GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Basics of Digital Cartography, PG_00047974		
Field of study	Informatics		
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	Polish
Semester of study	7	ECTS credits	3.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department Of Geoinformatics -> Faculty Of Electronics Telecommunications And Informatics -> Wydziały Politechniki Gdańskiej		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Jerzy Demkowicz	
	Teachers	dr inż. Jerzy Demkowicz	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	0.0	15.0	0.0	0.0	45

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	45	3.0	27.0	75

Subject objectives

Cartografphic Software Implemetation

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_W04] knows and understands, to an advanced extent, the principles, methods and techniques of programming and the principles of computer software development or programming devices or controllers using microprocessors or programmable elements or systems specific to the field of study, and organisation of systems using computers or such devices	Creating simple systems for the presentation of digital maps, scaling, moving the area of the digital map.	[SW1] Assessment of factual knowledge
[K6_K02] is ready to critically assess possessed knowledge and acknowledge the importance of knowledge in solving cognitive and practical problems	Digital map presentation using style sheets.	[SK2] Assessment of progress of work

<table>
<tr><td>Subject contents</td><td>1. Modern Cartography
2. Modern chart
3. Reference GRS-80 i WGS-84, Elipsoidal hieght
4. Distances: orthodroma, locsodrome, geodesic
5. Cartographic transformation
6. Mercator & UTM
7. Raster charts
8. Vector charts

9. Modern GIS Databases
10. Database strucuters and SQL

11. Geocoding

12. Chart production process</td></tr>
<tr><td>Prerequisites
and co-requisites</td><td></td></tr>
<tr><td>Assessment methods
and criteria</td><td>
<table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>Lab</td><td>51.0%</td><td>50.0%</td></tr>
<tr><td>Lecture</td><td>51.0%</td><td>50.0%</td></tr>
</table>
</td></tr>
<tr><td>Recommended reading</td><td>
<table>
<tr><td>Basic literature</td><td>1. Biancetti F. "Introduction to Digital Cartography", C-Map, La Spezia 2004
2. "Tatuk GIS Developer Kernel .NET Edition"

3. Stepnowski A. "Systemy akustycznego monitoringu środowiska morskiego", Gdańskie Towarzystwo Naukowe, Gdańsk 2001</td></tr>
<tr><td>Supplementary literature</td><td>1. Dokumentacja protokołu WMS - http:/mapserver.org/orc/wms_server.html
2. Dokumentacja "Tatuk GIS Developer Kernel .NET Edition"
3. Dokumentacja techniczna GeoServer - www.geoserver.org
4. Dokumentacja techniczna oprogramowania GobalMapper-www.globalmapper.com</td></tr>
<tr><td>eResources addresses</td><td>Adresy na platformie eNauczanie:</td></tr>
</table>
</td></tr>
<tr><td>Example issues/
example questions/
tasks being completed</td><td>Object Digital Chart Database</td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
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