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

IFR Communications

Course

Field of study	Year/Semester
Aerospace Engineering	2/3
Area of study (specialization)	Profile of study
Flight Training For Civil Aviation	general academic
Level of study	Course offered in
First-cycle studies	polish
Form of study	Requirements
full-time	compulsory

Number of hours

Lecture	Laboratory classes	Other (e.g. online)
15		
Tutorials	Projects/seminars	
15		

Number of credit points

1

Lecturers

Responsible for the course/lecturer:	Responsible for the course/lecturer:
Leszek Grześkowiak	
Wydział Inżynierii Środowiska i Energetyki	
email: leszeg1@o2.pl	
tel. +48 601 827 942	

Prerequisites

The student starting this subject should have a basic knowledge of the basics of computer science and communication systems. He should also have the ability to apply the scientific method in solving problems and be ready to cooperate within a team.

Course objective

Familiarizing the student with the technical capabilities of communication equipment and communication systems, and applicable labor regulations for technical means of communication.

Course-related learning outcomes

Knowledge

1. has expanded knowledge of technical vocabulary, in particular specialized terminology used in the fields of science and technology related to aviation engineering

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2. has expanded knowledge necessary to understand profile subjects and specialist knowledge about construction, methods of construction, manufacture, operation, aircraft control, safety systems, economic, social and environmental impact in the field of aviation engineering for selected specialties:

1. Piloting of aircraft

2. Aero engines and airframes.

3. has ordered, theoretically founded general knowledge covering key issues in the field of on-board systems, as well as on-board and ground electronic communication systems.

Skills

1. knows how to use a language to a degree enabling understanding of technical texts in the field of aviation (knowledge of technical terminology).

2. can obtain information from literature, the Internet, databases and other sources. Is able to integrate obtained information, interpret and draw conclusions from them.

3.can analyze objects and technical solutions, is able to search in the catalogs and on the manufacturers' websites ready components of machines and devices, including means of transport and storage, assess their suitability for use in own technical and organizational projects.

Social competences

1. is aware of the importance of maintaining the principles of professional ethics.

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 associated responsibility for the decisions taken.

3. Understands the need for critical assessment of knowledge and continuous learning.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture:

- assessment of knowledge and skills demonstrated on the written test - 1.5 hour

Exercises:

- knowledge acquired during the exercises is verified by two 45-minute colloquia carried out during 3 and 7 classes

Programme content

Lecture:

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Meanings and Significance of Associated Terms. Air Traffic Control Abbreviations. Q-Code Groups Commonly Used in RTF Air-Ground Communications. Categories of Messages. Radiotelephony Call Signs for Aeronautical Stations and Aircraft Including Use of Abbreviated Call Signs. Transfer of Communication. Test Procedures Including Readability Scale; Establishment of RTF Communication. Relevant Weather Information Terms (IFR).

Exercises:

Transmission of Letters, Numbers (Including Level Information), Time. Transmission Technique. Standard Words and Phrases (Relevant RTF Phraseology Included). Level Changes and Reports. Action Required to be Taken in Case of Communication Failure. PAN Medical. Morse Code.

Teaching methods

1. Lecture: multimedia presentation, illustrated with examples given on the board.

2. Exercises: examples given on the board and performance of tasks given by the teacher - practical exercises.

Bibliography

Basic

1. "Communication" (JAR Ref 090). JAA ATP1 Training. Germany 2004

2. „Procedury służb Żeglugi powietrznej Zarządzanie Ruchem Lotniczym (PL-4444)"

Additional

Breakdown of average student's workload

	Hours	ECTS
Total workload	30	1,0
Classes requiring direct contact with the teacher	30	1,0
Student's own work (literature studies, preparation for written tests)[1]		

[1] delete or add other activities as appropriate