



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Monitoring of security threats

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### Course

Field of study

Safety Engineering

Area of study (specialization)

Level of study

First-cycle studies

Form of study

part-time

Year/Semester

2/3

Profile of study

general academic

Course offered in

Polish

Requirements

compulsory

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### Number of hours

Lecture

8

Laboratory classes

Tutorials

8

Projects/seminars

Other (e.g. online)

### Number of credit points

3

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### Lecturers

Responsible for the course/lecturer:

Ph.D., Eng. Grzegorz Dahlke

Responsible for the course/lecturer:

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### Prerequisites



A student beginning to study this subject should have basic knowledge about contemporary safety problems, threats affecting humans in the environment (especially natural and industrial threats).

### Course objective

The aim of this course is to get to know structures (administrative units, state services, inspections, research institutes) dealing with monitoring of threats listed in the National Crisis Management Plan and to assimilate selected methods, models, techniques and tools for identification, analysis and evaluation of the threats in question.

### Course-related learning outcomes

#### Knowledge

1. the student has detailed knowledge in the field of monitoring threats to the security of society, critical infrastructure facilities at the level of the state, voivodship, county and commune [P6S\_WG\_01]
2. the student knows the basic basic classifications of hazards, methods of their monitoring and diagnostic equipment [P6S\_WG\_05].
3. the student is familiar with the legal connections in the scope of cooperation in the execution of functions in particular phases of crisis management characterized in safety nets [P6S\_WG\_06].
4. the student has knowledge of the construction and development of safety monitoring systems [P6S\_WK\_03].

#### Skills

1. the student, at the end of classes, is able to identify institutions involved in monitoring security threats and is able to prepare and implement a plan of cooperation in the process of taking control of the threat [P6S\_UW\_01]
2. the student is able to identify sources of security threats to be monitored and cooperate in reducing their harmfulness [P68\_UW\_06].
3. the student is able to prepare procedures for monitoring security threats with the use of measuring tools [P6S\_UO\_01].

#### Social competences

1. the student is aware of the importance of monitoring security threats and developing research methods for shaping safe living conditions in the environment [P6S\_KK\_02]
2. the student is aware of the complexity of the impact of investment impacts on safety in the human life environment and the tasks of administrative and research institutions in monitoring the safe level of impact [P6S\_KK\_03]
3. the student is able to undertake initiatives in the scope of cooperation with organisational units in the field of monitoring threats to safety and controlling risks connected with the threats in question [P6S\_KO\_02].



### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formal evaluation:

- a) exercises: current evaluation (on a scale from 2 to 5) of the tasks and colloquia,
- b) lectures: assessment of responses during a written colloquium.

Summary evaluation:

- a) exercises: average of partial tasks' marks; a pass after obtaining at least 3.0,
- b) lectures: a written colloquium (answers to 15 open and closed questions) of the content presented during the lecture; each answer is scored on a scale from 0 to 1; the score is calculated after summing up the points and recalculating according to the scale provided for in the study regulations.

### Programme content

Detection, identification and assessment of chemical, biological, radioactive, nuclear, epidemiological and noise risks to human and environmental safety. Detection, identification and assessment of threats to the safety of stationary facilities (concentrated or dispersed), large industrial facilities, public utilities, airports, seaports, drinking water intakes and systems in urban agglomerations) and mobile facilities and transport (wheeled, rail, pipe, water, air). Institutions, methods and tools for monitoring security threats listed in the National Crisis Management Plan.

### Teaching methods

Lecture supported by a multimedia presentation. During the practice classes, students use task sheets containing a set of practical cases requiring monitoring of security threats. Students carry out exercises using computers.

### Bibliography

Basic

1. Ficoń K., Inżynieria zarządzania kryzysowego. Podejście systemowe, BEL Studio, Warszawa 2016
2. Gołębiewski J., Zarządzanie kryzysowe na szczeblu samorządowym. Teoria i praktyka, Wydawnictwo Difin, Warszawa 2015
3. Krajowy Plan Zarządzania Kryzysowego RP
2. Narodowy Program Ochrony Infrastruktury Krytycznej RP
3. Radziejowski R., Ochrona infrastruktury krytycznej. Teoria i praktyka, Wydawnictwo PWN, Warszawa 2014
4. Strategia Rozwoju Systemu Bezpieczeństwa Narodowego RP
5. Strategia Bezpieczeństwa Narodowego RP



Additional

1. Biuletyn Analityczny RCB, Warszawa, [www.rcb.pl](http://www.rcb.pl)
2. Juda-Pezter K., Oddziaływanie zanieczyszczeń powietrza na środowisko, Wydanie II, Oficyna Wydawnicza Politechniki Warszawskiej 2006

**Breakdown of average student's workload**

	Hours	ECTS
Total workload	75	3,0
Classes requiring direct contact with the teacher	20	1,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests, project preparation) <sup>1</sup>	50	2,0

<sup>1</sup> delete or add other activities as appropriate