GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Practice of Programming, PG_00047792
Field of study	Informatics

Date of commencement of studies	October 2021	Academic year of realisation of subject	2021/2022
Education level	first-cycle studies	Subject group	Optional subject group
Mode of study	Part-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	Polish
Semester of study	1	ECTS credits	5.0
Learning profile	general academic profile	Assessment form	exam

Conducting unit	Faculty of Electronics, Telecommunications and Informatics

Name and surname of lecturer (lecturers)	Subject supervisor	dr Marcin Jurkiewicz
	Teachers	dr Marcin Jurkiewicz

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	15.0	0.0	30
	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	30	10.0	85.0	125

Subject objectives	The aim of the course is to learn students programming and implementation of programs in the Linux/Visual Studio environment. Students should master C/C++ instructions, data resources, operators and functions. Students should acquire knowledge about structures, functions and other basic concepts related to programming in C / C ++.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K6_U03] can design, according to required specifications, and make a simple 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	The student is able to design the control flow between blocks according to the given design content.	[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools
	[K6_U41] can produce, test or evaluate software using modern programming platforms, tools, languages and paradigms of different levels, as well as use software packages supporting scientific and research processes as well as business decision-making processes and teamwork	Students program in a procedural programming language, run and test programs.	[SU1] Assessment of task fulfilment
	[K6_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 technical systems, devices and facilities typical for the field of studies, gained in the professional engineering environment	The student is able to select from existing templates/codes the most beneficial one and, based on it, is able to create a system solving various scientific and engineering problems. The student is able to analyse different algorithms for solving a given problem and is able to select the most effective one.	[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information
	[K6_W42] Knows and understands, to an advanced extent, architecture, design principles and methods of hardware and software support for local and distributed information systems, including computing systems, databases, computer networks and information applications, as well as the principles of human cooperation with computers and computer-aided teamwork	The student is familiar with the basic principles of working with a computer via the C/C++ language.	[SW1] Assessment of factual knowledge
	[K6_U04] can apply knowledge of programming methods and techniques as well as select and apply appropriate programming methods and tools in computer software development or programming devices or controllers using microprocessors or programmable elements or systems specific to the field of study	The student is able to use the knowledge provided (from the lecture), the basic techniques of the C/C++ language and the software in Linux/Visual Studio to compile a programme.	[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools

Subject contents	Program of the course include the basic construction of C/C++ language and structural programming.
Prerequisites and co-requisites	1. Mathematical knowledge in the way of middle school. 2. Notion of vector and matrix. 3. Student should be able to programming in the way of beginner.

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Exam	50.0%	40.0%
	Project:. Evaluation of correctness operation, algorithms, structures, run time and interface, universality.	50.0%	60.0%

Recommended reading	Basic literature	1. B. Kerninghan, D. Ritchie, Język ANSI C
	Supplementary literature	1. K. Reek, Język C Wskaźniki 2. J. Grębosz, Symfonia C
	eResources addresses	

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