



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Project management in preparation for emergency situations

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### Course

Field of study

Year/Semester

Safety Engineering

2/3

Area of study (specialization)

Profile of study

Safety and Crisis Management

general academic

Level of study

Course offered in

Second-cycle studies

Polish

Form of study

Requirements

full-time

elective

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### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars

15

15

### Number of credit points

2

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### Lecturers

Responsible for the course/lecturer:

Responsible for the course/lecturer:

PhD DSc Eng Magdalena K. Wyrwicka, PUT Prof.

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### Prerequisites

Basic knowledge of ergonomics, safety and communication

### Course objective

Ability to proactively prepare an enterprise related to emergencies

### Course-related learning outcomes

Knowledge

Student knows the issues of ergonomics, macroergonomics and occupational safety and design methodologies taking into account the principles of safety, and knows the issues of design in relation to products and processes.

Skills

Student is able to notice and formulate system and its non-technical aspects in engineering tasks, as well as socio-technological, organizational and economic aspects, and is able to use research, analytical, simulation and experimental methods to formulate and solve engineering tasks, also using information and communication methods and tools



He is also able to critically analyze the functioning and assess - in conjunction with Security Engineering - existing technical solutions, in particular machines, devices, objects, systems, processes and services, and is able to plan and conduct experiments, including computer measurements and simulations, interpret the results obtained and draw conclusions.

Student knows how to identify changes in requirements, standards, regulations, technical progress and the reality of the labor market, and based on them determine the needs to supplement own and other knowledge

#### Social competences

Student is aware of the perception of cause-and-effect relationships in achieving the set goals and ranking the significance of alternative or competitive tasks, understands the non-technical aspects and effects of engineering activities, including its impact on the environment and the associated responsibility for decisions. Student is also able to plan and manage business ventures.

#### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

assessment of effects, activity and commitment while solving cognitive tasks (exercises)

assessment of the presentation of the project prepared using IT support (laboratories)

#### Programme content

Determining the requirements and conditions for the project and specifying the purpose of the project. Feasibility analysis. Project outline. Project planning. The division of tasks. Resource Planning. Methods for estimating the duration and costs of project tasks. Project network diagram. Critical Path. Project schedule (Gantt chart). The use of IT support of project management. Risk analysis and interference prevention plans. Project implementation and control. Project controlling.

#### Teaching methods

auditorium exercises, laboratory method

#### Bibliography

##### Basic

Shenhar A.J., Dvir D., Nowe spojrzenie na zarządzanie projektami. Sukces wzrostu i innowacji dzięki podejściu romboidalnemu, Wyd. APN Promise, Warszawa 2008

Wysocki R., Efektywne zarządzanie projektami. Tradycyjne, zwinne, ekstremalne, Wyd. Helion, Gliwice 2013

Wyrwicka M., Zarządzanie projektami, Wyd. Politechniki Poznańskiej, Poznań 2011.

##### Additional

Kozarkiewicz A., Zarządzanie portfelami projektów, PWN, Warszawa 2012



Wyrwicka M.K., Proaktywność jako przesłanka inteligencji przedsiębiorstwa [w:] Organizacja inteligentna, C. Suszyński, G. Leśniak-Łebkowska (red.), Oficyna Wyd. SGH, Warszawa 2016, s. 31-44

ISO 45 001:2018

### Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	30	1,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>	20	1,0

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