



## International Programme

List of English taught courses offered to Erasmus+ programme and international exchange students

## Logistics Technologies

Master degree level

Summer 2023



## Logistics Technologies

Course code	Course title	Number of ECTS credits
S_N_TCL	Technology of City Logistics	6
S_N_DOL	Transport Logistics	6



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**Technology of City Logistics (Code: S\_N\_TCL) | Number of credits: 6**

***Course objectives***

The aim of the course is to acquaint students with the nature and solution of logistics problems of cities in different concepts of partial solutions to complex approach. They become familiar with the classic concept of city logistics solutions as flows of goods and other materials to the centers of large cities, widespread concept involving all relevant components of transport in the whole agglomeration, the issue of freight and public transport, including its integration as an important part of city logistics and related logistics and environmental aspect. Graduates will be able to identify strengths and weaknesses in transport in towns and cities, can solve the task scheduling and optimization of transport and traffic flows in cities. They will be able to define and describe the properties of both passenger and freight transport, environment and transport technology, able to define the basic parameters of a comprehensive solution of this particular issue.

***Topics***

1. The issues of City Logistics. 2. Road transport of the world cities.
3. Transport as a system. 4. System approach to urban transport.
5. Definition of transport services.
6. Modeling the operation in the transport sector.
7. Forecasting and modeling the transport needs.
8. Creating the transport process using the PTV VISION.
9. Logistics of supplying the city by freight transport.
10. Technology of operating the city by freight transport.
11. Data collection and analysis of permeability.
12. Analysis and modeling the population movements.
13. Analysis of connectivity and appropriateness of cartography methods.



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**Transport Logistics (Code: S N DOL) | Number of credits: 6**

***Course objectives***

The aim of the course is to acquaint students with problems of transport logistics and its relationship to marketing, to apprise them with the different modes of transport, a combination of different modes of transport and other transport options. After successful completion of the course, students can describe basic concepts and approaches used in logistics, describe problems associated with transport costs, performance measure in the transportation, international aspects of transport, the main activities in the field of transportation for shippers and carriers, classify traffic management and identify key technologies and the importance of information.

***Topics***

1. Introduction to transport logistics
2. Legislation in transport, European Transport policy, Transport policy in Czech Republic
3. Characteristics of carriers and transport services
4. Transport infrastructure in the Czech Republic
5. Transport infrastructure in Europe
6. The provider of transportation services
7. Intermodal transport systems
8. Management of Transport, decision-making of the mode of transport
9. Road transport technologies
10. Railway transport technologies
11. Air transport and water transport technologies
12. Logistics centers and their connection to transport systems
13. Transport Logistics and Environment