COURSE GUIDE

Subject name	**TECHNICAL APPLICATION OF DATABASES**
Course of study	**Quality and Production Management**
The form of study	**Full-time**
Level of qualification	**I**
Year	**II**
Semester	**3**
The implementing entity	**Institute of Management Information Systems**
The person responsible for preparing	**Paweł Kobis, Ph.D.**
Profile	**General Academic**
Course type	**elective**
ECTS points	**4**

TEACHNING METHODS – NUMBER OF HOURS PER SEMESTER

LECTURE	CLASS	LABORATORY	PROJECT	SEMINAR
15E		**30**		

COURSE AIMS

C1. Presentation of database systems that are applied in websites and web applications
C2. Developing an ability of practical application of selected database types

ENTRY REQUIREMENTS FOR KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. Student possesses basic knowledge in the scope of using a computer and operating system
2. Student possesses an ability to use in practice knowledge acquired during lectures.

LEARNING OUTCOMES

EK1 – Student can create a virtual internet account to create websites
EK2 – Student can work in the application environment for databases creation
EK3 – Student can create simple web applications based on the database environment MySQL and PHP programming language

COURSE CONTENT

Type of teaching – LECTURES 15 HOURS	Number of hours
W1 –General terms concerning databases	1
W2–Relational databases	1
W3–MySQL database environment	1
W4–Creating databases in the remote environment and basic language commands of MySQL	1
W5– PHP language – basic information	1
W6 - PHP language – elements of programming and using a database	1
W7 –Integration of PHP language and MySQL database	1
W8–Sample uses of PHP and MySQL	1
W9, W10–Non-relational databases in dispersed systems	2
W11, W12–Databases in socalled „officesystems”	2
W13–Creatingdatabases in cloudcomputing model	1
W14 –Types of databasesused in CMS systems and productionsystems	1
W15 –Database systems in ERP classsystems	1
Type of teaching – LABORATORY30 HOURS	**No. of hours**
L1, L2 - Classes introducing the problem domain, principles of carrying out laboratory classes and their evaluation, statute of the computer workshop.	2
L3 – Setting up a hosting account and domain. Defining safe access passwords.	1
L4 – Work in the PHP My Admin environment	1
L5, L6, L7, L8 - Creating simple scripts in PHP language	4
L9, L10, L11, L12, L13, L14 - Creating a coherent database environment with the use of MySQL – creating database, tables and records. Operations on the database with the use of SQL language.	6
L15, L16, L17, L18 – Integration of PHP and MySQL – creating scripts cooperating with the MySQL database	4
L19 – L28 – Creating a website on the basis of PHP and MySQL – an IT project – independent work	10
L29, L30 – Assessment of the website and granting credits	2

TEACHNING TOOLS

1. Scripts, electronic documentation of the application
2. Computer equipment
3. Internet applications, PHP programming environment, MySQL database system

WAYS OF ASSESSMENT (F – FORMATIVE, P – SUMMATIVE)

F1. Presentation of practical abilities of using PHP and MySQL
P1. Assessment of the IT project

STUDENT WORKLOAD

Form of activity		Average number of hours to complete the activity		
		[h]	ECTS	ECTS
Contact hours with the teacher	LECTURE	**15**	**0,6**	**1,32**
Preparation to the exam		**15**	**0,6**	
Presence in the exam		**3**	**0,12**	
Contact hours with the teacher	CLASSES	**30**	**1,2**	**2**
Preparing tolaboratory		**20**	**0,8**	
Getting acquainted with the indicated literature		**10**	**0,4**	**0,4**
Presenceatconsultationhours		**7**	**0,28**	**0,28**
TOTAL NUMBER OF HOURS / ECTS CREDITS FOR THE COURSE		**∑ 100 h**	**∑ 4**	

BASIC AND SUPPLEMENTARY RESOURCE MATERIALS

Basic resources:	
1.	iCode Academy, *PHP for Beginners: Your Guide to Easily Learn PHP Programming In 7 Days***,** 2017
2.	Nixon R. *Learning PHP, MySQL&JavaScript*, O'Reilly Media, Sebastopol 2015
Supplementary resources:	
1.	Welling L., Thomson L., *PHP and MySQL Web Development. Fifth Edition*., Addison-Wesley 2017
2.	Marty M., *PHP and MySQL Web Development: A Beginner's Guide*, McGraw-Hill Education 2015.

TEACHERS (NAME,SURNAME, ADRES E-MAIL)

1. Paweł Kobis pawel.kobis@wz.pcz.pl

MATRIX OF LEARNING OUTCOMES REALISATION

Learning outcome	Reference of given outcome to outcomes defined for whole program	Course aims	Course content	Teaching tools	Ways of assessment
EK1	K_W08, K_U07, K_U8, K_K03	C1, C2	W1-W4, W9-W15, L3	1,2,3	F1, P1
EK 2	K_W08, K_U07, K_K03	C2	W3, W4, L4, L9-L14	1,2,3	F1, P1
EK 3	K_W08, K_U07, K_K03	C2	W3-W8, L3 – L28	1,2,3	F1, P1

FORM OF ASSESSMENT - DETAILS

	grade 2	grade 3	grade 4	grade 5
Effect 1	Student cannot create a virtual internet account to create websites	Student knows selected steps indispensable to create a virtual internet account to create websites	Student can create a virtual internet account to create websites with a little help of the teacher	Student can create a virtual internet account to create websites
Effect 2	Student cannot operate the application environment for creating databases	Student knows basic functions of the application environment for creating databases	Student knows majority of the functions of the application environment for creating databases	Student can operate the application environment for creating databases
Effect 3	Student cannot create simple web applications on the website based on database MySQL environment and PHP programming language	Student can create fragments of elementary web applications on the website based on database MySQL environment and PHP programming language	Student can create elementary web applications on the website based on database MySQL environment and PHP programming language	Student can create simple web applications on the website based on database MySQL environment and PHP programming language

ADDITIONAL USEFUL INFORMATION ABOUT THE COURSE

1. Information where presentation of classes, instruction, subjects of seminars can be found, etc. - information presented to students in class, if required by the formula classes are sent electronically to the e-mail addresses of individual dean groups - information can be found on the website of the department.
2. Information about the place of classes - - information can be found on the website of the department.
3. Informationabout the timingof classes(day of the week / time)- information can be found on the website of the department.
4. Informationabout the consultation(time +place) -Are givento students forthe first class, can be found onthe website ofthe departmentandshowcaseinformationthe Instituteof Management Information Systems(4th floor).

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Coordinator