



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

MSc seminar [S2EiT1-ESPIO>SD]

### Course

Field of study

Electronics and Telecommunications

Year/Semester

2/3

Area of study (specialization)

Programmable Electronic Systems and  
Optotelecommunications

Profile of study

general academic

Level of study

second-cycle

Course offered in

Polish

Form of study

full-time

Requirements

compulsory

### Number of hours

Lecture

0

Laboratory classes

0

Other

0

Tutorials

0

Projects/seminars

15

### Number of credit points

13,00

### Coordinators

dr hab. inż. Damian Karwowski  
damian.karwowski@put.poznan.pl

### Lecturers

### Prerequisites

Students starting a master's degree seminar in second-cycle studies should have in-depth knowledge of electronics and telecommunications and mathematically based knowledge of programming. They should be able to prepare a scientific study and present a presentation in Polish or English on a selected topic in electronics and telecommunications. They should have the ability to obtain information from the indicated sources in Polish or English. Should be ready to cooperate in a group, should be able to formulate and defend their own judgments, should know the limitations of their own knowledge, and recognize the need for further education.

### Course objective

The aim of the diploma seminar is to prepare students to write a master's thesis, study a planned scientific work, collect and develop the results of experiments, and formulate correct conclusions based on the results obtained.

### Course-related learning outcomes

Knowledge:

1. Student knows the formal, literature and editorial requirements for the diploma thesis
2. Student knows the general methodology for writing diploma theses
3. Student is aware of the source citations and the need for independent work

**Skills:**

1. Student is able to plan and carry out a scientific experiment
2. Student is able to use various sources of information, interpret the results obtained, as well as draw conclusions, and formulate and substantiate opinions
3. Student is able to prepare a well documented written study of a given design problem, in accordance with the requirements of substantive and linguistic correctness
4. Student is able to prepare and present a presentation of his experiment and start a discussion about it

**Social competences:**

1. Student can prepare a presentation of the results of experiment
2. Student can initiate and control discussion on selected technical topics, is able to formulate and defend judgments
3. Student correctly identifies and resolves dilemmas related to the exercise of the profession, maintains an ethical attitude when performing entrusted tasks and presenting their results

**Methods for verifying learning outcomes and assessment criteria**

Learning outcomes presented above are verified as follows:

Ongoing control of the progress of work on the creation of a master's diploma thesis by

1. Preparation of a work plan
2. Preparation of at least two presentations indicating the progress of work in subsequent stages of its creation
3. Delivering a paper based on the presentation and participating in the discussion on it
4. Presentation of at least one substantive chapter of your own master's thesis

The following components are assessed

1. Class attendance
2. Active participation in classes, involvement in discussions, the ability to defend one's position
3. The quality of the presentation and substantive chapter of the master's thesis
4. Ability to deliver a paper
5. Timely completion of tasks

The final grade is the resultant of the component grades, each of the component grades must be positive. For the component grades and for the final grade, there is a scale of grades from 2 (insufficient – negative grade) to 5 (very good).

**Programme content**

- Conducting scientific research (principles and methods of scientific research)
- Principles of conducting the diploma exam and defense of the thesis
- Principles of creating a correct plan and structure of the thesis
- Principles of writing a correct thesis
- Principles of using sources
- Principles of creating a correct presentation
- Principles of discussion, with special emphasis on scientific discussion

**Course topics**

- Conducting scientific research (principles and methods of scientific research)
- Principles of conducting the diploma exam and defense of the thesis
- Principles of creating a correct plan and structure of the thesis
- Principles of writing a correct thesis
- Principles of using sources
- Principles of creating a correct presentation
- Principles of discussion, with special emphasis on scientific discussion

**Teaching methods**

Presentation, delivering a paper, participating in a discussion, steering the discussion, a conversational

lecture with using a whiteboard and/or projector.

## Bibliography

### Basic

1. Dudziak A., Żejmo A.: Redagowanie prac dyplomowych – wskazówki metodyczne dla studentów. Difin, Warszawa 2008

1. Zenderowski R.: Praca magisterska - Licencjat. Krótki przewodnik po metodologii pisania i obrony pracy dyplomowej, CeDeWu Sp. z o.o., 2015

### Additional

## Breakdown of average student's workload

	Hours	ECTS
Total workload	325	13,00
Classes requiring direct contact with the teacher	50	2,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	275	11,00