COURSE DESCRIPTION CARD - SYLLABUS

Course name
Diploma seminar

Course

Field of study
Aviation and Astronautics

Year/Semester
4/7

Area of study (specialization)
Aircraft engines and airframes

Profile of study
general academic

Level of study
First-cycle studies

Course offered in
polish

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture
0

Laboratory classes
0

Other (e.g. online)
0

Tutorials
30

Projects/seminars
0

Number of credit points

5

Lecturers

Responsible for the course/lecturer:
PhD inż. Łukasz Brodzik

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tel.: 61 665 2213

Faculty of Environmental Engineering and Energy

Piotrowo 3 st., 60-965 Poznań

Responsible for the course/lecturer:

Prerequisites

Student has knowledge of issues related to the realized diploma topic, is able to apply the scientific method in solving problems, carrying out experiments and inference, knows the limitations of their own knowledge, skills and is able to formulate questions precisely, and understands the need for further education.

Course objective

To acquaint the student with the stages of writing the engineering thesis and its correct editorial preparation

Course-related learning outcomes

Knowledge

1. has basic knowledge in the field of the main branches of technical mechanics: statics of kinematics and dynamics of the material point and rigid body and strength of materials, including the basis of theory of elasticity and plasticity, performance hypotheses, methods for calculating beams, membranes, shafts, joints and other simple structural elements

2. has a structured, theoretically founded general knowledge covering key issues in the field of technical thermodynamics, i.e. the theory of thermodynamic transformations, heat transfer, thermal and cooling machines

3. has expanded the knowledge necessary for understanding the items profile and expertise of construction, methods of construction, manufacturing, operations, air traffic management, safety systems, the impact on the economy, society and the environment in the aviation and aerospace selected specialties

Skills

1. can obtain information from literature, the Internet, databases and other sources, can integrate the information obtained and interpret conclusions and create and justify opinions

2. can use verbal communication in one additional foreign language at the level of everyday language, can describe issues in the field of the studied field of study in this language, can prepare technical documentation for descriptive and engineering tasks, transport and / or logistics

3. can prepare and present a short verbal and multimedia presentation devoted to the results of an engineering task

4. is able to plan and conduct a research experiment using measuring equipment, computer simulations, is able to perform measurements, such as temperature measurements with liquid thermometers, thermometers, thermocouples, speed and flow rate using turbine, laser and ultrasonic flowmeters, and interpret results and draw conclusions

Social competences

1. understands the need to learn throughout life, can inspire and organize the learning process of other people

2. is aware of the importance and understands the non-technical aspects and effects of engineering activities, including its impact on the environment, and the related responsibility for decisions -

3. can think and act in an entrepreneurial way

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Oral exam

Programme content

The process of writing scientific papers (genesis of thesis topic, preparatory activities, source materials). Preparation of the diploma thesis (general requirements, editorial preparation, ethical problems). The role of the promoter in the process of creating work.

Teaching methods

Discussion, combined with an assessment of the progress of the thesis based on the presentation

Bibliography

Basic

1. Szkutnik Z., Metodyka pisania pracy dyplomowej. Wyd. Poznańskie, 2005

Additional

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Breakdown of average student's workload

	Hours	ECTS
Total workload	500	20,0
Classes requiring direct contact with the teacher	25	1,0
Student's own work (literature studies, preparing presentations, studies related to the thesis) [1]	475	19,0

[1] delete or add other activities as appropriate