

Course Name : Programim në Python							
Course Code	Course Type	Regular Semester	Lecture (hours/week)	Seminar (hours/week)	Lab. (hours/week)	Credits	ECTS
CMP 125	C	Fall	2.00	0.00	2.00	3.00	5.00
Lecturer		Ejona Bodo, Msc					
Assistant							
Course language		Albanian					
Course level		Program Profesional 2-Vjeçar					
Description		This course will provide a comprehensive, fast-paced introduction to Python and the popular Python-based web framework Django.					
Objectives		-Learn the basics of programming through Python -Learn the basics of modern web development in Python -Learn Django fundamentals					
Core Concepts		Python Object-Oriented Programming Django Data Types Web development RESTful API-s					
Course Outline							
Week	Topic						
1	Introduction to Python						
2	Advanced Data Types in Python						
3	Writing Iterative Code and Algorithms						
4	Decomposition, Abstractions, Functions						
5	Introduction to Object Oriented Programming						
6	Python Classes and Inheritance						
7	Testing, Debugging, Exceptions, Assertions						
8	Introduction to Back-End Web Development using Django -HTTP protocol -MVC model -Virtual environment -Django structure -Generic Views -HTML templates -URL dispatcher						
9	Back-End Web Development using Django -Generic Views -HTML templates -URL dispatcher						
10	Project concept approval						
11	Advanced Django for Web -Custom Views -GET and POST methods -URL shortener						
12	Advanced Django for Web 2 -User model -Logic in templates -Querying models						
13	Final Project and Presentation						
14	Working with APIs -RESTful architecture -Request library						
15	Exam Review Questions						
16	Final Exam						

Prerequisites	The student must attend the course at a minimum rate of 75%.		
Literature	• Gutttag, John. Introduction to Computation and Programming Using Python: With Application to Understanding Data Second Edition. MIT Press, 2016. ISBN: 9780262529624 • Django for Beginners: Learn web development with Django 2.0 [Vincent, William S.] ISBN-13: 978-1980377894, ISBN-10: 1980377898		
References	• Downey, Allen, Jeffrey Elkner, and Chris Meyers. How to Think Like a Computer Scientist: Learning with Python. Green Tea Press, 2002. ISBN: 9780971677500. • Materiale ndihmëse/udhëzuese nga lektori i lëndës		
Course Outcome			
1	Provide students with good knowledge of Python programming		
2	Learn students how to build a Django application, hands-on.		
3	Provide an understanding of the role computation can play in solving problems.		
4	Help students feel confident of their ability to write small programs that allow them to accomplish useful goals.		
Course Evaluation			
In-term Studies		Quantity	Percentage
Midterms		0	0
Quizzes		0	0
Projects		1	35
Term Projects		0	0
Laboratory		1	15
Class Participation		1	10
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	2	4	8
Midterms	0	0	0
Final Exam	1	1	1
Other	0	0	0
Total Work Load			129
Total Work Load / 25 (hours)			5.16
ECTS			5.00