POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

Course name Diploma seminar [S1Lot2-ORL>SD]

Lecturers
nars
sses Other 0
Requirements elective
Course offered in Polish
Profile of study general academic
Year/Semester 4/7

Prerequisites

Knowledge: Basic knowledge of physics, mathematics, economics, and major subjects Skills: Basic computer programs MS Office, CAD, and others, depending on interests and the problem undertaken Social competences: the ability to formulate questions precisely; the ability to determine priorities important in solving the tasks assigned to him; the ability to formulate a research problem and seek its solution, independence in solving problems, the ability to work in a group

Course objective

Theoretical and practical preparation for writing an engineering diploma thesis with each graduate

Course-related learning outcomes

Knowledge:

1. has the ability to self-educate using modern teaching tools, such as remote lectures, Internet sites and databases, teaching programs, e-books

Skills:

1. is able to obtain information from various sources, including literature and databases, both in Polish and

English, integrate it properly, interpret and critically evaluate it, draw conclusions, and comprehensively 2. is able to appropriately use information and communication techniques that are used at various stages of implementing aviation projects

3. is able to prepare a short scientific paper, while maintaining basic editorial principles. Is able to select appropriate methods for the research conducted and is able to conduct a basic analysis of the results.

Social competences:

1. understands that in technology, knowledge and skills very quickly become outdated

2. correctly identifies and resolves dilemmas related to the profession of an aviation and astronautics engineernone

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Discussion during classes, using individual analyses and student studies on the undertaken issue in the field of air transport. Final paper.

Programme content

Preparation and implementation of a diploma thesis by students. A diploma seminar is a time when students, under the guidance of a research supervisor, develop a topic for their diploma thesis, acquire the necessary knowledge, skills and methodology that will allow them to independently conduct research and then write a paper.

Course topics

The structure of an engineering thesis: the method of analyzing the literature to determine the state of knowledge in the issue covered by the topic of the thesis, formulation of the research problem (fundamental theses of the thesis), the method of presenting the research methodology (analytical, experimental) and its results, formulation of observations and conclusions. Principles of citing foreign studies. Discussion (in turn) of the completed diploma theses: the referrer should demonstrate knowledge of the latest achievements in a given field of science and technology (domestic and foreign publications). General discussion of the subject of the presented work and the adopted method of its implementation. Structure and types of diploma theses. Selection of literature. Development of source materials and references. Development of a work plan. Topic, goal, implementation schedule. Development of a research program. Research model. Experimental studies. Simulation studies. Optimization and verification of research results. Initial reporting of the work. Discussion of the results of the work so far. Formulation of conclusions. Second presentation of the work. Preparation and development of guidelines for the defense of the thesis. Passing the thesis seminar.

Teaching methods

Paper discussion (or after the lecture in the form of a seminar) (paper on the topic as a basis for discussion)

Bibliography

Basic:

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Additional:

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	45	2,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	5	0,00