

## Course Syllabus

### I. General Information

Course name	Programming project: programming, algorithms and databases
Programme	Computer science
Level of studies (BA, BSc, MA, MSc, long-cycle MA)	BA
Form of studies (full-time, part-time)	Full-time
Discipline	Computer science
Language of instruction	English

Course coordinator/person responsible	Rafał Lizut
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Type of class ( <i>use only the types mentioned below</i> )	Number of teaching hours	Semester	ECTS Points
lecture			3
tutorial			
classes			
laboratory classes	30	6	
workshops			
seminar			
introductory seminar			
foreign language classes			
practical placement			
field work			
diploma laboratory			
translation classes			
study visit			

Course pre-requisites	Knowledge of core and profile oriented subjects from the curriculum necessary to complete the task outlined in the BA thesis Knowledge of structural and object-oriented programming
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### II. Course Objectives

Designing application utilizing advanced programming techniques
Finding a practical solution to a problem described in the BA thesis in a systematic way
Developing the application and preparing documentation according to assumptions encompassed in BA thesis

### III. Course learning outcomes with reference to programme learning outcomes

Symbol	Description of course learning outcome	Reference to programme learning outcome
<b>KNOWLEDGE</b>		
W_01	The student has a basic knowledge of the technology he/she has chosen to develop an application. The student will be able to recall software development knowledge necessary for scheduling the entire project; describe the functionality of the application; locate source code that implements the selected application functionality; define a problem from the thesis and explain its solution through the application.	K_W08
<b>SKILLS</b>		
U_01	The student is able to design an application, and then implement it using the selected technology; present his/her programming project with particular attention to its functionalities; explain the principle of operation of individual modules of the prepared application; work systematically, which develops in him/herself the ability to punctuality; work conscientiously, which results in creating software of the highest quality that meets the functionalities assumed in the BA's thesis.	K_U02, K_U04, K_U08, K_U17, K_U23, K_U30
<b>SOCIAL COMPETENCIES</b>		

### IV. Course Content

Developing a project and write an application according to the topic established in the selected BA seminar. Preparing project documentation according to the required specification. Conducting a presentation of the created application.

### V. Didactic methods used and forms of assessment of learning outcomes

Symbol	Didactic methods <i>(choose from the list)</i>	Forms of assessment <i>(choose from the list)</i>	Documentation type <i>(choose from the list)</i>
<b>KNOWLEDGE</b>			
W_01	Guided practice	Preparation / implementation of the project	Project rating card
<b>SKILLS</b>			
U_01	Project-based learning design thinking	Preparation / implementation of the project	Project rating card
<b>SOCIAL COMPETENCIES</b>			

**VI. Grading criteria, weighting factors**

A prerequisite for passing this course is preparing a project which is a practical part of the Bachelor's thesis

**VII. Student workload**

Form of activity	Number of hours
Number of contact hours (with the teacher)	<i>50</i>
Number of hours of individual student work	<i>40</i>

**VIII. Literature**

Basic literature
According to the seminar selected
Additional literature