Course Unit Descriptor

Study Programme: Traffic Engineering		
Course Unit Title: Sociological Aspects of Technical Development		
Course Unit Code: E251		
Name of Lecturer(s): Sonja Pejić, Ana Nešić		
Type and Level of Studies: Bachelor level		
Course Status (compulsory/elective): compulsory		
Semester (winter/summer): Winter		
Language of instruction: English		
Mode of course unit delivery (face-to-face/distance learning): Face-to-face		
Number of ECTS Allocated: 3		
Prerequisites: None		
Course Aims: Enabling engineers to understand social importance and role of technical sciences in the society development, positive and negative implications of technical sciences to the development of society and a person, as well as their own social importance and responsibility in the creation of humane society		
Learning Outcomes: Acquisition of social knowledge on features, sources, social functions of technology and creators of technical knowledge; knowledge on the impact of the nature of social systems on technical development and the impact of technology on the development of a society; knowledge on the impact of technology on processes and changes in modern society: globalization, changes in the work content and forms of work organization, changes in communication, culture, education, democracy, way of life and thinking, knowledge on the negative aspects of technological development, nature destruction, work alienation, creation of risky society		
Syllabus: - Technical knowledge: features and social functions of technology, sources of technical knowledge, creators of technical knowledge, dissemination of technical knowledge, scientific-technical potential, science and technology relationship. Relationship between technology and society: the impact of society on technical development and the impact of technical sciences on the development of society. Industrial and information society. The impact of technology on life, awareness and culture. Technology and globalization: causes and dimensions of globalization, technological gap, brain drain. Technology and work organization: flexible production, network organizations, knowledge economy, electronic economy. Technical sciences and work: reduction of working hours, change of work content, decline of the work importance. Technology and alienation at work: the impact of technology, forms of alienation, humanization of labour. Mass media and communications: global television, the impact of television on society, media theories, mobile telephony and the Internet, the impact of the Internet on society, media imperialism, mass culture, cyber criminal. Technology and education: education and new communication technologies, education and technological gap, virtual universities, intelligence and educational success. Technology and democracy: global media and liberal democracy, media and virtual reality, resistance and alternatives to global media. Technology and ecological crisis: global warming, genetically modified food, technical risks, technical society as risky. Technical intelligence: social status and impact, engineering ethics.		
Required Reading: Relevant literature in English TBD		
Weekly Contact Hours:	**Lectures:**	**Practical work:**

Teaching Methods: The problem is presented in lectures, and then a discussion is opened in which students may ask questions, give objections and contribute to the presented matter.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	**Final exam**	points
Test	10	Oral part of the exam	70
Test	10		
Test	10		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			