COURSE DESCRIPTION CARD - SYLLABUS

Course name

Decision's games

Course

Field of study

Safety Engineering

Area of study (specialization)

Security and Crisis Management

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

2/3

Profile of study

general academic

Course offered in

Polish

Requirements

elective

Number of hours

Lecture	Laboratory classes	Other (e.g. online)
	15	
Tutorials	Projects/seminars	

Number of credit points

1

Lecturers

Responsible for the course/lecturer:

Ph.D., D.Sc., Eng. Ewa Więcek-Janka

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Faculty of Engineering Management

ul. J. Rychlewskiego 2, 60-965 Poznań

Responsible for the course/lecturer:

Ph.D., Eng. Joanna Majchrzak

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Prerequisites

The student formulates opinions on the basis of group discussion, brainstorming, implemented SWOT and PEST analyzes, explain their applications and summarize and recommend corrective actions. The

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Course objective

Developing the potential of knowledge, skills and attitudes in making market and (especially crisis) management decisions based on the acquired knowledge and skills acquired at the first level of education at the university using decision games.

Course-related learning outcomes

Knowledge

The Student:

knows the issues of mathematical decision support and statistics [P7S_WG_01]

knows the issues of leadership and management, especially in the area of quality [P7S_WG_08]

knows contemporary development trends and best practices in the field of security systems [P7S_WK_02]

Skills

The Student:

can properly select sources and information derived from them, make an evaluation, critical analysis and synthesis of this information, formulate conclusions and exhaustively justify an opinion [P7S_UW_01]

is able to see and formulate system and non-technical aspects, as well as socio-technical, organizational and economic aspects in engineering tasks [P7S_UW_03]

can use research, analytical, simulation and experimental methods to formulate and solve engineering tasks, also with the use of information and communication methods and tools [P7S_UW_04]

can plan and carry out experiments, including measurements and computer simulations, interpret the obtained results and draw conclusions [P7S_UO_01]

is able to identify changes in requirements, standards, regulations, technical progress and the reality of the labor market, and on their basis determine the needs of supplementing own and other knowledge [P7S_UU_01]

Social competences

The Student:

is aware of the perception of cause-effect relationships in the implementation of the goals and the importance of the importance of alternative or competitive tasks [P7S_KK_01]

is aware of the recognition of the importance of knowledge in solving problems in the field of safety engineering and continuous improvement [P7S_KK_02]

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The laboratory will play a decision game and will be awarded on the basis of an oral and written report.

Rating range:

up to 50% of points - 2.0

51-60% points - 3.0

61-70% points - 3.5

71-80% points - 4.0

81-90% points - 4.5

91-100% points - 5.0

Programme content

1. Essence, goals, types of decisions

2. Deciding and decision-making processes

3. Features of the decision-making process

4. Classification of decisions

5. Criteria for making rational decisions

6. The shaping of the decision-making process

7. Models and decision-making methods

8. Decision rules

9. Barriers in making decisions

10. Risk and uncertainty in decision making

11. Game theory in decision making

12. Game concepts

13. Game history

14. Simulation games, seriously simulation games, management games

15. Conflicts in simulation games

16. Psychological aspects in simulation games

17. The course of simulation games

18. Inference based on the results of simulation games

Teaching methods

lecture, talk, teamwork, presentation

Bibliography

Basic

Więcek-Janka, E. (2011). Games and Decisions, Poznań: Wydawnictwo Politechniki Poznańskiej.

Additional

Breakdown of average student's workload

	Hours	ECTS
Total workload	30	1,0
Classes requiring direct contact with the teacher	15	0,5
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests, project preparation) [1]	15	0,5

[1] delete or add other activities as appropriate