



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Pre-diploma Seminar

### Course

Field of study

Education in Technology and Informatics

Area of study (specialization)

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

2/2

Profile of study

general academic

Course offered in

Polish

Requirements

compulsory

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars

30

### Number of credit points

2

### Lecturers

Responsible for the course/lecturer:

prof. dr hab. Ryszard Czajka

e-mail:ryszard.czajka@put.poznan.pl

tel. 61-665-3234

Faculty of Materials Engineering and Technical

Physics

Piotrowo street 3, 60-965 Poznań

Responsible for the course/lecturer:

### Prerequisites

Student :

-knows and understands the mathematical apparatus necessary to describe the basic rights and solve tasks related to technical issues, including: the basis of the differential and integral calculus, statistics and numerical methods

- has basic knowledge of selected departments of physics, chemistry, necessary to understand the basic technological processes

- has an orderly and theoretically sub-structured basic knowledge in the field of materials science,



- knows the basic methods, techniques and tools used in solving complex engineering tasks from the selected field of computer science and technology.
- can use the acquired mathematical knowledge to describe processes, create models, write algorithms in the field of technology; knows how to use analytical methods to formulate and solve tasks in the field of physical quantities measurements
- he can obtain information from literature, databases and other sources, interpret them and draw conclusions, formulate and justify opinions
- he can prepare and present an oral presentation in Polish and foreign language
- he can work on the assigned task independently and cooperate in a team, taking on different roles in it; is responsible for this work
- it follows the principles of professional ethics; is responsible for the reliability of the results of its work and theirs interpretation.

### Course objective

preparing the student for the M.Sci thesis realization, referring the results obtained and drawing on them thesis and conclusions, as well as drawing a vision of the thesis carried out

### Course-related learning outcomes

#### Knowledge

Student:

1. is familiar with the achievements, challenges and limitations of selected advanced issues applicable to modern technologies [K2W\_01], [K2W\_15].
2. has detailed knowledge of physics, materials engineering and computer science needed to formulate and solve specific tasks relating to the performance of thesis [K2W\_11], [K2W\_14].
3. has knowledge on preparation of the relevant technical documentation [K2W\_04].

#### Skills

Student is able to obtain information on physical and technical issues from literature and databases, critically analyse them, integrate them and formulates opinions in physical, technical and economic aspects [K2U\_03], [K2U\_04].

#### Social competences

Student:

1. can work on the designated multi-threaded task responsibly, independently and in a team [K2K\_03].
2. is able to adequately define priorities for the performance of a task which he/she or others have defined; is aware of the importance of behaving professionally [K2K\_04]



### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Effect	Form of assessment	Assessment criteria
W01-W02	Evaluation of individual oral presentation	50.1%-70.0% (3)
	using a computer program	70.1%-90.0% (4)
	and evaluation of answers to questions about the presentation.	from 90.1% (5)
U01-U02	Evaluation of individual oral presentation	50.1%-70.0% (3)
	using a computer program	70.1%-90.0% (4)
	and evaluation of answers to questions about the presentation.	from 90.1% (5)
K01-K02	Evaluation of individual oral presentation	50.1%-70.0% (3)
	using a computer program	70.1%-90.0% (4)
	and evaluation of answers to questions about the presentation.	from 90.1% (5)

### Programme content

1. Rules for the preparation of the thesis.
2. Tips for preparing presentations in Power Point programs.
3. State of the art of technology in the world

### Teaching methods

seminar, consultation of ongoing projects, workshops – discussions on presented diploma projects

### Bibliography

Basic

1. Selected individually by the student according to the subject matter of the work carried out

Additional

1. Selected individually by the student according to the subject matter of the work carried out



### Breakdown of average student's workload

	Hours	ECTS
Total workload	49	2,0
Classes requiring direct contact with the teacher	34	1,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>	30	1,0

<sup>1</sup> delete or add other activities as appropriate