GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Interactive visualisation, PG_00045377
Field of study	Data Engineering

Date of commencement of studies	October 2023	Academic year of realisation of subject	2026/2027
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	Polish
Semester of study	7	ECTS credits	4.0
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	2.0	68.0	100

Subject objectives	The aim of the course is to acquire the skills needed to construct interactive audiovisual communication in business communication using IT tools and solutions.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K6_U13] Is able to prepare, independently and in a team, studies and analyses appropriate for the field of data engineering.	Student has the ability to use various methods and tools for interactive information visualization.	[SU1] Assessment of task fulfilment
	[K6_K04] takes responsibility for jointly performed tasks.	Student understands the need of teamwork in developing solutions for information visualization.	[SK1] Assessment of group work skills
	[K6_W08] Knows the models and structure of the data mining process and their multidimensional analysis and can assess the results of such analyses	The student has an extended knowledge of interactive visualization methods of information visualization and their use in data analysis.	[SW1] Assessment of factual knowledge

Subject contents	Basics of digital processing of audiovisual materials. Visualization in the diagnosis, assessment and analysis of phenomena. Application of computer graphics and animation in information visualization. Dynamic data presentation in selected applications. Advanced visualization techniques in intra-organizational 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
	Team project	60.0%	100.0%

Recommended reading	Basic literature	Murray S., Interactive Data Visualization for the Web, 2nd Edition. OReilly 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.: Architektura informacji w serwisach internetowych. Wyd. Helion Warszawa 2003.
	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	- interactive video presentations on websites
	- video tutorials as a form of intra-organizational communication
	- visualizations using 2D animation

Work placement	Not applicable

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