

COURSE SYLLABUS

University	UNIVERSITY OF ORADEA
Faculty	FACULTY OF ENERGY ENGINEERING AND INDUSTRIAL MANAGEMENT
Study program*	<i>INDUSTRIAL ECONOMICS ENGINEERING</i>

I. Course Name: Applied informatics

II. Course Details

Code	Semester	No of hours/week				
		Credits	Lecture	Seminar	Laboratory	Project
IEMI-0771	VI	4	2	-	2	-

III. Course coordinator (title, name, surname, e-mail):

IV. Course objectives

The course provides the background necessary to understand the role of information systems in organizations and to use computer tools and technology to solve business problems. Topics include the organizational and technical foundations of information systems, information systems design theory, and fundamental database principles. Microsoft Access is used to demonstrate selected concepts.

V. Course content	No. of hours
V.1. Lecture (chapters/subchapters and paragraphs)	
Information Systems: purpose and components Data vs. information vs. knowledge Information and information quality Information classification Information flow and information processing Information Systems and the System Development Life Cycle (SDLC) The role of MIS and core functions of MIS	8
Computer systems: introduction and core concepts Components of computer systems Classification of computer systems Design and implementation of computer systems How technology is changing work and organizations	4
Databases: fundamental concepts Microsoft Access databases Creating a database in Access Working with tables Working with forms Working with reports Working with queries	16
V.2. Laboratory	
1. Examine fundamental database concepts and explore the Microsoft Access environment; design a simple database in Microsoft Access.	2
2. Build a new database with related tables; manage data within a table.	10
3. Design a form.	8
4. Generate a report.	4
5. Query a database using different methods.	4

VI. Bibliography

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VII. Grading criteria

Activities	Assesment	% of final grade

Exam	<p style="text-align: center;">Quizzes</p> <p style="text-align: center;">1. Requirements to obtain the minimum passing grade For grade 5: at least 10 correct answers.</p> <p style="text-align: center;">2. Requirements to obtain the maximum grade For grade 10: 20 correct answers.</p>	70%
Seminar/Laboratory/Project	Students will submit an assignment each week, through the University of Oradea e-learning platform. The evaluation of the laboratory activity will be based on weekly assignments (15%) and on active participation in discussions (15%).	30%

VIII. Learning outcomes:

Upon completion of the course, students will be able to:

- distinguish and explain the differences between data, information and knowledge;
- describe the impact of Information Systems on basic business processes and explain the difference between functional and cross-functional information flows;
- explain the importance of implementing security measures for business information systems;
- identify and describe the relationships among entities and attributes in a database management system and apply the principles of cardinality;
- examine fundamental database concepts and design simple relational databases;
- create, modify and manage databases and their objects (tables, forms, queries and reports) using Microsoft Access;
- use information systems to support managerial decision-making processes.

Course coordinator,
Assoc.Prof .Dr. Liliana Indrie