warehouse Operations Management	3	The subject is designed to plan, organize, control warehouse processes, ensuring their quality, evaluate the management of logistic flows, movement of material, information and financial flows, management of storage functions. Know the peculiarities of logistics process management; analyze and evaluate warehouse management processes.	yes	yes
Transport Geography	3	The course aims at familiarizing students with transport geography research object and methods; analyzing geographical factors which influence transport operations; reviewing transport systems and their development tendencies in other world countries and regions; learning about the importance of separate transport branches on freight and passenger transportation; compatibility of different means of transport; analyzing the geographical location of the main transport intersections, complexes and highways and getting introduced to international transport routes. The course is taught in the third semester.	yes	yes