# STUDY MODULE DESCRIPTION FORM

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|---|---|---|
| Name of the module/subject<br>**Man - possibilities and limitations** | | Code<br>**1010601131010637563** |
| Field of study<br>**Aerospace Engineering** | Profile of study (general academic, practical)<br>**(brak)** | Year /Semester<br>**2 / 3** |
| Elective path/specialty<br>**Aircraft Piloting** | 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<br>Lecture: **1** Classes: **1** Laboratory: **-** Project/seminars: **-** | | No. of credits<br>**2** |
| Status of the course in the study program (Basic, major, other)<br>**(brak)** | (university-wide, from another field)<br>**(brak)** | |
| Education areas and fields of science and art<br>**technical sciences**<br>**Technical sciences** | | ECTS distribution (number and %)<br>**2 100%**<br>**2 100%** |

**Responsible for subject / lecturer:**

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

| | | |
|---|---|---|
| 1 | **Knowledge** | in the field of general and air psychology, the essence and functioning of the cognitive, emotional and motivational processes of man |
| 2 | **Skills** | can apply the scientific method in solving problems |
| 3 | **Social competencies** | knows the limits of own knowledge and skills; can work in a group |

## Assumptions and objectives of the course:

familiarizing the student with the human structure and emotional and motivational processes of a man functioning in normal, difficult and extreme situations. Basic human cognitive processes - perception and attention and their importance in the process of information management in the human - technical object system. The dynamics of small social groups and its application in the process of constructing effective task forces in aviation. Managing crew / team resources (CRM).

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

### Knowledge:

1. has detailed knowledge related to selected issues in the field of human capabilities and limitations when operating the aircraft in flight, as well as the capabilities and limitations of the air ambulance system - [K1A_W15]
2. has basic knowledge necessary to understand social, economic, legal and other non-technical conditions of engineering activities - [K1A_W24]

### Skills:

1. knows how to use native and international languages to the extent that it allows to understand technical texts and write technical descriptions of machines in the field of aviation and astronautics (technical terminology) - [K1A_U01]
2. 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]

### Social competencies:

1. understands the need to learn throughout life; can inspire and organize the learning process of other people - [K1A_K01]
2. can interact and work in a group, taking on different roles in it - [K1A_K03]
3. able to properly define the priorities for the implementation of a task set by himself or others - [K1A_K04]

| **Assessment methods of study outcomes** |
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| computer exam using Aviationexam software |

| **Course description** |
|---|
| Knowledge of the structure of the human body. Functioning of individual systems and organs. Techniques of negotiation and conflict resolution. Effective conflict management. Error as a psychological category. Theory and model of human error formation. The sources of their formation. Hypotheses for translating reality. Principles of cooperation with people, techniques of motivating subordinates, time management techniques, methods of selection, assessment and development of personnel, negotiation and conflict techniques, techniques of organizing staff work in garrison and polygonal conditions, sources of human error, with particular reference to air errors. The dynamics of functioning of small social groups, crew resource management (CRM), operational risk management (ORM), situational awareness, risk areas and propensity to make mistakes. |

**Basic bibliography:**

1. Szajnar S.: ?Czynnik ludzki w obsłudze urządzeń technicznych?, Skrypt WAT, Warszawa 2010
2. Scott W. E., Cummings L. L.: ?Zachowanie człowieka w organizacji?, Państwowe Wydawnictwo Naukowe, 1983
3. Janowska Z.: ?Zarządzanie zasobami ludzkimi?, Polskie Wydawnictwo Ekonomiczne, 2010

**Additional bibliography:**

**Result of average student's workload**

| **Activity** | **Time (working hours)** |
|---|---|
| 1. Participation in classes (according to plan) | 30 |
| 2. Preparation for the exam / pass | 17 |
| 3. Participation in the exam / pass | 2 |

**Student's workload**

| **Source of workload** | **hours** | **ECTS** |
|---|---|---|
| Total workload | 49 | 2 |
| Contact hours | 32 | 1 |
| Practical activities | 25 | 1 |