# GDAŃSK UNIVERSITY OF TECHNOLOGY

## Subject card

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| Subject name and code | Technological Platforms, PG_00047670 |
| Field of study | Informatics |

| Date of commencement of studies | October 2020 | Academic year of realisation of subject | 2021/2022 |
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| 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 | 2 | Language of instruction | Polish |
| Semester of study | 4 | ECTS credits | 3.0 |
| Learning profile | general academic profile | Assessment form | assessment |

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| Conducting unit | Department of Computer Architecture -> Faculty of Electronics, Telecommunications and Informatics |

| Name and surname of lecturer (lecturers) | Subject supervisor | dr inż. Jarosław Kuchta |
|---|---|---|
| | Teachers | dr inż. Wojciech Siwicki |
| | | dr inż. Piotr Rajchowski |
| | | dr inż. Łukasz Gołuński |
| | | dr inż. Piotr Kurgan |
| | | dr inż. Jerzy Burczyk |
| | | dr inż. Jarosław Magiera |
| | | dr inż. Jarosław Kuchta |
| | | mgr inż. Michał Wójcik |

| Lesson types and methods of instruction | Lesson type | Lecture | Tutorial | Laboratory | Project | Seminar | SUM |
|---|---|---|---|---|---|---|---|
| | Number of study hours | 15.0 | 0.0 | 30.0 | 0.0 | 0.0 | 45 |
| | E-learning hours included: 0.0 | | | | | | |
| | 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 | 45 | 15.0 | 15.0 | 75 |

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| Subject objectives | Presentation of technological platforms: .NET and Java |

| 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 | Knows and understands programming methods in C # and Java. | [SW1] Assessment of factual knowledge |
| | [K6_W07] Knows and understands, to an advanced extent, the general principles of setting up and development of business entities, forms of individual entrepreneurship and running ventures in the field specific to the field of study | Knows and understands how to create applications in C # and Java. | [SW1] Assessment of factual knowledge |
| | [K6_U01] can apply mathematical knowledge to formulate and solve complex and non-typical problems related to the field of study and perform tasks, in an innovative way, in not entirely predictable conditions, by:n- appropriate selection of sources and information obtained from them, assessment, critical analysis and synthesis of this information,n- selection and application of appropriate methods and toolsn | Can implement algorithms in C # and Java | [SU1] Assessment of task fulfilment |

| Subject contents | Java: Java Platform, Conventions and Launch, Project Building - Maven, Collections and Object Comparison, Thread Support, Input / Output Support, Java Network Sockets, Persistence AP, I Stream API Testing, Parallel Operations.

NET: Introduction to .NET. Language Comparison, WPF, Entity Framework, LINQ, Asynchronous Applications, Native Code in .NET |
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| Prerequisites and co-requisites | Knowledge of object oriented programming. |
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| Assessment methods and criteria | Subject passing criteria | Passing threshold | Percentage of the final grade |
|---|---|---|---|
| | Practical exercise | 50.0% | 50.0% |
| | Midterm colloquium | 50.0% | 50.0% |

| Recommended reading | Basic literature | C. Nagel, B. Evjen, J. Glynn, M. Skinnerand, K. Watson Professional C# 2005 with .NET 3.0, Wrox Press 2007 The Java Tutorial, Oracle, 2010 Bruce Eckel: Thinking in Java 4th Edition Code Conventions for the Java Programming Language |
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| | Supplementary literature | E. Jendrock, I. Evans, D. Gollapudi, K. Haase, C. Srivathsa: "The Java EE 6 Tutorial", Oracle, 2010 |
| | eResources addresses | |

| Example issues/ example questions/ tasks being completed | |
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| Work placement | Not applicable |