

Course Name : Mathematical Analysis II							
Course Code	Course Type	Regular Semester	Lecture (hours/week)	Seminar (hours/week)	Lab. (hours/week)	Credits	ECTS
CMP 128	B	Spring	3.00	1.00	0.00	3.50	5.00
Lecturer		Vladimir Muka, Msc					
Assistant		Sadije Bushati, Prof. Dr					
Course language		Albanian					
Course level		Bachelor					
Description		This course provides concepts about indefinite and definite integrals and their implementations. An important part of this course is differential computation and solving differential equations. The course concludes with knowledge about series and their kinds.					
Objectives		1. The deepening of knowledge provided in 1st semester 2. Application in the field of IT					
Core Concepts		The fundamental concepts are the following: 1. Indefinite integral 2. Definite integral 3. The differential equation 4. Convergent and divergent series					
Course Outline							
Week	Topic						
1	Indefinite integral						
2	Fundemental elementary formulas						
3	Implementation in exercises and problems						
4	Definite integral						
5	Computation of closed surfaces						
6	Computation of volumes for solids revolved around x axis						
7	Not proper integrals						
8	Midterm test						
9	Differential equations						
10	Equations with separated variables						
11	Differential homogeneous equations						
12	The concept of arithmetic and geometric sequence						
13	The convergent series						
14	Divergent series. Types of divergent series						
15	Review						
16	Final Exam						

Prerequisites	The student must attend the course at a minimum rate of 75%.		
Literature	• Muka. V. Analiza Matematike		
References	• Howard. V. Calculus. 6th edition		
Course Outcome			
1	Ne perfundim te kursit studentet do te kene bazen e nevojshme te njohurive matematike per te perballuar konceptet ne kurset profesionale te IT		
2	Ne perfundim te kursit studentet do te kene bazen e nevojshme matematike per te ndjekur disiplina te tjera matematikore.		
Course Evaluation			
In-term Studies		Quantity	Percentage
Midterms		1	35
Quizzes		0	0
Projects		0	0
Term Projects		0	0
Laboratory		1	15
Class Participation		0	0
Total in-term evaluation percent			50
Final exam percent			50
Total			100
ECTS Workload (Based on Student Workload)			
Activities	Quantity	Duration (hours)	Total (hours)
Course duration (Including the exam week: 16x Total hours of the course)	16	4	64
Study hours outside the classroom (Preparation, Practice, etc.)	14	4	56
Duties	0	0	0
Midterms	1	0	0
Final Exam	1	5	5
Other	0	0	0
Total Work Load			125
Total Work Load / 25 (hours)			5.00
ECTS			5.00