

### DESCRIPTION OF A STUDY COURSE – SYLLABUS

<b>Title of a course</b>	<b>Information Systems in Road/ Railroad Transport</b>				
<b>Head of course</b>	<b>Marina Rauker Koch, Lecturer</b>				
<b>Study programme</b>	<b>Professional undergraduate study Road/ Railroad Transport</b>				
<b>Status of a course</b>	Obligatory				
<b>Year of study</b>	3.	<b>Semester</b>	V	<b>ECTS credits</b>	3
<b>Teaching plan (L + E + S+ Pr)</b>	1+0+2+0				
<b>Goals of a course</b>					
Introduce students to the concept, content, role, use and selection of information systems in transport systems, as well as the basics of database design and operation.					
<b>Conditions for enrolling course</b>					
No conditions					
<b>Learning outcomes on a level of a study programme which includes course</b>					
Outcome 11: Select appropriate information technology and software to address specific road transport problems					
Outcome 14: Independently present professional content on oral, written and graphical basis using the usual tools in Croatian and/or foreign language.					
Outcome 15: Participate in teamwork in solving complex road transport tasks.					
<b>Expected learning outcomes on a level of a course</b>					
<ol style="list-style-type: none"> <li>1. Define an information system and its features</li> <li>2. Interpret methods and stages of information systems development.</li> <li>3. Assess the benefits of using information systems in the transport system.</li> <li>4. Select and apply the available e-solution to specific problems in the transport system.</li> <li>5. Apply the selected tool to create a simple database</li> </ol>					
<b>Content of a course</b>					
Notion of information systems in road transport and their features. Systematization of information systems components in road transport: assembly equipment and operation systems, communication equipment, developmental program tools, object technology, Internet and relation data bases. Designing and development of information systems. Computer supported methods of information systems development. Business reengineering and supply chains management as basic methods of development of advanced information systems in road transport. Types of information systems in road transport. Information – booking systems in road transport. Systems for monitoring and management of flow of goods and vehicles in road transport (global systems for locating of vehicles by satellite, vehicles control – steering systems, signalling devices systems, robot systems). Computer simulations and road transport management.					
<b>Teaching modes</b>	<input checked="" type="checkbox"/> lectures <input type="checkbox"/> auditory exercises <input checked="" type="checkbox"/> seminars and workshops <input type="checkbox"/> distance learning <input type="checkbox"/> field classes		<input checked="" type="checkbox"/> individual assignments <input type="checkbox"/> multimedia and network <input type="checkbox"/> laboratory <input type="checkbox"/> supervisor's work <input type="checkbox"/> other _____		
<b>Comments</b>					
<b>Students' obligations</b>					
<b>Grading, evaluation and monitoring of students' work continuously during lectures and exams</b>					

Grading is based upon evaluation of course's learning outcomes' adoption. Grading is performed continuously during lectures and/or during exam, in compliance with the provisions of Regulation on the assessment of students.

**Continuous check-up:**

Outcomes	Written exam	Practical assignments	Presentation of results	Threshold	Max
Outcome 1	20			10	20
Outcome 2	10			5	10
Outcome 3		15	5	10	20
Outcome 4		15	5	10	20
Outcome 5		30		15	30
Percentage of ECTS	1	1,75	0,25		
Total	30	60	10	50 %	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

**Exam term:**

Outcomes	Written exam	Oral exam	Max
Outcome 1	20		20
Outcome 2		10	10
Outcome 3		20	20
Outcome 4		20	20
Outcome 5	30		30
Percentage of ECTS	1,5	1,5	
Total	50	50	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

**Grading:**

A student has passed the exam if he has acquired at least 50% of anticipated credits of a specific learning outcome.

If a student has passed learning outcomes of all courses, the accomplished credits (percentages) of all passed learning outcomes are being added, while the final grade is defined upon following table:

Range of credits (percentages)	Numerical grade	ECTS grade
90,00 – 100,00	Excellent (5)	A
75,00 – 89,99	Very good (4)	B
60,00 – 74,99	Good (3)	C
50,00 – 59,99	Sufficient (2)	D
0,00 – 49,99	Insufficient (1)	F

**Obligatory literature**

1. Pavlić, M.: Informacijski sustavi, Odjel za informatiku Sveučilišta u Rijeci, 2009;

**Additional literature**

1. Bošnjak, I.: Intelligentni transportni sustavi - ITS 1, Zagreb : Fakultet prometnih znanosti Sveučilišta, 2006.



