1.	**Field of study**	**Physics**
2.	Faculty	Faculty of Science and Technology
3.	Academic year of entry	2025/2026 (winter term)
4.	Level of qualifications/degree	second-cycle studies
5.	Degree profile	general academic
6.	Mode of study	full-time

7.	**General information about the module**
Module name	**Internships in Research Teams or Industry**
Module code	W4-FZ-S2-3-25-14
Number of the ECTS credits	3
Language of instruction	Polish
Purpose and description of the content of education	The course aims to introduce students to work in research, R&D groups, or modern industry. A student may complete the internship in research groups of Polish or foreign academic units, research institutes or companies. The internship's scope may cover theoretical physics, experimental physics, computer modelling in physics, physics applications in industry or medicine. As part of the 160 hours provided in the course, the student is expected to become familiar with a research group's specific work of their choice and actively participate in the group's work. The internship supervisor will assign tasks to the student (e.g., performing calculations, simulations, participating in an experiment, developing a research procedure, testing the equipment, analysing the results of conducted research). After completing the assignment, the student prepares a report on the accomplished activities.
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)
E1	understands the importance of physics and its applications in the progress of science and the development of new technologies	KF_W01	4
E2	has in-depth knowledge of selected branches theoretical and experimental physics	KF_W02	3
E3	knows the theoretical models and mathematical formalisms and computer methods necessary to solve the problems undertaken in the thesis	KF_W05 KF_W06 KF_W07	5 5 5
E4	is able to use research apparatus, conduct experiments and select an appropriate measurement method for a specific problem and the expected result	KF_U04 KF_U05 KF_U06 KF_U08	4 4 4 4
E5	is able to perform critical analysis and interpret research findings	KF_U08	4

		KF_U09 KF_U10	4 4
E6	can individually prepare a study of research results, assess their significance in relation to other results obtained from the literature, draw conclusions and formulate opinions	KF_U11 KF_U12	4 4
E7	is able to prepare written works and multimedia presentations in native language and English within the scope of the conducted research	KF_K07 KF_U15 KF_U16 KF_U19	4 4 4 3
E8	is able to listen to a different opinion and professionally discuss the issue in question	KF_K07 KF_U15	4 4
E9	understands the need for further education, can implement the process of self-education	KF_K01 KF_U17	5 5

9. Methods of conducting classes

Code	Category	Name (description)
e05	Practical methods	Internship *including professional and individual training; gaining skills and experience in real-life conditions, e.g., in the environment, institution or workplace the student is preparing for by following a specific study programme; training in real working conditions*

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
FZ1	internship	90	course work	E1, E2, E3, E4, E5, E6, E7, E8, E9	e05

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

Code	Category	Name (description)	Is it part of the BUNA?
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*	No
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)*	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
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*	Yes

		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	
c03	Preparation for verification of learning outcomes	Implementation of an individual or group assignment necessary for course/phase/ examination completion *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*	Yes
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*	No

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.