UNIWERSYTET IM. ADAMA MICKIEWICZA W POZNANIU

External practices (4 weeks)

Educational subject description sheet

Basic information

Study programme Fizyka (Physics of Advanced Materials for Energy Processing) **Speciality** - **Organizational unit** Faculty of Physics **Study level** Second-cycle programme **Study form** Full-time **Education profile** General academic	**Didactic cycle** 2023/24 **Subject code** 04FENS.28KU.12936.23 **Lecture languages** English **Course type** Obligatory **Block** Complementary major subjects

Subject coordinator	Marcin Ziółek
Lecturer	Marcin Ziółek

Period	**Activities and hours**	**Number of ECTS points**
Semester 4	• Practice: 150, Graded credit	8

Goals

Code	Goal
C1	4-weeks-long (approximately 150 hours) internship in a R&D company or a research group outside the Faculty of Physics at AMU

Subject learning outcomes

Code	Outcomes in terms of	Learning outcomes	Examination methods
Knowledge – Student:			
W1	understands the principles of occupational health and safety related to the dissertation work.	FEN_K2_W07	Report / Practice Log
Skills – Student:			
U1	can cooperate in the company or research group using the knowledge of physics of materials and energy processing.	FEN_K2_U06	Report, opinion of the person-in-charge from the internship company or the research group, Report / Practice Log
U2	can use the specialized equipment or advanced methodology in the company or research group.	FEN_K2_U01	Report, opinion of the person-in-charge from the internship company or the research group, Report / Practice Log
Social competences – Student:			
K1	is ready to perform professional roles in the company or research group.	FEN_K2_K05	Report, opinion of the person-in-charge from the internship company or the research group, Report / Practice Log
K2	is ready to use his/her knowledge or ask for the professional advice to solve the problems in the company or the research group.	FEN_K2_K02	Report, opinion of the person-in-charge from the internship company or the research group, Report / Practice Log

Study content

No.	Course content	Subject learning outcomes	Activities
1.	Internship in a R&D company or a research group.	W1, U1, U2, K1, K2	Practice

Additional information

Activities	Teaching and learning methods and activities
Practice	Laboratory method, Research method (scientific inquiry), Workshop method, Work in groups

Activities	Credit conditions
Practice	The supervisor makes the assessment of the master student work during the practices based on the report/practice log and opinion of the person-in-charge from the internship company or the research group, in accordance with the grading system: Very good (bdb; 5,0) Good plus (+db; 4,5) Good (db; 4,0) Satisfactory plus (+dst; 3,5) Satisfactory (dst; 3,0) Unsatisfactory (ndst; 2,0)

Literature

Obligatory

1. Depends on the kind of intership.

Optional

1. Depends on the kind of intership.

Calculation of ECTS points

Activities	**Activity hours***
Practice	150
Report preparation	30
Completion of the practice logbook	20
Student workload	**Hours** 200
Number of ECTS points	**ECTS** 8

* academic hour = 45 minutes

Efekty uczenia się dla kierunku

Kod	Treść
FEN_K2_K02	The graduate is ready to recognize the importance of knowledge in solving cognitive and practical problems and seeking expert opinion (also from other scientific disciplines) to overcome difficulties during independent problem solving
FEN_K2_K05	The graduate is ready to responsibly perform professional roles, incorporating changing social needs, including advancing the achievements of the profession and maintaining its ethos, as well as the observance and development of the principles of professional ethics and actions to comply with these principles
FEN_K2_U01	The graduate can use their knowledge to formulate and solve complex and unusual problems in the field of physical sciences; select and apply appropriate methods and tools necessary to solve a given problem (including advanced IT techniques), as well as adapt existing methods and tools or develop completely new ones
FEN_K2_U06	The graduate can interact with others as part of teamwork and take a leading role in such work; manage team work
FEN_K2_W07	The graduate knows and understands workplace health and safety principles to the extent that allows independent work in the research workplace