Study program: Road Traffic Engineering

Course title: Basics of Informatics

Professor/assistant: Slavica Đ. Šarenac

Type of course: Compulsory

ECTS credits: 6

Prerequisites: none

## Aims of the course:

Acquiring computer skills using Microsoft Office Package (Word, Excel, PowerPoint), and the Internet. The use of computer programs and systems as a support "tool" in various fields of mechanical engineering.

## Learning outcomes:

After passing the course, the student will be able to use programs for different purposes (word and numerical data processing, making presentations), employ modern information and communication technologies and be competent to monitor other areas in which computer programs are used.

## Syllabus:

Theoretical part:

- 1. The concept of IT and its development, its place in the given historical period.
- 2. The basics of hardware, its structure and principles of operation, functions of components and their impact on computer performance and operating system.
- The concept and basic functions of the operating system, system and application software. The MS Office applications: the basic concept of integrated applications. Windows operating system. Word processing facilities, MS Word. Spreadsheet programs, MS Excel. Presentation programs, MS Power Point.
- 4. The concept and basics of network technologies, the basics of the Internet (search, addressing, principles of functioning, networking benefits, Internet service providers, Internet protocols, computer viruses, antiviruses and data protection).

Practical part: Computer exercises

## Literature:

- 1. Oficijelni Microsoft MOC kursevi za Word, Excel i Power Point, CET biblioteka edicija *Korak po korak*
- 2. Simić D., Osnove informaciono komunikacionih tehnologija, FON, Beograd, 2011.
- 3. James F. Kurose, Keith W. Ross, Umrežavanje računara: od vrha ka dnu sa Internetom u fokusu, CET, Beograd, 2009.

Total number of active classes: 60		Lectures: 30		Practical classes: 30	
Teaching methods: Lectures and laboratory exercises.					
Grading system (maximum 100 points)					
grading scale from 5 to 10: below 51 points – student fails the exam, grade 6 from 51- 60 points, grade 7 from 61-70					
points, grade 8 from 71-80 points, grade 9 from 81-90 points, grade 10 from 91- 100 points.					
Pre-exam obligations:	Poi	nts:	Final exam:		<b>Points:</b>
Activity during theoretical lectures	max	x 5	Written e	xam	50
Practical training	max	x 5			
Written test(s)	max	x 20			
Term papers	max	x 20			
Minimum requirement for the final	30				
exam					