University of Silesia in Katowice

1.	Field of study	Computer Science
2.	Faculty	Faculty of Science and Technology
3.	Academic year of entry	2024/2025 (winter term)
4.	Level of qualifications/degree	first-cycle studies (in engineering)
5.	Degree profile	general academic
6.	Mode of study	full-time

7.	General information about the module
Module name	**Diploma Project 2**
Module code	W4-IN-S1-24-7-IPD2
Number of the ECTS credits	6
Language of instruction	Polish
Purpose and description of the content of education	Moduł jest kontynuacją modułu "Inżynierski projekt dyplomowy I". Efektem końcowym jest praktyczna realizacja wybranego zadania oraz sporządzenie dokumentacji. Na tym etapie nacisk jest położony na następujące zagadnienia: - dobór właściwych technologii do postawionego zadania, - wykorzystanie nowoczesnych narzędzi oraz metod adekwatnych do problemu, - zarządzanie zadaniami i czasem ich realizacji, - tworzenie dokumentacji.
List of modules that must be completed before starting this module (if necessary)	not applicable

8.	Learning outcomes of the module			
Code	**Description**		**Learning outcomes of the programme**	**Level of competenc (scale 1-5)**
K01	podczas realizacji projektu inżynierskiego przyjmuje szeroką perspektywę analizy problemów, a także korzysta z gotowych rozwiązań oraz źródeł wiedzy z uwzględnieniem własności intelektualnej		IN_K02 IN_K04	2 3
U01	potrafi zrealizować zaprojektowane informatyczne rozwiązanie inżynierskie z wykorzystaniem nowoczesnych technologii, metod i narzędzi		IN_U04 IN_U05 IN_U07 IN_U09	1 2 3 2
U02	potrafi opracować dokumentację projektu inżynierskiego z wykorzystaniem obowiązujących notacji i standardów		IN_U02 IN_U04	5 2
U03	potrafi zaprezentować opracowane rozwiązanie inżynierskie oraz podjąć dyskusję o jego słabych i mocnych stronach		IN_U03 IN_U08	4 1

W01	zna techniki, metody i narzędzia stosowane w realizacji projektu inżynierskiego na wszystkich jego etapach i na wielu poziomach szczegółowości	IN_W03	4
		IN_W04	2
		IN_W07	3
		IN_W08	3

9.	Methods of conducting classes	
Code	**Category**	**Name (description)**
a03	Lecture methods / expository methods	Description *a description of objects, phenomena, processes or people; it involves specifying the structure and characteristic features of the object, phenomenon, or process being described; it is usually accompanied by a demonstration of the described object or by its models, drawings, tables, charts, etc.; a description may take the form of an explanation, classification, justification or comparison*
a05	Lecture methods / expository methods	Explanation/clarification *explication involving the derivation of a predetermined theorem from other, already known ones, in the number of steps specified by the person teaching the course*
c06	Demonstration methods	Demonstration-imitation *a presentation of a model way of performing specific activities accompanied by a commentary; it aims at triggering imitation activities in an individual or in a group of participants observing the activities of the person teaching the course until the right habit is formed through regular exercise; the demonstration-imitation method is combined with a physical practice of activities/behaviours*
d01	Programmed learning methods	Working with a computer *e.g., Webquest; implementation of educational tasks using electronic and digital devices, computer programs and Internet applications; the academic teacher acts as a consultant; students' work is carried out step by step according to the plan laid own by the person teaching the course and following his instructions, and proceeds towards producing the indicated results within the set deadline*
e02	Practical methods	Production exercise – workshop *an activity involving the creation of an object/product according to the rules/principles/description provided by the academic teacher acting as the workshop master*
e03	Practical methods	Creation/production – creative workshop *an activity involving creating/producing a work/artifact based on the individual, creative effort of the participant; the creative workshop is characterized by the presence and openness which make it possible to access the essence of the work/ peculiarity of the artifact at every stage of its creation/production*
e04	Practical methods	Project scheduling *proceeding according to the steps proposed within a specific methodology for the completion of a task; e.g., identifying project objectives, determining the result, identifying strengths, limitations, opportunities and threats (SWOT), establishing a schedule of activities, assessing resources, establishing an implementation plan; the initial diagnosis; the reassessment of assumptions; the process of preparing the practical implementation of a project*
f03	Methods of self-learning	Conceptual work *a (mainly intellectual) activity carried out independently (or in a selected group) resulting in the creation of a concept, idea or project; creating a plan based on a vision; developing a general outline of a project; producing a simplified sketch of the variant versions of a procedure/product/work*

10. Forms of teaching

Code	Name	Number of hours	Assessment of the learning outcomes of the module	Learning outcomes of the module	Methods of conducting classes
01	practical classes	45	course work	K01, U01, U02, U03, W01	a03, a05, c06, d01, e02, e03, e04, f03

11. The student's work, apart from participation in classes, includes in particular:

Code	Category	Name (description)	Is it part of the BUNA?
a01	Preparation for classes	Search for materials and review activities necessary for class participation *reviewing literature, documentation, tools and materials as well as the specifics of the syllabus and the range of activities indicated in it as required for full participation in classes*	Yes
a02	Preparation for classes	Literature reading / analysis of source materials *reading the literature indicated in the syllabus; reviewing, organizing, analyzing and selecting source materials to be used in class*	Yes
a03	Preparation for classes	Developing practical skills *activities involving the repetition, refinement and consolidation of practical skills, including those developed during previous classes or new skills necessary for the implementation of subsequent elements of the curriculum (as preparation for class participation)*	No
a05	Preparation for classes	Production/preparation of tools, materials or documentation necessary for class participation *developing, preparing and assessing the usefulness of tools and materials (e.g. aids, scenarios, research tools, equipment, etc.) to be employed in class or as an aid when preparing for classes*	Yes
b01	Consulting the curriculum and the organization of classes	Getting acquainted with the syllabus content *reading through the syllabus and getting acquainted with its content*	No
b02	Consulting the curriculum and the organization of classes	Verification / adjustment / discussion of syllabus provisions *consulting the content of the syllabus, possibly in the presence of the year tutor or members of the class group, and, if necessary, reassessing the provisions concerning special conditions for class participation, e.g., space and time requirements, technical and other requirements, including conditions for participation in classes outside the walls of the university, classes organized in blocks, organized online, etc.*	Yes
b03	Consulting the curriculum and the organization of classes	Consulting the schedule *getting acquainted with the class schedule, possibly in the presence of the year tutor, in order to optimize participation in classes, including those supplementary to the core subjects listed in the pursued study programme*	Yes
c01	Preparation for verification of learning outcomes	Determining the stages of task implementation contributing to the verification of learning outcomes *devising a task implementation strategy embracing the division of content, the range of activities, implementation time and/or the method(s) of obtaining the necessary materials and tools, etc.*	Yes
c02	Preparation for verification of learning outcomes	Studying the literature used in and the materials produced in class *exploring the studied content, inquiring, considering, assimilating, interpreting it, or organizing knowledge obtained from the literature, documentation, instructions, scenarios, etc., used in class as well as from the notes or other materials/artifacts made in class*	No
c03	Preparation for verification of learning outcomes	Implementation of an individual or group assignment necessary for course/phase/ examination completion	Yes

		a set of activities aimed at performing an assigned task, to be executed out of class, as an obligatory phase/element of the verification of the learning outcomes assigned to the course	
d01	Consulting the results of the verification of learning outcomes	Analysis of the corrective feedback provided by the academic teacher on the results of the verification of learning outcomes *reading through the academic teacher's comments, assessments and opinions on the implementation of the task aimed at checking the level of the achieved learning outcomes*	Yes
d02	Consulting the results of the verification of learning outcomes	Development of a corrective action plan as well as supplementary/corrective tasks *reviewing and selecting tasks and activities enabling the elimination of errors indicated by the academic teacher, their verification or correction resulting in completing the task with at least the minimum passing grade*	Yes

Information on the details of the module implementation in a given academic year can be found in the syllabus available in the USOS system: https://usosweb.us.edu.pl.