STUDY MODULE DESCRIPTION FORM

Name of the module/subject **Property security techniques**		Code **1010325341010326103**
Field of study **Electrical Engineering**	Profile of study (general academic, practical) **(brak)**	Year /Semester **2 / 4**
Elective path/specialty **Electrical and Computer Systems in**	Subject offered in: **Polish**	Course (compulsory, elective) **obligatory**
Cycle of study: **Second-cycle studies**	Form of study (full-time,part-time) **part-time**	
No. of hours Lecture: **-** Classes: **-** Laboratory: **-** Project/seminars: **9**		No. of credits **1**
Status of the course in the study program (Basic, major, other) **(brak)**	(university-wide, from another field) **(brak)**	
Education areas and fields of science and art **technical sciences** **Technical sciences**		ECTS distribution (number and %) **1 100%** **1 100%**

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Basic knowledge of electrical engineering, electronics and information technology, including installation.
2	**Skills**	The ability to understand and interpret knowledge transmitted in the classroom. The ability to effectively self-education in a field related to the chosen field of study.
3	**Social competencies**	The awareness of the need to broaden their competence, their willingness to cooperate within the team.

Assumptions and objectives of the course:

Advanced knowledge of theoretical and practical problems associated with the construction components, subassemblies and systems of modern security of property and people.

Study outcomes and reference to the educational results for a field of study

Knowledge:

1. has an extended knowledge in the construction and design of complex microprocessor systems in particular for measurement and control - [K_W08++]
2. has knowledge of the capabilities and limitations of the methods used in computer assisted design in electrical engineering - [K_W18++]

Skills:

1. can apply knowledge of security systems, security cooperation with other systems - [K_U11++]
2. can formulate and solve problems related to modeling and design elements, electrical equipment and systems, and design of their manufacturing process - [K_U15+++]

Social competencies:

1. able to think and act in an entrepreneurial manner in the area of systems analysis and systems in buildings - [K_K01+++]

Assessment methods of study outcomes

http://www.put.poznan.pl/

Class Project:
- Test and rewarding knowledge necessary for the accomplishment of the problems in the area of project tasks,
- Continuous assessment for each course - rewarding the increase in the ability to use principles and methods have met.
- Assess the knowledge and skills related to the implementation of the project tasks.

Get extra points for activity in the classroom, and in particular for:
- Proposing to discuss additional aspects of the subject,
- The effectiveness of applying knowledge when solving a given problem,
- Comments relating to the improvement of teaching materials,
- Developed aesthetic care tasks - as part of self-study.

Course description

Project: The history of electronic systems for property protection. Legal status. Designing alarm and property protection. Realization examples.

Basic bibliography:

1. Stanisławek R., Integracja systemów bezpieczeństwa w obiekcie, Systemy Alarmowe, 2002
2. Markiewicz H., Instalacje elektryczne, Wydawnictwo Naukowo-Techniczne, Warszawa, 2006
3. Petykiewicz P., Nowoczesna instalacja elektryczna w inteligentnym budynku, COSiW SEP, Warszawa, 2001.
4. Aktualny wykaz norm i opracowań.

Additional bibliography:

1. Nawrocki W., Sensory i systemy pomiarowe, Wydawnictwo Politechniki Poznańskiej, Poznań, 2006
2. www.satel.pl
3. http://alarmserwis.pl
4. Diploma theses.
5. Internet.

Result of average student's workload

Activity	Time (working hours)
1. participation in class of project	9
2. consultations	8
3. preparing to pass	8
4. pass	2
5. the preparation of the project	12

Student's workload

Source of workload	hours	ECTS
Total workload	39	1
Contact hours	19	1
Practical activities	29	1

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