# POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS) pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

# **COURSE DESCRIPTION CARD - SYLLABUS**

Course name			
Pre-seminar			
Course			
Field of study		Year/Semester	
Aerospace Engineering	<b>3/6</b> Profile of study		
Area of study (specialization)			
-		general academic	
Level of study		Course offered in	
First-cycle studies		polish	
Form of study		Requirements	
part-time		compulsory	
Number of hours			
Lecture	Laboratory classes	Other (e.g. online)	
0	0	0	
Tutorials	Projects/seminars		
0	9		
Number of credit points			
1			
Lecturers			
Responsible for the course/lecturer: Responsible Responsible for the course/lecturer Responsible Respo		sible for the course/lecturer:	
Prof. dr hab. inż. Karol Nadolny			
email: karol.nadolny@put.pozna	ın.pl		
tel. 61 665			
Faculty of Civil Engineering and <sup>-</sup>	Fransport		
ul. Piotrowo 3; 60-965 Poznań			
Prerequisites			
Knowledge: Knowledge of issues	related to the diploma topic		
Skills: Can apply the scientific me	ethod in solving problems		

Social competences: Knows the limitations of own knowledge and skills; can precisely formulate questions, understand the need for further education

#### **Course objective**

Deepening the knowledge and skills on the organization and conduct of scientific and technical works and the presentation of the results of these works



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## **Course-related learning outcomes**

#### Knowledge

1. knows the general principles of creating and developing forms of individual entrepreneurship, also taking into account time management, as well as the skills of proper self-presentation, using knowledge in the field of science and scientific disciplines relevant to aviation and astronautics [K2A\_W26]

2. Has basic knowledge of research methods and how to prepare and conduct research, and knows the rules of editing a research paper [K2A\_W34]

#### Skills

1. is able to communicate with the use of various techniques in the professional environment and other environments, using the formal notation of the structure, technical drawing, concepts and definitions of the scope of the field of study [P7S\_UK, K2A\_U02]

2. Is able to prepare a short research paper, respecting the basic editorial rules. He can choose appropriate methods for the conducted research and is able to carry out a basic analysis of the results [K2A\_U25].

#### Social competences

1. understands the need for lifelong learning; can inspire and organize the learning process of other people [P7S\_UU K2A\_K01]

2. Is ready to critically assess the knowledge and content received, recognize the importance of knowledge in solving cognitive and practical problems and consult experts in the event of difficulties with solving the problem on its own [P7S\_KK, K2A\_K02]

3. is able to cooperate and work in a group, assuming different roles in it [P7S\_UO, K2A\_K04]

4. is able to properly define the priorities for the implementation of the tasks defined by himself or others [P7S\_UO, K2A\_K05]

5. correctly identifies and resolves dilemmas related to the profession [P7S\_KR, K2A\_K06]

6. is aware of the social role of a technical university graduate, and especially understands the need to formulate and convey to the society, in particular through the mass media, information and opinions on the achievements of technology and other aspects of engineering activities; makes efforts to provide such information and opinions in a commonly understandable manner [P7S\_KO, K2A\_K08]

Methods for verifying learning outcomes and assessment criteria Learning outcomes presented above are verified as follows: based on the work completed

#### **Programme content**

General part: types of qualification works, including diploma theses and rules for their implementation, requirements for diploma theses. Formulation of the technical problem and thesis, literature study, methodological part of the thesis, presentation of research results, development of observations and



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conclusions. Principles of work editing, editing support, development of graphic elements, preparation of work for printing and duplication.

Specialist part: reporting on the dissertations carried out by the authors and discussion on them.

### **Teaching methods**

Project method (individual or team implementation of a large, multi-stage cognitive or practical task, the effect of which is the creation of a work)

#### Bibliography

Basic

1. Good manners in science. Collection of Principles and Guidelines (3rd edition), Ed. PAN Warsaw 2001

2. Leszek W., Selected methodological issues of empirical research. Institute of Sustainable Technologies, Radom 2006

3. Szubert-Zarzeczny U., Technique of writing scientific papers, Wyd. Higher School of Management

Additional

1. Wojciechowska R., Methodical guide to writing a thesis. Ed. DIFIN, 2010

#### Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,0
Classes requiring direct contact with the teacher	10	1,0
Student's own work (literature studies, preparation for laboratory	15	0,0
classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>		

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