# POZNAN UNIVERSITY OF TECHNOLOGY



#### EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

## **COURSE DESCRIPTION CARD - SYLLABUS**

#### Course name Research project [S2IZarz1E>PrBad]

prof. dr hab. inż. Stefan Trzcielińsk stefan.trzcielinski@put.poznan.pl	<b>ki</b>		
Coordinators		Lecturers	
Number of credit points 5,00			
Tutorials 120	Projects/seminars 0	6	
Number of hours Lecture 0	Laboratory classe 0	es C	Other )
Form of study full-time		Requirements compulsory	
Level of study second-cycle		Course offered in English	
Area of study (specialization) Managing Enterprise of the Future		Profile of study general academic	
<b>Course</b> Field of study Engineering Management		Year/Semester 2/3	

### **Prerequisites**

The student possesses knowledge, skills and social competences necessary to register for the third semester of Master program.

### **Course objective**

Collecting data on the research problem undertaken in the master's thesis, their processing and development of research results.

### Course-related learning outcomes

Knowledge:

The student defines practical applications of mathematical statistical tools in data analysis for a research project. [P7S\_WG\_03]

The student describes and delineates the applications of advanced research methods in management science for their own research project [P7S\_WG\_04].

The student lists and characterizes various data acquisition methods used to identify and analyze research problems [P7S\_WG\_07].

The student explains and applies ethical standards in the research process, especially in the context of

data collection and processing [P7S\_WK\_01].

The student classifies and applies the principles of intellectual property and copyright protection in the creation of research materials [P7S\_WK\_02].

### Skills:

The student interprets the scientific literature, integrating it with his/her own research in the project [P7S\_UW\_03].

The student plans and conducts research, developing and testing hypotheses in the project [P7S\_UW\_04].

The student analyzes the results of empirical research, applying scientific methodology [P7S\_UW\_07]. The student prepares scientific documentation, presenting research results in written form [P7S\_UK\_01].

The student presents research results orally, demonstrating communication skills in Polish and foreign language [P7S\_UK\_02].

Social competences:

The student manages his/her own research project, demonstrating responsibility and effective collaboration with the research supervisor [P7S\_UO\_01].

The student uses and integrates interdisciplinary knowledge in the context of a research project [P7S\_KK\_01].

The student identifies and evaluates key factors influencing the outcomes of the research project [P7S\_KK\_02].

The student demonstrates professionalism and ethics in the research process, respecting diversity of views and cultures [P7S\_KR\_01].

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Ongoing assessment of the progress of the MA dissertation; final evaluation of the master's dissertation; assessment of verbal and visual presentation and fragments of master dissertation.

### Programme content

Formulation of the research problem; literature analysis of the problem; identification of the research gap; defining the purpose of research; developing research methodology; collecting empirical data; data processing; development and discussion of research results; defining the practical usefulness of research results and the limits of their application.

### **Course topics**

Formulation of the research problem; literature analysis of the problem; identification of the research gap; defining the purpose of research; developing research methodology; collecting empirical data; data processing; development and discussion of research results; defining the practical usefulness of research results and the limits of their application.

### **Teaching methods**

Individual literature studies; case studies; design method.

### Bibliography

Basic:

Publications according to the thesis theme

Czakon W. (2020). Podstawy metodologii badań naukowych w naukach o zarządzaniu. Wydawnictwo Nieoczywiste.

Kothari C.R. (2004). Research Methodology. Methods and Techniques. New Age International (P) Ltd., Publishers. https://www.modares.ac.ir/uploads/Agr.Oth.Lib.17.pdf

### Additional:

Krajewski (2010). O metodologii nauk i zasadach pisarstwa. http://www.krajewskimiroslaw.pl/\_media/docs/4i.%20METODOLOGIA%20NAUK.pdf

# Breakdown of average student's workload

	Hours	ECTS
Total workload	125	5,00
Classes requiring direct contact with the teacher	100	4,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	25	1,00