

BASIC INFORMATION:

Organisational Unit	FACULTY OF TRANSPORT AND TRAFFIC ENGINEERING	
Chair	Chair for motor vehicles	
Course/modul		
Code	2.11.14.013.	Vehicle operation and maintenance
ETCS credits	4	

COURSE TYPE:

Functional Area	Specialist
Level of Abstraction	Middle
Course Type - Obligation	Mandatory

COURSE REGISTRATION:

Scientific Field	2.	Technical Sciences
Scientific Area	2.11.	Mechanical Engineering
Narrow Scientific Field	2.11.14.	Engines and Motor Vehicles

COURSE DESCRIPTION:

Educational goals	Acquiring basic engineering knowledge in the field of exploitation and maintenance of vehicles.
Competences/ educational outcomes:	Ability to work independently and as a team and manage available resources during vehicle operation and maintenance.
Course content	Basics of vehicle operation and maintenance. Determination of vehicle exploitation conditions. Operational and technical characteristics of the vehicle. Vehicle selection based on: multi-criteria analysis, experimental technical characteristics, safety, needs and traffic conditions. The life cycle and lifetime of the vehicle. Vehicle performance and vehicle condition. The modern way of vehicle maintenance as well as the application of preventive and corrective maintenance technology. Basics of the fleet maintenance system and maintenance facilities. Arrangement of the workplace, personnel, equipment, tools and devices for the needs of motor vehicle maintenance. Information systems in the exploitation and maintenance of vehicles. Transport processes, maintenance and fleet structure with the aim of functionality, optimization and economy.

COURSE METRICS:

	Teaching activities (hours)	Individual work	TOTAL
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ETCS	Contact lessons		Exercises and trainings	Seminar and stud. papers	Pedagogical workshops	Profess. practice	Individual. and group learning	Source research	Hours of work
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4	16	8	36			18	70	8	120

ACCESS CONDITION

None

COURSE METHODOLOGY

Lectures, auditory exercises and consultations.

TEACHING LANGUAGES

English

STUDENT WORK EVALUATION

No.	Type of Evaluation	Partial/ Final	Elective/ Mandatory	Percentage of participation
01	Participation in Lecture Interactions and Exercise Activity		Mandatory	20 %
03	Seminary work		Mandatory	20 %
04	Exam activities – final test		Mandatory	60 %

LITERATURE

No.	Author	Publication Title	Publisher	Edition Year
1.	A. Bonnic; D. Newbold	A Practical Approach to Motor Vehicle Engineering and Maintenance	Butterworth-Heinemann	2011
2.				