

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Modelling and analysis of information systems		Code 1010335511010335194
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) part-time	
No. of hours Lecture: 16 Classes: - Laboratory: 16 Project/seminars: -		No. of credits 5
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		ECTS distribution (number and %)
Responsible for subject / lecturer: dr inż. Ewa Idzikowska email: ewa.idzikowska@put.poznan.pl tel. 61 665 35 31 Wydział Elektryczny ul. Piotrowo 3A 60-965 Poznań		
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	16	
2. Laboratory	16	
3. Preparation to laboratory	48	
4. Preparation of laboratory reports	30	
5. Exam preparation	30	
6. Consultations and exam	10	
Student's workload		
Source of workload	hours	ECTS
Total workload	150	6
Contact hours	42	3
Practical activities	94	3