



Subject card

Subject name and code	Interactive visualisation, PG_00067411						
Field of study	Data Engineering						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2028/2029		
Education level	first-cycle studies		Subject group		Optional subject group 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	4		Language of instruction		English		
Semester of study	7		ECTS credits		3.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Informatics in Management -> Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Igor Garnik				
	Teachers		dr inż. Igor Garnik				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	30.0	0.0	0.0	30
	E-learning hours included: 0.0						
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		3.0		42.0	75
Subject objectives	The aim of the course is to acquire the skills needed to construct interactive visual communication in the visual business communication with the help of IT tools and solutions.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_W03] identifies veracious sources of information relevant to the analyzed issues		The student knows where to obtain reliable information, and when creating presentations provides the source of its origin.		[SW2] Assessment of knowledge contained in presentation		
	[K6_W07] analyzes business processes in an advanced way in the technical, legal, economic, financial and social context		The student has knowledge of advanced methods of analysis and visualization of business information.		[SW1] Assessment of factual knowledge		
	[K6_U02] prepares and presents convincingly professional presentations of the results of undertaken activities, with their advanced interpretation		Has the ability to use appropriately selected methods and IT tools to present the results of his/her activities.		[SU5] Assessment of ability to present the results of task [SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment		
Subject contents	<ul style="list-style-type: none">Basics of digital processing of audiovisual materials.Visualization in the diagnosis, evaluation and analysis of economic phenomena.Applications of computer graphics in information visualization.Dynamic data presentation in selected applications.Advanced visualization techniques in intraorganizational communication.						
Prerequisites and co-requisites	Completion of the course: Visualization of economic data						
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	2 individual projects		60.0%		50.0%		
	Team project		60.0%		50.0%		

Recommended reading	Basic literature	<ul style="list-style-type: none"> • Murray S., Interactive Data Visualization for the Web, 2nd Edition. O'Reilly Media. 2017 • Bergström, B., Essentials of visual communication. Laurence King Pub. 2008 • D. L. Adamy, Preparing and Delivering Effective Technical Presentations, Artech House Publishers, Boston - London, 2001. • S. Bienvenu, The Presentation Skills Workshop, Amacom, New York, 2000. • J. Kupsch, P. R. Graves, Here's How Create High-Impact Business Presentations, NTC/Contemporary Publishing Co., 1998. • Rosenfeld L., Morville P.: Information Architecture for the World Wide Web: Designing Large-Scale Web Sites 3rd Edition, O'Reilly Media, 2007.
	Supplementary literature	Austin, T., & Doust, R. (2007). New Media in Graphic Design. Harry N. Abrams, Inc
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	- creating an audio presentation, - visualization of a selected project concerning data analysis, - interactive audiovisual presentation of a selected topic within the scope of the field of study.	
Work placement	Not applicable	

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