

COURSE SYLLABUS

University	UNIVERSITY OF ORADEA
Faculty	FACULTY OF ENERGY ENGINEERING AND INDUSTRIAL MANAGEMENT
Study program*	INDUSTRIAL ECONOMICS ENGINEERING

I. Course Name: Applied informatics

II. Course Details

No of hours/week						
Code	Semester	Credits	Lecture	Seminar	Laboratory	Project
IEMI-0340	II	5	2	-	2	-

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

IV. Course objectives

This course introduces students to computers and their importance in the modern world. The fundamentals of computing are taught through lectures and practical assignments. Various computer applications are used to help students develop practical skills. The course will enable students to access and use word-processing tools, apply basic formulas in Excel for simple calculations, link data between worksheets, search for information in large data sets using different functions, use filtering and subtotal tools to organize and display data clearly, and create PowerPoint presentations that integrate text, images, graphics, and spreadsheet tables.

V. Course content	No. of hours
V.1. Lecture (chapters/subchapters and paragraphs)	
1. Computer architecture	2
2. Computer Hardware Basics and Their Components	2
3. - Operating systems and user interfaces - Introduction to the Windows graphical user interface (GUI) - Working with File Explorer	2
4. Word Processing: Launch Word and navigate the editing interface; create and edit Word documents; use proofing tools; apply character formatting and themes; set and modify tab stops; format paragraphs; preview and print documents; work with columns, pictures, diagrams, and charts; create basic tables; use templates and wizards; compare and merge documents; work with drawing objects and graphics; use spelling and grammar tools; manage printing options and document views.	10
5. Microsoft Excel: Introduction to Microsoft Excel; perform basic arithmetic operations (add, subtract, multiply, divide); use data validation tools; sort and filter data; apply formulas and functions; use mathematical, statistical, logical, and text functions; create different types of charts; search for values using VLOOKUP and HLOOKUP; create and format PivotTables.	8
6. PowerPoint Create a PowerPoint presentation from scratch; choose a theme; insert new slides; add and format text; add pictures, charts and graphs; apply animations to text, shapes and images.	4
V.2. Laboratory	
1. Basic structure of computer hardware. Computer hardware components.	1
2. Operating systems and user interfaces. Introduction to the Windows GUI. Working with File Explorer.	1
3. Creating, editing, formatting and saving a Word document.	2
4. Inserting pictures in Word. Creating a calendar in Word using tables.	2
5. Creating a table: <i>Activity Plan for 2025</i> (page header and footer included).	2
6. Using the Draw Tools in Word to create drawing objects.	2
7. Inserting equations in Microsoft Word.	2
8. Excel formulas and functions – introductory examples.	6
9. Creating charts in Excel – types and examples.	4
10. Conditional formatting and PivotTables.	2

11. Creating series in Excel (Linear, Growth, Date, Autofill).	2
12. Creating a PowerPoint presentation – examples.	2

VI. Bibliography

Bibliografie

- Băduț, M. (2012). *Calculatorul în trei timpi*. Iași: Editura Polirom.
- Constantinescu, R., & Dănăilă, I. (2017). *ECDL Calcul tabelar. Microsoft Excel 2010*. București: Editura ECDL România.
- Constantinescu, R., & Dănăilă, I. (2018). *Manual ECDL Editare de text – Microsoft Word 2019*. București: Editura ECDL România.
- Constantinescu, R., & Dănăilă, I. (2020). *Manual ECDL Calcul tabelar – Microsoft Excel 2019*. București: Editura ECDL România.
- Constantinescu, R., & Dănăilă, I. (2020). *Manual ECDL Prezentări – Microsoft PowerPoint 2019*. București: Editura ECDL România.
- Codres, D., Codres, M., Popescu, E., & Vlad, M. (2010). *Inițiere în Excel, PowerPoint și Access*. București: Editura Else.
- Dănăilă, I. (2018). *ECDL Calcul tabelar. Microsoft Excel 2019*. București: Editura ECDL România.
- Ionescu, B. S. (coord.), Rîndașu, S., & Barna, L. E. L. (2021). *Excel aPROFundat*. București: Editura ASE.
- Indrie, L. (2007). *Bazele informaticii și tehnologia informației*. Oradea: Editura Universității din Oradea.
- Indrie, L. (2025). *Informatică aplicată. Note de curs*. Platforma e-learning UO.
- Lambert, J. (2019). *Microsoft Word 2019 Step by Step*. Washington, D.C.: Microsoft Press.
- Lică, O. I., Lică, M., & Nuță, I. (2009). *Prietenul meu, calculatorul. Să învățăm Word, Excel și Internet*. Craiova: Editura Aius.
- Sagman, S. (2004). *Microsoft Office 2003 pentru Windows. Ghid de învățare rapidă prin imagini*. București: Editura Corint.
- Tudor, V. (2023). *Excel 2023. Curs pentru începători (învață rapid și eficient)*. București: Editura L&S Soft.
- Tudor, V. (2024). *Word. Curs pentru începători. Învăță rapid și eficient*. București: Editura L&S Soft.
- Weikler, S. (2016). *Office 2016 for beginners: The perfect guide on Microsoft Office*. Scotts Valley, CA: CreateSpace Independent Publishing Platform.
- Weverka, P. (2022). *Office 2021 All-in-One for Dummies*. Hoboken, NJ: Wiley.

VII. Grading criteria

Activities	Assesment	% of final grade
Exam	Exam: Online Exam – Quizzes 1. Requirements to obtain the minimum passing grade: For grade 5, students must correctly answer at least 10 questions. 2. Requirements to obtain the maximum grade: For grade 10, students must correctly answer 20 questions.	70%
Seminar/Laboratory/Project	Students will submit one 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:

Students will be able to apply theoretical knowledge in practice by completing tasks using Microsoft Office applications (Word, PowerPoint, Excel).

Course coordinator,
Assoc.Prof Dr. Liliana Indrie