

**BASIC INFORMATION:**

Organisational Unit	FACULTY OF TRANSPORT AND TRAFFIC ENGINEERING	
Chair	Chair for motor vehicles	
Course/modul		
Code	2.12.07.015.	<b>Intelligent Transportation Systems &amp; Logistic</b>
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	2.12.	Traffic Engineering
Narrow Scientific Field	2.12.07.	Intelligent Transportation Systems & Logistic

**COURSE DESCRIPTION:**

Educational goals	Acquiring knowledge that enables the design and evaluation of traffic and transport management systems with the help of intelligent transport systems.
Competences/ educational outcomes:	The ability to manage traffic, transport and logistics processes with the application of intelligent transport systems.
Course content	Introduction. The importance and role of ITS in traffic and transport. Construction of ITS. ITS life cycle. ITS architecture. Scientific and technological components of ITS. Theory of the Cybernetics system. Modeling of complex systems. Concept and types of leadership. Information technologies in traffic and transport. Transport information systems - TIS, Principle of operation of TIS. GIS geographic information system. ITS infrastructure. GSM, SMS, GPRS, Global navigation systems (GPS, GLONASS, GALILEO). Area of ITS services. Informing passengers. Pre-travel information. ITS travel information services. Route guide and navigation services. ITS traffic management services. Application of ITS on roads. Interchangeable traffic signals. ITS in the function of transport terminals. EDI electronic information exchange. National security and protection.

**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	24			18	64	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.	S. Mandzuka	INTELLIGENT TRANSPORT SYSTEMS	Faculty of Transport and Traffic Sciences, University of Zagreb	2015
2.				
3.				