POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

Course name
Monitoring of security threats [N1IBiJ1>MZdB]

Course

Field of study
Safety and Quality Engineering

Year/Semester
2/3

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
Polish

Form of study
part-time

Requirements
compulsory

Number of hours

Lecture
9

Laboratory classes
0

Other
0

Tutorials
9

Projects/seminars
0

Number of credit points

2,00

Coordinators	Lecturers
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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 advanced knowledge of issues related to monitoring threats to public security and critical infrastructure facilities at the state, voivodeship, poviat and commune level [K1_W02].
2. The student has advanced knowledge of phenomena related to the cycle of objects, systems and technical systems. [K1_W06]
3. The student knows the fundamental dilemmas of modern civilization and development trends as well

as best practices in monitoring threats [K1_W10].

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 [K1_U01].
2. the student is able to identify sources of security threats to be monitored and cooperate in reducing their harmfulness [K1_U06].
3. the student is able to prepare procedures for monitoring security threats with the use of measuring tools [K1_U11].

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 [K1_K02].
2. The student is aware of the complexity of the impact of investment impacts on safety in the human living environment and the tasks of administrative and research institutions in monitoring the safe level of impact [K1_K03].
3. The student is able to take initiatives in the field of cooperation with organizational units in the field of monitoring security threats and controlling the risks related to the threats in question [K1_K05].

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

The programme content includes learning about the structures (administrative units, state services, inspections, research institutes) involved in monitoring the threats listed in the National Crisis Management Plan and acquiring selected methods, models, techniques and tools for identifying, analysing and assessing the said threats.

Course topics

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
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	50	2,00
Classes requiring direct contact with the teacher	21	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	29	1,00