

Faculty of Computer Science and Management**SUBJECT CARD****Name in Polish** Modelowanie systemów informacyjnych zarządzania**Name in English** Management Information Systems Modeling**Main field of study (if applicable):** Management**Specialization (if applicable):** Business Information Systems**Level and form of studies:** 2nd level, full-time**Kind of subject:** obligatory**Subject code** IEZ1203**Group of courses** NO

	Lecture	Classes	Laboratory	Project	Seminar
Number of hours of organized classes in University (ZZU)	15		15		
Number of hours of total student workload (CNPS)	60		60		
Form of crediting	crediting with grade		crediting with grade		
For group of courses mark (X) final course					
Number of ECTS points	2		2		
including number of ECTS points for practical (P) classes			2		
including number of ECTS points for direct teacher-student contact (BK) classes	0.5		0.5		

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PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. Knowledge of the software user requirements analysis methods
2. Basic knowledge and skills of the computer using

SUBJECT OBJECTIVES

C1 Getting knowledge on skills building models of management information systems in different functional areas of the organization.

C2 Getting the skills to apply the right tools for computer-aided modeling of management information systems.

SUBJECT EDUCATIONAL EFFECTS

relating to knowledge:

PEK_W01 - student has ordered knowledge of the methods and techniques of building models of systems management functions with the structural approach.

PEK_W02 - student has ordered knowledge of the methods and techniques of building data models of information systems management at the structural approach.

relating to skills:

PEK_U01 - student can create a models of simple computer systems to support management solutions to common problems and issues in the various functional areas of the organization.

PEK_U02 - student can use software tools to support the design of computer systems models.

relating to social competences:

PROGRAMME CONTENT		
Form of classes - lecture		Number of hours
Lec 1	Introduction. Repository.	2
Lec 2	Business function modeling -FHD.	2
Lec 3	Function dependency and events – FDD.	2
Lec 4	Basic rules and definitions for entities, relationships, attributes. Multiple and recursive relationship, generalization, aggregation.	2
Lec 5	Entity Relational Model – ERD. Classical structures and generic patterns (ERD).	1
Lec 6	Consistence and completeness of the structured model checking methods: F to E, DFD.	2
Lec 7	Rules of the Transformation from ERD to logical relational database design.	2
Lec 8	Test	2
	Total hours	15
Form of classes - class		Number of hours
Cl 1		
Cl 2		
Cl 3		
	Total hours	
Form of classes - laboratory		Number of hours
Lab 1	Case study “Hydraulics”: business terms - repository.	2
Lab 2	The subject (functional) areas extraction. Decomposition and grouping functions (FHD).	2
Lab 3	Analysis of the interdependencies between functions and the events – process model building (FDD).	2
Lab 4	Analysis of information needs: an entity type identification. Analysis of the business relationship – definition and representation (ERD)	2
Lab 5	Analysis of the movement of data between processes. Consistency and completeness checking.	2
Lab 6	Using the basic technique of logical relational database design	2
Lab 7	Analysis of rules and details of business functions – the usage of an entity type by a function	2
Lab 8	Signing indexes	1
	Total hours	15
Form of classes - project		Number of hours
Proj 1		

Proj 2		
Proj 3		
	Total hours	
Form of classes - seminar		Number of hours
Sem 1		
Sem 2		
Sem 3		
	Total hours	
TEACHING TOOLS USED		
N1. computer N2. projector N3. Ms PowerPoint, Ms Word, Ms Visio N4. blackboard or whiteboard		

EVALUATION OF SUBJECT EDUCATIONAL EFFECTS ACHIEVEMENT

Evaluation (F – forming (during semester), P – concluding (at semester end))	Educational effect number	Way of evaluating educational effect achievement
F1	PEK_U01, PEK_U02	report
F2	PEK_U01, PEK_U02	report
F3	PEK_U01, PEK_U02	report
P1	PEK_W01, PEK_W02	test
PLec = P1 PLab = F1+F2+F3		

PRIMARY AND SECONDARY LITERATURE

PRIMARY LITERATURE:

- [[1] Barker R., CASE*Method – Entity Relationship Modelling, Addison-Wesley PC , 1989
[[2] Barker R., Longman C., CASE*Method – Function and Process Modelling, Addison-Wesley PC , 1989

SECONDARY LITERATURE:

- [[1] Gane C., Sarson T., Structured Systems Analysis - Tools and Techniques, Prentice-Hall, Englewood Cliffs, New Jersey, 1989

SUBJECT SUPERVISOR (NAME AND SURNAME, E-MAIL ADDRESS)

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MATRIX OF CORRELATION BETWEEN EDUCATIONAL EFFECTS FOR SUBJECT
Management Information Systems Modeling
AND EDUCATIONAL EFFECTS FOR MAIN FIELD OF STUDY **Management**
AND SPECIALIZATION **Business Information Systems**

Subject educational effect	Correlation between subject educational effect and educational effects defined for main field of study and specialization (if applicable)**	Subject objectives***	Programme content***	Teaching tool number***
PEK_W01 (knowledge)	S2_BIS_W04	C1	Lec1, Lec2, Lec6	N1, N2, N3, N4
PEK_W02	S2_BIS_W04	C1	Lec3, Lec4, Lec 5, Lec6, Lec 7	N1, N2, N3, N4
PEK_U01 (skills)	S2_BIS_U03	C2	Lab 1, Lab 2, Lab 3, Lab 4, Lab 5, Lab 6, Lab 7	N1, N2, N3, N4
PEK_U02	S2_BIS_U03	C2	Lab 1, Lab 2, Lab 4, Lab 6, Lab7	N1, N2, N3, N4
PEK_K01 (competences)	K2_ZARZ_K05			

** - enter symbols for main-field-of-study/specialization educational effects

*** - from table above