



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Specialist Laboratory

Course

Field of study

Year/Semester

Education in Technology and Informatics

3/6

Area of study (specialization)

Profile of study

Level of study

Course offered in

First-cycle studies

polish

Form of study

Requirements

full-time

Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars

30

15

Number of credit points

5

Lecturers

Responsible for the course/lecturer:

Responsible for the course/lecturer:

dr hab. Dobrosława Kasprowicz

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Faculty of Material Science and Technical
Physics

Piotrowo 3, 60-696 Poznań

Prerequisites

Basic knowledge from five semesters of engineering studies in the field of the field of study. The ability to solve elementary problems in physics, technology and computer science based on the possessed knowledge, the ability to obtain information from the indicated sources. Understanding the need to expand your competences, readiness to cooperate as part of the team.

Course objective

Provide students with basic knowledge on the principles of conducting scientific research, drawing conclusions from research and writing publications on the content of engineering studies, appropriate for a given field of study.



Developing students' creative skills (theoretical and experimental) based on the knowledge acquired during engineering studies.

Course-related learning outcomes

Knowledge

W0 use the general knowledge obtained during studies, not related to the area of engineering education
K_W01 to K_W07

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K_W01 to K_W07

W02 use the basic engineering knowledge obtained during the studies K_W08 to K_W13

W03 use the knowledge obtained during the studies directly related to the directional engineering tasks
K_W14 to K_W20.

Skills

U01 use general skills obtained during the studies, not related to the area of engineering education
K_U01 to K_U05

U02 use the engineering skills K_U06 to K_U14 obtained during the studies

U03 use the skills obtained during studies, directly related to solving engineering tasks K_U16 to K_U24

Social competences

K01 work on the assigned task, acts in accordance with the principles of professional ethics, understands the need for continuous training, can provide engineering and technical information, is aware of the importance of engineering activities K_K01 to K_K08

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Completion of completed exercises and projects

3 the student shows moderate commitment to problem solving, encouraged to look for a solution based on the acquired knowledge,

4 the student shows commitment to problem solving, looks for a solution based on the acquired knowledge,

5 the student shows great commitment to solving problems, independently looks for a solution based on the acquired knowledge, looks for additional sources of knowledge useful to solve the problem, looks for solutions in non-standard situations.

U01 U02 U03 Completion of exercises and projects



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K01 Completion of exercises and projects

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Programme content

The subject of engineering works is proposed by employees of the Faculty of Technical Physics and employees of PUT departments cooperating in the education process.

Teaching methods

Bibliography

Basic

Additional



Breakdown of average student's workload

	Hours	ECTS
Total workload	122	5,0
Classes requiring direct contact with the teacher	72	3,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) ¹	45	2

¹ delete or add other activities as appropriate