



MEĐIMURSKO VELEUČILIŠTE U ČAKOVCU

MEĐIMURJE UNIVERSITY OF APPLIED SCIENCES IN ČAKOVEC

COURSE SYLLABUS

ACADEMIC YEAR: 2024/2025

1. GENERAL COURSE INFORMATION

1.1 Course name	COMPUTER APPLICATION			
1.2 Study program/s	UNDERGRADUATE PROFESSIONAL STUDY PROGRAMME COMPUTER ENGINEERING			
1.3 Course status (O,E)	O	1.6 Mode of instruction (number of hours)	Lectures	15
1.4 Course code			Exercises	60
1.5 Course abbreviation	PR		Seminars	
1.6 Semester	I		E-learning	Merlin
1.7 ECTS	5	1.7 Place and time of instruction	The premises of the Međimurje University of Applied Sciences in Čakovec, according to the schedule published on the website	

2. TEACHING STAFF

2.1 Course leader/s-title	Nenad Breslauer, senior lecturer	contact	nbreslauer1@mev.hr
		contact	
2.2 Assistant/s- title		contact	
		contact	
2.3 Instruction held by- title	Nenad Breslauer, senior lecturer	contact	nbreslauer1@mev.hr
2.4 Course leader/s-title		contact	

3. COURSE DESCRIPTION

3.1. Course goals	After completing the course, the student will understand the basic components of computers and their construction and application. The student should be familiar with computer and software equipment, operating systems, and the basics of internet usage. Upon successful completion of the course, the student will be able to work with text editors, word processors, spreadsheets, and software tools for creating and preparing drafts, images, and presentations. The student will have a broad enough knowledge to quickly apply new technologies and integrate them into other subjects of the study program
3.2 Prerequisites	No conditions.
3.3 Course outcomes	After successfully completing the course, students will be able to: I1 - Describe basic concepts in the field of information technology. I2 - Identify the characteristics of built-in components and peripheral devices. I3 - Create complex documents for a wide range of office tasks using office tools for document processing. I4 - Combine various features of spreadsheets and presentation software to achieve complex project tasks. I5 - Select the most efficient software solution for completing a project task and plan the implementation and writing of code for the given case.
3.4 Contribution of the course to the study program	Apply acquired learning skills, fundamental professional knowledge, and problem-solving necessary for continuing studies at a higher level Use the English language in the field of ICT when communicating with experts and laypersons

	<p>Work in teams, manage professional projects, and collaborate with experts from the real sector</p> <p>Apply communication and professional ethics</p> <p>Identify trends in ICT technologies in the domestic and international markets</p> <p>Analyze user needs (research and detect data sources, currently present business systems, technological limitations, specific business environment characteristics)</p> <p>Develop program code in multiple programming languages using modern methods and tools</p> <p>Apply relevant mathematical and statistical methods in software engineering</p> <p>Identify the basic specifics of operating systems</p>																																							
3.5 Course content	The course covers topics related to the historical development of computers, basic concepts in informatics, how computers work, computer architecture, operating systems, and MS Office tools.																																							
3.6 Types of coursework	x	Lectures	X	Exercises		Blended e-learning	X	Individual activities		Laboratory																														
		Seminars and workshops		Distant learning		Field classes		Multimedia and network		Mentorship																														
		Other																																						
3.7 Language of instruction	Croatian																																							
3.8 Monitoring students' work (enter the number of ECTS credits for each activity so that the total number of ECTS credits is equal to the total ECTS value of the course, 1 ECTS = 30 hours)	1	Class attendance				Seminars			Research																															
	2	Midterm exams/written exam				Project			Essay																															
		Oral exam			2	Practical task																																		
	<table border="1"> <thead> <tr> <th>Activity specification</th> <th>Percent %</th> <th>Points</th> </tr> </thead> <tbody> <tr> <td colspan="3" style="text-align: center;">Assessment during instruction</td> </tr> <tr> <td>Class Assignments</td> <td>10%</td> <td>10</td> </tr> <tr> <td>Midterm Exam 1</td> <td>20%</td> <td>20</td> </tr> <tr> <td>Midterm Exam 2</td> <td>20%</td> <td>20</td> </tr> <tr> <td>Midterm Exam 3</td> <td>50%</td> <td>50</td> </tr> <tr> <td colspan="3" style="text-align: center;"><i>Exam assessment for the students who failed to fulfil all the obligatory requirements during the semester</i></td> </tr> <tr> <td>Written Exam</td> <td>70%</td> <td>70</td> </tr> <tr> <td>Oral Exam</td> <td>30%</td> <td>30</td> </tr> <tr> <td>Total:</td> <td>100%</td> <td>100</td> </tr> </tbody> </table> <p><i>Points Grade</i></p> <p>89 – 100 excellent (5)</p> <p>76 – 88 very good (4)</p> <p>63 – 75 good (3)</p> <p>50 – 62 pass (2)</p> <p>0 – 49 fail (1)</p>											Activity specification	Percent %	Points	Assessment during instruction			Class Assignments	10%	10	Midterm Exam 1	20%	20	Midterm Exam 2	20%	20	Midterm Exam 3	50%	50	<i>Exam assessment for the students who failed to fulfil all the obligatory requirements during the semester</i>			Written Exam	70%	70	Oral Exam	30%	30	Total:	100%
Activity specification	Percent %	Points																																						
Assessment during instruction																																								
Class Assignments	10%	10																																						
Midterm Exam 1	20%	20																																						
Midterm Exam 2	20%	20																																						
Midterm Exam 3	50%	50																																						
<i>Exam assessment for the students who failed to fulfil all the obligatory requirements during the semester</i>																																								
Written Exam	70%	70																																						
Oral Exam	30%	30																																						
Total:	100%	100																																						
3.9 Specific features related to taking the course	<p><i>If a student collects 50% of the points of each outcome he/she directly accesses the oral exam. If a student does not achieve a sufficient number of points on the midterm exam, he/she cannot take the next midterm exam, and has to take the written exam.</i></p> <p><i>If he/she passes the written exam, he/she will proceed to the oral part of the exam.</i></p> <p><i>The seminar paper is submitted within the agreed deadline, and certainly before the exam term.</i></p> <p><i>The final grade is given on the oral part of the exam.</i></p>																																							

3.10 Students obligations	<ul style="list-style-type: none"> • a full-time student has the right to sit for the exam if he attends classes for a minimum of 70% of the total prescribed number of hours • a full-time student who attends classes from 50 to 70% of the total prescribed number of hours can exercise the right to take the exam by completing additional teaching activities in agreement with the course teacher • a full-time student who attends a certain course for less than 50% of the prescribed number of hours enrolls in the course the following academic year • a part-time student has the right to sit for the exam if he/she attends classes for a minimum of 30% of the total prescribed number of hours • a part-time student who attends classes for 20 to 30% of the total prescribed number of hours can exercise the right to sit for the exam by completing additional teaching activities in agreement with the course teacher • a part-time student who attends the classes of a certain course for less than 20% of the prescribed number of hours re-enrolls in the course the following academic year 	
3.11 Written assignments		
3.12 Required reading	1.	Ž. Panian, I. Strugar, Primjena računala u poslovnoj praksi, 2. izd., Sinergija, Zagreb, 2004
	2.	Nenad Breslauer: Skripta za vježbe iz kolegija Primjena računala u poslovnoj praksi
3.13 Additional reading	1.	Materijali na sustavu za e-učenje, (moodle.srce.hr)
	2.	Grundler, Gvozdanović, Ikica, Kos, Lipljin, Milijaš, Srnec, Zvonarek: ECDL 5.0 – Osnovni program, PRO-MIL, Varaždin, 2010
4. ADDITIONAL INFORMATION ABOUT THE COURSE		
4.1 Quality control	The quality of the program, teaching process, teaching skills and level of mastery of the material will be established by conducting a written evaluation based on questionnaires, and in other standardised ways and in accordance with the by-laws of the Međimurje University of Applied Sciences in Čakovec.	
4.2 Contact the teacher	Students can contact the teacher during the office hours and during classes. All other methods of communication are arranged with the teacher. It is also possible to ask questions by e-mail, which will be answered in 48 hours at the latest. It is desirable for students to come as often as possible for any possible questions during the teacher's office hours.	
4.3 Information about the course	It is the obligation of each student to be regularly informed about the course. All notifications about the classes or possible postponement of classes will be posted on the bulletin board and on the website of the University at least 24 hours in advance.	
5. ELABORATION OF THEMATIC UNITS		
Week	Topic	Course outcome
1.	Introduction to the course content.	I1
2.	Brief history and trends in the development of information technology.	I1
3.	Number systems and data encoding.	I1

4.	Data encoding in computer systems.	I1
5.	The structure and operation of electronic computers.	I2
6.	Computer memory.	I2
7.	Memory hierarchy.	I2
8.	Output devices - monitor.	I2
9.	Graphics cards.	I2
10.	Printers.	I2
11.	. Printers	I2
12.	Scanners	I2
13.	Sound.	I2
14.	Computer networks and the internet.	I5
15.	Midterm exam.	

Week	Topic	Course outcome
1.	Introduction to the course content.	I1
2.	Operating system MS Windows 10, file system, file management.	I1
3.	Advanced internet searching, using email systems.	I2
4.	WORD: Inserting and processing images, drawing vector shapes, adding text boxes, tables, and formulas, creating form letters, preparing document contents, lists of images, and tables.	I3
5.	WORD: Macros, creating forms.	I3
6.	Midterm exam 1.	
7.	EXCEL: Introduction to the program, working environment, basics of working with the program, basics of selection, formatting appearance, cell and table styles, using formulas, addressing, basic formulas.	I4
8.	EXCEL: Creating and editing charts, types of charts.	I4
9.	EXCEL: Completing and editing a complex project task.	I4
10.	POWERPOINT: Introduction to the program, features and usage, basic actions, using themes, inserting objects, using slide layouts, animating objects on slides, adding sound and video, creating a CD package.	I4
11.	Midterm exam 2.	
12.	Working with Microsoft Visual Studio, Microsoft Visual C++, basic programming concepts.	I5
13.	Flowcharts and pseudocode, loops, and flow control.	I5
14.	Basics of programming and solving simple tasks.	I5
15.	Midterm exam 3.	