## STUDY MODULE DESCRIPTION FORM

| Name of the module/subject<br>**Communication 1** | | Code<br>**1010601111010638521** |
|---|---|---|

| Field of study<br>**Aerospace Engineering** | Profile of study<br>(general academic, practical)<br>**general academic** | Year /Semester<br>**1 / 1** |
|---|---|---|

| Elective path/specialty<br>**-** | Subject offered in:<br>**Polish** | Course (compulsory, elective)<br>**obligatory** |
|---|---|---|

| Cycle of study:<br>**First-cycle studies** | Form of study (full-time,part-time)<br>**full-time** |
|---|---|

| No. of hours | | | | No. of credits<br>**2** |
|---|---|---|---|---|
| Lecture: **1** | Classes: **-** | Laboratory: **-** | Project/seminars: **-** | |

| Status of the course in the study program (Basic, major, other)<br>**other** | (university-wide, from another field)<br>**university-wide** |
|---|---|

| Education areas and fields of science and art<br><br>**technical sciences**<br>  **Technical sciences** | ECTS distribution (number and %**)**<br><br>**2  100%**<br>    **2   100%** |
|---|---|

| Responsible for subject / lecturer:<br><br>mgr Tomasz Zdziarski<br>email: tomasz.zdziarski@put.poznan.pl<br>tel. +48 500 123 362<br>Faculty of Transport Engineering<br>ul. Piotrowo 3 60-965 Poznań | Responsible for subject / lecturer:<br><br>dr hab. inż. Agnieszka Wróblewska<br>email: agnieszka.wroblewska@put.poznan.pl<br>tel. +48 784 698 595<br>Faculty of Transport Engineering<br>ul. Piotrowo 3 60-965 Poznań |
|---|---|

### Prerequisites  in terms of knowledge, skills and social competencies:

| 1 | **Knowledge** | in the field of computer science and communication systems [PKR4] |
|---|---|---|
| 2 | **Skills** | can apply the scientific method in solving problems [PKR4] |
| 3 | **Social competencies** | knows the limits of own knowledge and skills; can work in a group [PKR4] |

### Assumptions and objectives of the course:

familiarizing the student with the technical-tactical capabilities of communications equipment and communication systems and applicable regulations in the field of work through technical means of communication.

### Study outcomes and reference to the educational results for a field of study

**Knowledge:**

1. has a structured, theoretically founded general knowledge covering key issues in the field of on-board equipment, as well as on-board and ground-based electronic communication systems - [K1A_W09]

**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  - [K1A_U04]

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 descriptively - drawing engineering, transport and / or logistic tasks  - [K1A_U07]

**Social competencies:**

1. understands the need to learn throughout life; can inspire and organize the learning process of others - [K1A_K01]

2. can interact and work in a group, taking on different roles in it - [K1A_K03]

3. is able to properly define the priorities for the implementation of a task set by himself or others - [K1A_K04]

### Assessment  methods of study outcomes

Lecture:

- assessment of knowledge and skills demonstrated on written exam

| Course description |
|---|
| basic issues related to the communication and information systems. Terminal and commutation devices. Technical characteristics of digital and analogue aviation type radios. Rules and methods of organizing communication. Regulations for conducting radio correspondence. Security and protection of communications. Operating documents and secret command. Using technical means of communication. |

**Basic bibliography:**

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

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

**Additional bibliography:**

| Result of average student's workload | |
|---|---|
| **Activity** | **Time (working hours)** |
| 1. Preparation for classes | 10 |
| 2. Participation in classes (according to plan) | 15 |
| 3. consultations | 1 |
| 4. Preparation for the exam / pass | 20 |
| 5. Participation in the exam / pass | 1 |
| **Student's workload** | |

| Source of workload | hours | ECTS |
|---|---|---|
| Total workload | 50 | 2 |
| Contact hours | 18 | 1 |
| Practical activities | 0 | 0 |