Name of the course: Human Factors in Traffic Environment	Total credits: 0+2+0=2
IPM-18AUTPHFTG	
Type: Obligatory	
Total hours per semester: practice: 26 Other: projects in teamwork	
Type of testing: practice grade Other: report	
Semester: 1st	
Description	

The course focuses on interactions between the human, the environment and the vehicle. Human Perception and Cognition.

Human-Machine interaction. Customization of vehicle for the user.

Literature

Compulsory

- Rothengatter, T. & Huguenin, D. (eds.) (2004). *Traffic and Transport Psychology. Theory and Application*. Oxford: Elsevier.
- Cacciabue, P. C. (2007). Modeling driver behaviour in automotive environments: Critical issues in driver interactions with intelligent transport systems. Springer.

Recommended

• Anderson, J.R. (2010). *Cognitive Psychology and Its Implications*. New York, NY: Worth Publishers.

Competencies

Knowledge

• Knowledge of the principles of Human Factors, such as understanding human vision, perception, memory and situation awareness. Developing of complex knowledge in human factors aspects of decision making, human error and its application in human-computer interaction.

Competencies

- Understanding the main principles of human perception and cognition, such as reaction time. General knowledge of human factors such as controlling and problem solving.
- Ability to design effective communication between human and machine.

Attitude

- During the course developing getting and critical feedback and self-assessment.
- Commitment to lifelong learning and facilitating deep understanding of human behavior.
- Ability to create problems between human and machine, to evaluate abstract and functional level, and to invent sufficient solutions.

Autonomy and responsibility

• Takes responsibility for his/her work and decisions during actions and takes responsibility for other students' work.