COURSE DESCRIPTION CARD - SYLLABUS

Course name
Diploma seminar [S2LiK2P>SemD]

Course

Field of study
Aerospace Engineering

Year/Semester
2/3

Area of study (specialization)
–

Profile of study
practical

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
15

Projects/seminars
0

Number of credit points

1,00

Coordinators

prof. dr hab. inż. Krzysztof Wisłocki
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Lecturers

Prerequisites

Knowledge: Has the knowledge necessary to understand the profile subjects and specialist knowledge about the construction, methods of construction, manufacturing, operation, air traffic management, safety systems, impact on the economy, society and the environment in the field of aviation and aerospace for selected specialties: Civil Aviation Skills: has the ability to self-educate using modern teaching tools, such as remote lectures, websites and databases, teaching programs, e-books is able to obtain information from literature, the Internet, databases and other sources. Can integrate the obtained information, interpret and draw conclusions from it, as well as create and justify opinions Social competences: understands the need for lifelong learning; can inspire and organize the learning process of other people

Course objective

Theoretical and practical preparation for writing a master's thesis with each graduate. Discussing the rules of writing a thesis, setting the aim and scope of the master's thesis. Training of self-presentation and preparation and conducting of a scientific presentation

Course-related learning outcomes

Knowledge:

1. has knowledge of how to develop research methodology
2. 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 cosmonautics

Skills:
1. has the ability to self-educate with the use of modern teaching tools, such as remote lectures, websites and databases, teaching programs, e-books
2. is able to communicate using various techniques in the professional environment and other environments using the formal notation of concepts and definitions of the scope of the study field
3. is able to prepare and present a short verbal and multimedia presentation devoted to the results of an engineering task
4. is able to properly define priorities for the implementation of a task set by himself or others
5. understands the need for lifelong learning; can inspire and organize the learning process of other people

Social competences:
1. Is ready to critically evaluate the knowledge and content received, recognize the importance of knowledge in solving cognitive and practical problems, and consult experts in case of difficulties in solving the problem on its own
2. correctly identifies and resolves dilemmas related to the profession
3. has the competencies necessary to interact with other industry employees (including in English).

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Discussion during the course, using individual analyzes and studies of the student in the matter of the issue taken in the field of air transport. Presentations of the students' achievements so far as part of the master's thesis. Final work. Presentation of progress in the form of a multimedia presentation of a scientific nature.

Programme content

The structure of the master's thesis: the way of analyzing the literature to determine the state of knowledge in the issue covered by the topic of the thesis, the formulation of the research problem (fundamental thesis thesis), the method of presenting the research methodology (analytical, experimental) and their results, formulating observations and conclusions. Rules for citing foreign studies. Discussing (in succession) the diploma theses: the referrer should demonstrate knowledge of the latest developments in a given field of science and technology (domestic and foreign publications). General discussion on the subject of the presented work and the way of its implementation. General characteristics of the diploma thesis. Formal and editorial requirements for the diploma thesis. Structure and types of theses. Selection of literature. Development of source materials and links. Preparation of a work plan. Subject, goal, implementation schedule. Development of a research program. Research model. Experimental research. Simulation tests. Optimization and verification of test results. Initial reporting of work. Discussing current work results. Formulation of applications. The second report of work. Subject, final goal, scope of work. Discussion of students. Editorial comments. The final presentation of the work. Preparation and development of guidelines for defense of thesis. Passing the diploma seminar.

Course topics

none

Teaching methods

Informative (conventional) lecture (providing information in a structured way) - may be of a course (introductory) or monographic (specialist) character

Bibliography

Basic:

1. Wisłocki K.: Metodologia i redakcja prac naukowych. Wyd. Politechniki Poznańskiej, Poznań 2013
2. B. Branowski - Metody twórczego rozwiązywania problemów inżynierskich, Wielkopolska Korporacja Techniczna NOT, Poznań 1999

Additional:
3. Zb. Kłos (red.) - Rozprawy naukowe. Wydawnictwo Politechniki Poznańskiej, Poznań 2011

Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,00
Classes requiring direct contact with the teacher	15	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	10	0,00