POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

Course name

Organisation and operation of security systems [S1IBiJ1>OiFSB]

Course				
Field of study Safety and Quality Engineering		Year/Semester 3/6		
Area of study (specialization)		Profile of study general academic	C	
Level of study first-cycle		Course offered in Polish	I	
Form of study full-time		Requirements compulsory		
Number of hours				
Lecture 15	Laboratory classe 0	es	Other 0	
Tutorials 15	Projects/seminars 15	6		
Number of credit points 2,00				
Coordinators		Lecturers		
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Prerequisites

The student has the knowledge to define and characterize the basic concepts and principles of state security and security management systems in enterprises with particular emphasis on crisis and emergency situations. The student is able to plan, organize and evaluate the functioning of security management systems related to emergency preparedness. He/she is able to identify threats with particular emphasis on critical infrastructure. The student is aware of the importance of security management at the level of the State, local government units and companies. The student is aware of methods, tools and techniques supporting security management processes.

Course objective

Teaching the theoretical and practical aspects related to planning, organizing, implementing and evaluating systemic security management at the level of the State, local government units and companies. The detailed objective of the exercises is to learn the principles of creating a crisis management system at the operational level of the commune, district and province.

Course-related learning outcomes

Knowledge:

1. The student has advanced knowledge of issues related to the organization and operation of state security systems, local government units and companies [K1_W02].

2. The student knows at an advanced level issues in the field of risk identification, analysis and estimation as well as the basic elements of the plan for preparing for emergency situations in the enterprise and the crisis management plan at the level of local government units [K1_W03].

Skills:

1. The student is able to obtain, integrate and interpret information from literature, databases and other appropriately selected sources, also in English, on security management, crisis management, critical infrastructure and the issue of creating emergency preparedness plans [K1_U01].

2. The student is able to use appropriate methods and techniques to design objects, systems or processes that meet high quality and safety standards. is able to create a well-documented study containing the basic elements of crisis management plans (preparation plan for emergency situations) [K1_U07].

3. The student can take part in a debate and present, using appropriately selected means, a problem that falls within the scope of security systems [K1_U09].

4. The student is able to plan, organize and manage individual and team work in a way that ensures high quality results of experiments, measurements and simulations [K1_U11].

Social competences:

1. The student is aware of the importance of knowledge in solving problems in the field of system security and continuous improvement [K1_K02].

The student is aware of understanding non-technical aspects and effects of engineering activities, including its impact on the environment and the related responsibility for decisions made [K1_K03].
The student is aware of the responsibility for his or her own work and is ready to obey the principles of teamwork and be responsible for jointly performed tasks - [K1_K07].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formal evaluation:

a) exercises: current assessment (on a scale from 2 to 5) of tasks and colloquia,

- b) lectures: assessment of responses during a written colloquium.
- c) projects: evaluation of the implementation of project tasks.

Summary evaluation:

a) exercises: average of partial tasks' marks; a pass after obtaining at least 3.0,

b) lectures: a written colloquium (answers to 30 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.

c) Projects: assessment of the implementation of the project tasks carried out in the ten chapters; credit after obtaining at least a 3.0 grade (the condition is to prepare ten main tasks).

Programme content

Subjective and subjective aspect of security. Threats and their social perception. States resulting from the occurrence of threats. The concept of crisis. Emergency states. Levels of response. Crisis management and its phases. Rescue and emergency response planning. Public safety. Ensuring security. Entity security system. Security management. Security management system. Selected security systems. Safety planning. Civil Planning. Organizing security. Characteristics of organizing and functioning of services in selected security systems. Civil security. Civil-state cooperation in the field of security. Civil defense. Ensuring functioning of security system. Monitoring in security systems. Organization of information, warning and alerting.

The content of the exercises covers topics: Identification of threats in a crisis management plan at the commune/poviat/company level; Risk assessment for threats identified in a crisis management plan; Identification of critical infrastructure facilities (national and European); Analysis and assessment of the importance of critical infrastructure facilities; Risk assessment of threats to critical infrastructure facilities; Risk assessment of threats to critical infrastructure facilities; Developing hazard mapping and risk maps in the emergency management plan at commune/district/region level; Networking in the national emergency management plan for identified threats at commune/district/region level; Developing procedures and instructions in the emergency management plans at commune/district/region level;

Course topics

none

Teaching methods

Lecture supported by a multimedia presentation. During the training classes, students use the outlines for tasks including the preparation of elements of emergency plans and carry out exercises using computers. During design classes, students complete design tasks using methods and tools discussed by the class lecturer.

Bibliography

Basic:

1. Kosieradzka Anna, Zawiła-Niedźwiecki Janusz (red.), Zaawansowana metodyka oceny ryzyka w publicznym zarządzaniu kryzysowym, Wydawnictwo edu-Libri, s. 390, 2016.

2. Radziejewski Ryszard, Ochrona infrastruktury krytycznej. Teoria i praktyka, : Wydawnictwo Naukowe PWN, s. 210, Warszawa, 2016.

- 3. Krajowy Plan Zarządzania Kryzysowego RP
- 4. Narodowy Program Ochrony Infrastruktury Krytycznej RP
- 5. Strategia Rozwoju Systemu Bezpieczeństwa Narodowego RP
- 6. Strategia Bezpieczeństwa Narodowego RP

7. Szymonik A., Organizacja i funkcjonowanie systemów bezpieczeństwa, Difin, Warszawa 2011.

Additional:

1. Dahlke Grzegorz, Zarządzanie bezpieczeństwem pracy i higieną pracy, WPP, Poznań 2013.

2. Sienkiewicz-Małyjurek Katarzyna, Krynojewski Franciszek, Zarządzanie kryzysowe w administracji publicznej, Wydawnictwo: Difin, s. 220, 2010.

Ficoń K., Inżynieria zarządzania kryzysowego. Podejście systemowe, BEL Studio, Warszawa 2016.
Serafin T., Parszowski S., Bezpieczeństwo społeczności lokalnych. Programy prewencyjne w systemie bezpieczeństwa, Difin, Warszawa 2011.

- 5. Skomra W., Ochrona infrastruktury krytycznej w systemie zarządzania kryzysowego, RCB.
- 6. Tyrała P., Zarządzanie kryzysowe, Wyd. Adam Marszałek, Toruń 2001.

Breakdown of average student's workload

	Hours	ECTS
Total workload	60	2,00
Classes requiring direct contact with the teacher	45	1,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	15	0,50