Course Name	: The Comp	oilators							
Course Code	Course Type	Regular Semester	Lecture (hours/we ek)	Seminar (hours/we ek)	Lab. (hours/we ek)	Credits	ECTS		
CMP 116	В	Spring	3.00	1.00	0.00	3.50	5.00		
	Lecturer	Elton Kaziu, Msc	Elton Kaziu, Msc						
	Assistant	Kleona Elezi, Msc							
Course language		Albanian							
Course level		Bachelor							
	Description	Compilers is a course that describes the bases of the compilers, functions and processes. the phases of a compiler and its elements. This course has a broader aspect and will introduce the students with the fundaments of the compilers, their important role they play on transforming the code from a higher programming language to the code known by the machine.							
	Objectives								
Cc	ore Concepts	Syntax Analysis (Compiler Optimiz Construction Tool	duction to Compilers Compiler Construction System Lexical Analysis (Lexing) ax Analysis (Parsing) Semantics and Error Checking Code Generation piler Optimization Compiler Structure Programming Languages and Compiler truction Tools and Technologies for Compilers Importance of Compiler Testing overment and Development of Compilers						
Course Outlir	пе								
Week		Торіс							
1	Introduction								
2	A Simple Syntax-Directed Translator I								
3	A Simple Syntax-Directed Translator II								
4	Lexical Analysis								
5	Lexical Analysis(Finite Automata, NFA)								
6	Syntax Analysis (DFA)								
7	Review	Review							
8	Midterm								
9	Syntax Analys	Syntax Analysis (DFA) ys							
10	Syntax Analys	Syntax Analysis Top-Down Parsing I							
11	Syntax Analys	Syntax Analysis Top-Down Parsing II							
12	Syntax Analys	sis Bottom-Up I							
13	Syntax Analysis Bottom-Up II								
14	Syntax Analysis Bottom-Up III								
15	Review								
16	Final Exam								

Prerequisites		The student must attend the course at a minimum rate of 75%.		
Literature		• Alfred V. Aho, Monica S. Lam, Ravi Sethi, Jeffrey D. Ullman, Compilers - Principles Techniques, and Tools, Second Edition, 2007, Pearson/Addison Wesley		
References		•		
Course Outcome				
1 Njohuri në strukturën e kompilatorëve.				
2	Ndërtimin e kompilatorëve.			
3	Fazat në të cilat kalon një program burim për tu përkthyer nga kompilatori në një gjuhë të kuptueshme dhe të ekzekutueshme nga makinat.			

Course Evaluation

In-term Studies		Quantity	Percentage
Midterms		1	30
Quizzes		0	0
Projects		1	30
Term Projects		0	0
Laboratory		0	0
Class Participation		0	0
Total in-term evaluation percent			60
Final exam percent			40
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	1	2	2	
Midterms	1	1	1	
Final Exam	1	1	1	
Other	0	0	0	
Total Work Load				
Total Work Load / 25 (hours)				
ECTS				