GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

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|---|---|---|---|
| Subject name and code | Data Warehousing, PG_00047712 | | |
| Field of study | Informatics | | |
| Date of commencement of studies | October 2025 | Academic year of realisation of subject | 2025/2026 |
| Education level | second-cycle studies | Subject group | Obligatory subject group in the field of study<br>Subject group related to scientific research in the field of study |
| Mode of study | Part-time studies | Mode of delivery | blended-learning |
| Year of study | 1 | Language of instruction | Polish |
| Semester of study | 1 | ECTS credits | 6.0 |
| Learning profile | general academic profile | Assessment form | exam |
| Conducting unit | Department of Software Engineering -> Faculty of Electronics Telecommunications and Informatics -> Wydziały Politechniki Gdańskiej | | |
| Name and surname of lecturer (lecturers) | Subject supervisor | dr inż. Teresa Zawadzka | |
| | Teachers | dr inż. Grzegorz Gołaszewski<br>dr inż. Teresa Zawadzka | |

**Lesson types and methods of instruction**

| Lesson type | Lecture | Tutorial | Laboratory | Project | Seminar | SUM |
|---|---|---|---|---|---|---|
| Number of study hours | 12.0 | 0.0 | 12.0 | 12.0 | 0.0 | 36 |

E-learning hours included: 24.0

**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 | 36 | 10.0 | 104.0 | 150 |

**Subject objectives**

The objective of the subject is to learn student on basic issues of business intelligence, in particular on design and implementation of a data warehaouse and how to use some selected business intelligence tools.

**Learning outcomes**

| Course outcome | Subject outcome | Method of verification |
|---|---|---|
| [K7_U09] can carry out a critical analysis of the functioning of existing technical solutions and assess these solutions, as well as apply experience related to the maintenance of advanced technical systems, devices and facilities typical for the field of studies, gained in the professional engineering environment | Student can evaluate data warehouse efficiency and optymized its working. | [SU1] Assessment of task fulfilment |
| [K7_U03] can design, according to required specifications, and make a complex device, facility, system or carry out a process, specific to the field of study, using suitable methods, techniques, tools and materials, following engineering standards and norms, applying technologies specific to the field of study and experience gained in the professional engineering environment | Student can design a data warehouse. | [SU1] Assessment of task fulfilment |

**Subject contents**

Data warehouse implementation, from requirement to dashboards: project, implementation, optimalization, dashboards.

**Prerequisites and co-requisites**

basic database course

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|---|---|---|---|
| Assessment methods and criteria | Subject passing criteria | Passing threshold | Percentage of the final grade |
| | Midterm quizies | 50.0% | 20.0% |
| | Project | 50.0% | 40.0% |
| | Written exam | 50.0% | 40.0% |
| Recommended reading | Basic literature | P. Ponniah: Data Warehousing. J. Wiley&Sons, 2001. K. Goczyła. "Hurtownie danych". Materiały do wykładu. Gdańsk 2009. V. Poe, P. Klauer, S. Brebst: Tworzenie hurtowni danych, WNT 2000 | |
| | Supplementary literature | W.H. Inmon: Building the Data Warehouse. J. Wiley&Sons, 2002. R. Kimball: Data Warehouse Toolkit. J. Wiley&Sons, 1996. | |
| | eResources addresses | | |
| Example issues/ example questions/ tasks being completed | 1. What is OLAP?<br><br>2. Design a logical model of a data warehouse | | |
| Work placement | Not applicable | | |

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