

**Subject card**

Subject name and code	Programmer's Workshop, PG_00143521						
Field of study	Informatics						
Date of commencement of studies	October 2024	Academic year of realisation of subject			2024/2025		
Education level	Bachelor's studies	Subject group			Obligatory subject group in the field of study		
Mode of study	full-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			Polish		
Semester of study	1	ECTS credits			2.0		
Learning profile	academic	Assessment form			credit		
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Łukasz Kuszner				
	Teachers		mgr Radosław Ziemann dr inż. Łukasz Kuszner				
Lesson types	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		0.0		20.0	50
Subject objectives	To train students in the programmer's tools and working environment.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[INFL3_U02] can precisely formulate questions to deepen one's understanding of a given topic or find missing elements of reasoning		The student uses the documentation and learns on his own about the required functions, commands and their parameters		[SU1] oral statement/conversation/discussion [SU5] implementation of a problem task [SU8] observation of student's independent or team work		
	[INFL3_U06] is able to design, create, run and test programs using dedicated tools and adequate templates		The student can create a programming project, build it and run it using selected tools.  The student knows the basic commands of the Bash shell.  The student is able to create and manage a code repository		[SU2] presentation/project/paper/report [SU5] implementation of a problem task [SU6] demonstration of practical skills [SU8] observation of student's independent or team work		
	[INFL3_W04] has structured knowledge in the field of software engineering, software specifications, validation and verification, and tools supporting the software development process		The student distinguishes: code editor, preprocessor, compiler, linker and debugger; can run each of these tools from the command line and use them in an integrated environment (IDE). The student is able to use a version control system. The student knows the basics of the LaTeX text typesetting system and creates documents in it.		[SW4] test/exam - oral or written [SW1] oral statement/conversation/discussion [SW5] implementation of a problem task		

Subject contents	<p>Programming environment and basic software engineering tools</p> <p>Fundamentals of working in the Unix/Linux system and the Bash shell</p> <p>File, directory, and process operations from the command line</p> <p>Creating and running software projects using compilers and build tools</p> <p>Program compilation and debugging with various development tools</p> <p>Introduction to task automation using Bash scripts</p> <p>Principles of code documentation and project organization</p> <p>Introduction to the Git version control system local and remote repositories</p> <p>Version management, branching, and team collaboration with Git</p> <p>Creating technical documents using the LaTeX typesetting system</p> <p>Use of tools supporting software development and testing processes</p> <p>Independent information search and use of technical documentation</p> <p>Solving practical problems using system and programming tools</p> <p>Preparation and presentation of programming project results</p> <p>Individual and team-based project work</p>											
Prerequisites and co-requisites												
Assessment methods and criteria	<table border="1"> <thead> <tr> <th data-bbox="454 1361 794 1391">Subject passing criteria</th> <th data-bbox="799 1361 1139 1391">Passing threshold</th> <th data-bbox="1144 1361 1482 1391">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="454 1397 794 1426">Test</td> <td data-bbox="799 1397 1139 1426">50.0%</td> <td data-bbox="1144 1397 1482 1426">30.0%</td> </tr> <tr> <td data-bbox="454 1433 794 1462">Project</td> <td data-bbox="799 1433 1139 1462">50.0%</td> <td data-bbox="1144 1433 1482 1462">70.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	Test	50.0%	30.0%	Project	50.0%	70.0%
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Project	50.0%	70.0%										
Recommended reading	<p>Basic literature</p>	<p>T. Oetiker, H. Partl, I. Hyna, E. Schlegl. Not so short introduction to LaTeX2e</p> <p>Git Tutorial <a href="https://git-scm.com/docs/gittutorial">https://git-scm.com/docs/gittutorial</a></p> <p>Bash Tutorial <a href="https://www.freecodecamp.org/news/bash-scripting-tutorial-linux-shell-script-and-command-line-for-beginners/">https://www.freecodecamp.org/news/bash-scripting-tutorial-linux-shell-script-and-command-line-for-beginners/</a></p> <p>Cmake tutorial <a href="https://cmake.org/cmake/help/latest/guide/tutorial/index.html">https://cmake.org/cmake/help/latest/guide/tutorial/index.html</a></p>										
	<p>Supplementary literature</p>	<p>S. Chacon, Pro Git professional version control</p> <p>C. Albing, JP Vossen, C. Newham bash Cookbook: Solutions and Examples for bash Users, O'Reilly Media, 2007 or newer.</p>										
	<p>eResources addresses</p>											

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

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