



## Subject card

Subject name and code	Information Technology, PG_00044509						
Field of study	Transport						
Date of commencement of studies	October 2020	Academic year of realisation of subject			2020/2021		
Education level	first-cycle studies	Subject group			Obligatory subject group in the field of study Subject group related to scientific research in the field of study		
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			Polish		
Semester of study	1	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Katedra Wytrzymałości Materiałów -> Faculty of Civil and Environmental Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Marek Jasina					
	Teachers	dr inż. Marek Jasina dr inż. Roksana Licow					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	15.0	0.0	0.0	30
	E-learning hours included: 0.0 Address on the e-learning platform: <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=7295">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=7295</a> Adresy na platformie eNauczanie:						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM		
	Number of study hours	30	5.0	15.0	50		
Subject objectives	Practical aspects bases of information technology. Word processing. Calculation sheets, Data bases. Managing and presentation graphics. Information network services. Obtaining and processing of information. Information society. Technologies of access to information. Development of infrastructure of information society. Safety in the net. Bases of computers. Representation of data. Precision of calculations. Operating systems. Algorithms and nets of operations. Translators and compilers. Programming languages.						
Learning outcomes	Course outcome	Subject outcome	Method of verification				
	[K6_W04] has basic knowledge of informatics, electronics, telecommunications, automation and control, information technologies, computer graphics, geodesy and satellite navigation which is useful for understanding how it can be applied in transport	Coming to know concepts of information technology: <ul style="list-style-type: none"><li>• social transformations caused by technological progress;</li><li>• technologies of access to information.</li></ul>	[SW1] Assessment of factual knowledge				
	[K6_U01] able to use technical documentation and literature, databases and other sources of transport related information; able to interpret information, make logical links and formulate opinions and conclusions based on the above	Coming to know concepts of information technology: <ul style="list-style-type: none"><li>• development of infrastructure;</li><li>• safety in the net;</li><li>• programming.</li></ul>	[SU1] Assessment of task fulfilment				

Subject contents	<p>Practical Aspects bases of information technology. Word processing. Calculation sheets, Data bases. Managing and presentation graphics. Information network services. Obtaining and processing of information. Information society. Technologies of access to information. Development of infrastructure of information society. Safety in the net. Bases of computers. Representation of data. Precision of calculations. Operating systems. Algorithms and nets of operations. Translators and compilers. Programming languages.</p> <p>Bases of programming using MATLAB (environment and toolboxes, basic and control instructions, 2D and 3D graphics, task interpretation, programming, evaluation of results).</p>		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	lab. 1 - database	0.0%	20.0%
	lab. 3 – Internet note – work in team	0.0%	20.0%
	lab. 2 – paper – work in team	0.0%	20.0%
	lecture test	0.0%	20.0%
	lab. 4 – individual presentation	0.0%	20.0%
Recommended reading	Basic literature	<ol style="list-style-type: none"> <li>1. Papińska-Kacperek J. (red): Społeczeństwo informacyjne. PWN, Warszawa 2008.</li> <li>2. Jankowski R., Lubowiecka I., Witkowski W.: Podstawy programowania w języku MATLAB. CURE, Gdańsk 2003.</li> <li>3. MATLAB-The Language of Technical Computing. Users manual.</li> </ol>	
	Supplementary literature	<ol style="list-style-type: none"> <li>1. Zalewski A., Cegiłka R.: Matlab - obliczenia numeryczne i ich zastosowania. Wydawnictwo Nakom, Poznań 1997.</li> </ol>	
	eResources addresses		
Example issues/ example questions/ tasks being completed	<p>Create a database - Access.</p> <p>Preparation of a presentation on a given topic.</p>		
Work placement	Not applicable		