

### POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

general academic

# **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Preparation of diploma thesis [S2IBio1-BilW>PPD]

Course

Field of study Year/Semester

Biomedical Engineering 2/3

Area of study (specialization) Profile of study Bionics and Virtual Engineering

Course offered in Level of study

second-cycle Polish

Form of study Requirements full-time compulsory

**Number of hours** 

Lecture Laboratory classes Other 0

0

**Tutorials** Projects/seminars

0 60

Number of credit points

11,00

Coordinators Lecturers

dr inż. Jakub Grabski jakub.grabski@put.poznan.pl

### **Prerequisites**

The student has the knowledge and skills necessary to complete the diploma dissertation acquired during classes in semesters 1-3

# Course objective

Expanding knowledge and skills on planning and conducting research and the ability to present the results of these works.

# Course-related learning outcomes

#### Knowledge:

The student has advanced knowledge of biomedical engineering problems - theoretical foundations, tools and means used to solve engineering problems.

#### Skills:

The student can obtain information from various sources, also in English, and integrate, interpret and critically assess obtained information, draw conclusions as well as formulate and justify opinions, The student can use analytical, simulation and experimental methods to formulate and solve

engineering tasks and simple research problems in biomedical engineering.

#### Social competences:

The student is able to set priorities for implementation of a task set,

The student understands the importance of lifelong learning,

The student is aware of social role played by a graduate of technical university and understands the necessity to formulate and provide to the public, especially by means of mass media, information and opinions concerning technological advancements and other aspects of engineering activities; makes an effort to convey information and opinions in such a way that can be commonly understood

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

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Completion of the course based on:

- assessment of the diploma thesis presented,
- regularity of its implementation,
- ability to independently technical problem solving skills.

# Programme content

Compatible with the topic of the diploma thesis.

# Course topics

Formulation of the thesis objective.

Selection of the literature related to the thesis topic.

Methods and tools related to the implementation of the tasks planned within the thesis.

Analysis of the results and conclusions.

Correctness of thesis editing.

# Teaching methods

Discussion with the student about problems occurring during diploma thesis preparation, solving research problems or providing sources in the literature to solve problems.

# **Bibliography**

**Basic** 

Scientific and technical literature necessary to prepare the thesis Additional

# Breakdown of average student's workload

	Hours	ECTS
Total workload	300	11,00
Classes requiring direct contact with the teacher	60	2,00
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation)	240	9,00