STUDY MODULE DESCRIPTION FORM

Name of the module/subject **Software Engineering**		Code **1011105261011160082**
Field of study **Engineering Management - Part-time studies -**	Profile of study (general academic, practical) **(brak)**	Year /Semester **3 / 6**
Elective path/specialty **-**	Subject offered in: **Polish**	Course (compulsory, elective) **obligatory**
Cycle of study: **First-cycle studies**		Form of study (full-time,part-time) **part-time**

No. of hours				No. of credits
Lecture: **12** Classes: **-** Laboratory: **-** Project/seminars: **14**				**2**

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 %**)** **2 100%** **2 100%**

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Basic course in the computer management systems design
2	**Skills**	Efficient use of design supporting tools from Visio and skill from the range of database design
3	**Social competencies**	Understanding of the need of skills from the area of design and management of the information system implementation

Assumptions and objectives of the course:

The course is aimed at presenting students methods and case studies from the scope of software engineering applied in the design of information management systems

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

Knowledge:

1. The student knows instruments for amassing, processing data and selecting and distributing information - [K1A_W11]

2. The student has basic knowledge on information life cycle in information management systems - [K1A_W22]

3. The student has basic knowledge necessary for understanding software engineering methods in context of engineering tasks - [K!A_W24]

Skills:

1. The student is able to plan, simulate, interpret and draw conclusions from the range of software engineering   - [K!A_U12]

Social competencies:

1. The student is aware of the responsibility for own work and he is ready to follow rules of the team work and taking responsibility for tasks realized within the group   - [K1A_K02]

2. The student is able to notice relations causally consecutive in the realization of put purposes and put the importance of alternative or competitive objectives into proper hierarchy - [K1A_K03, K01-InzA_K2]

Assessment methods of study outcomes

Forming assessment:

Project: evaluation of current progress of the construction of a logical model of an application prepared within classes on Access database

Lecture: questions asked during the lecture, which refer to previous lectures on the subject

Final assessment:

Project: Final evaluation of the logical project of the application prepared along the course of project classes from the range of Access databases

Lecture: exam

Course description

Construction, implementation and modification of an information system; integration of information systems; instruments for software engineering, functional requirements, discipline requirements, system requirements of the user, requirements engineering process, requirement management, construction of software prototypes, software customization, management of information system implementation,

personnel management of IT projects - P-CMM model; estimation of software costs.

Teaching methods:

1. method of demonstration with instruction

2. the method of an individual project

3. the method of the experiment

Basic bibliography:

1. Borucki A. (2012). E-Biznes. Wydawnictwo Politechniki Poznańskiej. Poznań.

2. Kolbusz E., Olejniczak W., Szyjewski Z. (2005). Inżynieria systemów informatycznych w e-gospodarce. PWE. Warszawa.

3. Sommerville I. (2003). Inżynieria oprogramowania. WNT. Warszawa.

4. Jaszkiewicz A. (1997). Inżynieria oprogramowania. Helion. Gliwice.

Additional bibliography:

1. Szpringer W. (2012). Innowacyjne modele e-biznesu. Difin. Warszawa.

2. Flasiński M.(2008). Zarządzanie projektami informatycznymi.PWN

Result of average student's workload

Activity	Time (working hours)
1. Lecture	12
2. Project	14
3. Preparation for the project	15
4. Consultations	13
5. Final assessment and exam	5

Student's workload

Source of workload	hours	ECTS
Total workload	60	2
Contact hours	50	2
Practical activities	14	0