STUDY MODULE DESCRIPTION FORM

Name of the module/subject		Code
Modelling and analysis of information systems		**1010332411010335194**
Field of study: **Information Engineering**	Profile of study (general academic, practical): **(brak)**	Year /Semester: **1 / 1**
Elective path/specialty: **-**	Subject offered in: **polish**	Course (compulsory, elective): **obligatory**
Cycle of study: **Second-cycle studies**	Form of study (full-time,part-time): **full-time**	
No. of hours: Lecture: **2** Classes: **-** Laboratory: **2** Project/seminars: **-**		No. of credits: **6**
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**		ECTS distribution (number and %): **6 100%**

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	K_W08 K_W09
2	**Skills**	K_U01 K_U10
3	**Social competencies**	x

Assumptions and objectives of the course:

The aim of the course is to transfer knowledge about construction and effective usage of analytical, design and implementation methods in the process of design of IT systems.

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

Knowledge:

1. K_W05 - [-]
2. K_W13 - [-]

Skills:

1. K_U05 - [-]
2. K_U11 - [-]

Social competencies:

1. K_K01 - [-]

Assessment methods of study outcomes

Lecture: written exam. More than 50% of all points is necessary for positive result.
Laboratory: tests, exercises assessment, reports assessment.

Course description

Lecture. Information system, informative system. Architecture of information systems. Graphical User Interfaces (GUIs). Petri nets ? modeling and analysis of systems. Design phase and implementation phase of the developed software. Software documentation, testing, installation and conservation phases. Management of a programming project. Schedules and monitoring of a software development process. Issues of quality and risk management in a programming project. Analysis of methods of development of complex systems.

Lab. Elaborating of system models, analysis of completeness of the elaborated models. Complementing a model. Project of an interface. Implementation of an interface. Implementation of modules of a model. Comparison of assumptions with the completed system.

Laboratorium. Opracowywanie modeli systemów, analiza kompletności utworzonych modeli. Uzupełnienie modelu. Projekt interfejsu. Implementacja interfejsu. Implementacja modułów modelu. Porównanie założeń ze zrealizowanym systemem.

Basic bibliography:

1. Modelowanie i implementacja systemów informatycznych, Trzaska M., Wyd. PJWSTK, Warszawa 2008.

2. Modelowanie systemów informatycznych w języku UML 2.1, Dąbrowski W., Stasiak A., Wolski M., Wydawnictwo Naukowe PWN SA, Warszawa 2007.

Additional bibliography:

1. Sieci Petriego w modelowaniu i analizie systemów współbieżnych, Szpyrka M., WNT, Warszawa, 2008.

Result of average student's workload

Activity	Time (working hours)
1. Lectures	30
2. Laboratory	30
3. Preparation to laboratory	30
4. Preparation of laboratory reports	25
5. Exam preparation	25
6. Consultations and exam	10

Student's workload

Source of workload	hours	ECTS
Total workload	150	6
Contact hours	70	3
Practical activities	85	3