



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Diploma seminar [N2Trans1-TrN>SD]

### Course

Field of study

Transport

Year/Semester

2/3

Area of study (specialization)

Low-emission Transport

Profile of study

general academic

Level of study

second-cycle

Course offered in

Polish

Form of study

part-time

Requirements

compulsory

### Number of hours

Lecture

0

Laboratory classes

0

Other (e.g. online)

0

Tutorials

0

Projects/seminars

9

### Number of credit points

2,00

### Coordinators

prof. dr hab. inż. Jacek Pielecha

jacek.pielecha@put.poznan.pl

### Lecturers

### Prerequisites

Knowledge: Student knowledge of specialization subjects and undergraduate seminar Skills: Student can use computer programs to edit technical texts including the formulas, tables and technical computing Social competencies: Student understands the need for correct citation for their thesis

### Course objective

Familiarize with the basic elements of the philosophy of science. Help to prepare a thesis on the appropriate technical and formal level

### Course-related learning outcomes

Knowledge:

Student knows advanced methods, techniques and tools used in solving complex engineering tasks and conducting research in a selected area of transport.

Student has knowledge of ethical codes related to scientific and research work in the field of transport engineering.

Skills:

Student is able to obtain information from literature, databases and other sources (in Polish and English), integrate them, interpret and critically evaluate them, draw conclusions and formulate and exhaustively justify opinions.

Using among others conceptually new methods, the student is able to solve complex tasks in the field of transport engineering, including typical tasks and tasks with a research component.

The student is able to prepare and present a scientific study in Polish and English, presenting the results of scientific research or an oral presentation on specific issues in the field of transport engineering.

The student is able to determine the directions of further learning and implement the process of self-education, including other people.

Social competences:

Student understands the importance of using the latest knowledge in the field of transport engineering in solving research and practice problems.

Student understands the importance of popularizing the latest achievements in the field of transport engineering.

Student is aware of the need to develop professional achievements and observe the rules of professional ethics.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:

Assessment of the method of presenting the written master's thesis in the forum of the dean's group.

Assessment of the written work in terms of content, methodology and editorial content.

### Programme content

General part: types of qualification theses, including diploma theses and rules for their implementation, requirements for master's theses. Formulation of the technical problem and thesis, study of literature, methodological part of the work, presentation of research results, development of observations and conclusions. Principles of work editing, editing support, development of graphic elements, preparation of the work for printing and duplication. Specialist part: reporting on the dissertations carried out by the authors and discussion on them.

### Course topics

none

### Teaching methods

case study / discussion / problem solving

### Bibliography

Basic

1. Leszek W. Badania empiryczne. Wyd. ITE, Radom 1997
2. Opoka E., Uwagi o pisaniu i redagowaniu prac dyplomowych na studiach technicznych, Wyd. Politechniki Śląskiej, Gliwice 2003
3. Dobre obyczaje w nauce. Zbiór zasad i wytycznych (wyd. 3), Wyd. PAN Warszawa 2001
4. Zaczyński W.: Poradnik autora prac seminaryjnych, dyplomowych i magisterskich. Warszawa 1995
5. Urban S., Ładoński W., Jak napisać dobrą pracę magisterską, wyd. 4 uzupełn., Wyd. Akademia Ekonomiczna we Wrocławiu, Wrocław 2001

Additional

1. Boć J.: Jak pisać pracę magisterską. Wrocław, Kolonia Limited, 2003.

### Breakdown of average student's workload

	Hours	ECTS
Total workload	40	2,00
Classes requiring direct contact with the teacher	9	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	31	1,50