MODULE/ COURSE FORM

A. general information

To be completed by Course Team							
	Module name :					Module code: M23	
	Course name: Administration and Management of Oracle Database					Course code:	
	Faculty: **INSTITUTE OF APPLIED INFORMATICS**						
	Field of study: **INFORMATICS**			Level of education: **first**			
	Mode of study : **Full-time**	Learning profile: **Practical**		Speciality:: **Database design and computer application programming**			
	Year/ semester: **3/6**	Module/ course status:: **Mandatory**		Module/ course language: **Polish/English**			
	Type of classes	lecture	lessons	lab	project	Tutorial	other (please specify)
	Course load	**15**		**30**			

Module/ course objectives	Familiarization with the structures, tools and techniques of Oracle database administration
Entry requirements	Knowledge of relational databases, SQL, basic knowledge of Oracle tools and programming in PLSQL

LEARNING OUTCOME

Nr	LEARNING OUTCOME DESCRIPTION	Learning outcome reference
1	Identifies elements of physical and logical structure of the Oracle database	K_W05, K_W07 K_W14
2	Knows the basic queries modifying instance and database and knows the basic perspectives of system tables	K_W05, K_W07 K_W14
3	Understands the principles of backup and restore, and start and stop the server instance Oracle databases.	K_W05, K_W07 K_W14
4	Uses the tools of administration and monitoring of Oracle database server	K_U18
5	Construct SQL queries and PLSQL procedures in the administration and monitoring instances and Oracle database structures	K_U01, K_U18
6	It develops and implements simple safety scenarios for instance and Oracle database	K_U10, K_U18
7	It describes and differentiates the own knowledge and skills.	K_K01
8	Declares the need for continuous training and professional development	K_K01
9	Understands aspects of information confidentiality and security of data storage	K_K02, K_K03

Assessment method	Learning outcome number
1. Theoretical and practical final exam of the lecture material	01, 02, 03, 09
2. Reports from completed homework	05, 06, 08

3. Reports from completed laboratory exercises	04, 05, 06, 07

STUDENT WORKLOAD		
	Number of hours	
	In all	including practical
Participation in lectures	15	15
Independent study of lecture topics	15	15
Participation in tutorials, labs, projects and seminars	30	30
Independent preparation for tutorials*	30	30
Preparation of projects/essays/etc. *	40	40
Preparation/ independent study for exams	15	15
Participation during consultation hours	5	5
Other	0	0
TOTAL student workload in hours	150	150
Number of ECTS credit per course unit	**6 ECTS**	
Number of ECTS credit associated with practical classes	**6 ECTS**	
Number of ECTS for classes that require direct participation of professors	**2 ECTS**	

B. details information

<table>
<tr><td rowspan="9">To be completed by Course Team</td><td colspan="5">Module name :</td><td colspan="3">Module code:
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<tr><td colspan="2">Module/ course coordinator</td><td colspan="7">dr inż. Jerzy Buriak</td></tr>
<tr><td colspan="2">Lecturer</td><td colspan="7">dr inż. Jerzy Buriak</td></tr>
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CURRICULUM CONTENTS

Lecture

- Exploring the Oracle Database Architecture
- Preparing the Database Environment and Creating an Oracle Database
- Managing Database Instances
- Configuring the Oracle Network Environment
- Managing Database Storage Structures
- Administering User Security
- Managing Data Concurrency
- Managing Undo Data
- Implementing Oracle Database Auditing
- Database Maintenance and Performance Management
- Backup and Recovery Concepts
- Performing Database Backups
- Performing Database Recovery
- Moving Data

laboratory

Laboratories complements the lecture. They will present in a practical way all the issues discussed during the lecture. Students perform tasks and examples of Oracle Academy course: D50102GC11P Oracle Database 11g: Administration Workshop I.

Students are encouraged to do self-study using courses available within the Oracle Academy:

D50079GC20 Oracle Database 11g: Administration Workshop II DBA Release 2

D64256GC11 Oracle Database: Program with PL / SQL

D52601GC10P Oracle Database 11g: Advanced PL / SQL Angielski Student Subscription

Project (other)

Basic literature	Loney K.: Oracle Database 11g The Complete Reference, Oracle Press, 2010, ISBN-13: 978-0071598750, ISBN-10: 0071598758 Bryla B., Loney K.: Oracle Database 12c DBA Handbook, Oracle Press, 2010, ISBN-13: 978-0071496636, ISBN-10: 0071496637
Additional literature	McLaughlin M.: Oracle Database 11g PL/SQL Programming Workbook, Oracle Press, 2010, ISBN-13: 978-0071494458, ISBN-10: 0071494456
Teaching methods	1) lecture and multimedia presentation. 2) exercises in the computer laboratory. 3) Blended-Learning 4) homework to self-realization 5) reporting
Form and terms of an exam	50% of the grade is the result of the final exam of the lecture material. 56% of points is a minimum to pass the exam. 50% of the grade is a rating of the laboratory. Laboratories are assessed on the basis of reports from realized in class exercises and homework assignments