Course Name : Computer Architecture

Course Code	Course Type	Regular Semester	Lecture (hours/week)	Seminar (hours/week)	Lab. (hours/week)	Credits	ECTS
CMP 225	B	Fall	3.00	0.00	1.00	3.50	5.00

Lecturer	Alban Deda, Msc
Assistant	Olsi Shehu, MSc
Course language	Albanian
Course level	Bachelor
Description	At the end of this course, the students will be able to know and identify different problems of the computer (either with identification, and/or solving different issues of the computer)
Objectives	Objective of the course, is to make the student able to create a computer by assembling it
Core Concepts	1.Computer Control Unit. 2.RAM/ROM 3.Cache 4. TCP/IP 5. OSI Model 6. Subnetting ...etc.

Course Outline

Week	Topic
1	Introduction to the Computer Architecture History, Technology, Organizimi dhe Arkitektura e Kompjuterave, Agim Cami, 2012, pg.13
2	Computer Organization. Clock of Processor and Amdah'l Organizimi dhe Arkitektura e Kompjuterave, Agim Cami, 2012, pg.39
3	Instructionn Set of Architecture, ISA Organizimi dhe Arkitektura e Kompjuterave, Agim Cami, 2012, pg.113
4	Memory, Types of memories, Pipelining Organizimi dhe Arkitektura e Kompjuterave, Agim Cami, 2012, pg.190
5	Input/Output equipments Organizimi dhe Arkitektura e Kompjuterave, Agim Cami, 2012, pg.243
6	Computer, as part of computer networking Organizimi dhe Arkitektura e Kompjuterave, Agim Cami, 2012, pg.267
7	Troubleshooting of the comuter. Introduction to OSI and TCP/IP model. CCNA Routing and Switching Study Guide, Todd Lammle, Sybex Publishings, 2013, pg.29
8	In-Term Exam
9	Computer Architecture CCNA Routing and Switching Study Guide, Todd Lammle, Sybex Publishings, 2013, fq.79
10	Subnetting, of IPs according to IP classes CCNA Routing and Switching Study Guide, Todd Lammle, Sybex Publishings, 2013, pg.215
11	Practical subnetting of IP classes CCNA Routing and Switching Study Guide, Todd Lammle, Sybex Publishings, 2013, pg.257
12	Technologies of the broadband, wireless, fiber optcs, HFC, Ethernet. CCNA Routing and Switching Study Guide, Todd Lammle, Sybex Publishings, 2013, pg.289
13	IntErnet, IntrAnet , types of computer communications, simple and encrypted. CCNA Routing and Switching Study Guide, Todd Lammle, Sybex Publishings, 2013, pg.577
14	Advvanced Technologies, Smart Building. Smart Cities, Digital Solutions for a More Livable Future, McKinsey, 2018 pg.21

15	Practice, configuration/installation of a computer network, Router, Switch , PCs
16	Final Exam

Prerequisites	The student must attend the course at a minimum rate of 75%.
Literature	• Organizimi dhe Arkitektura e Kompjuterave, Agim Cami, 2012
References	• Computer Organisation and Design. The Hardware/Software Interface 4th Edition. Patterson, Hennessy, 2011. • CCNA Routing and Switching Study Guide, Todd Lammle, Sybex Publishings, 2013 • Comptia, Network+, Seventh Edition, Mike Meyers, MC Graw Hill Education, 2018

Course Outcome

1	Ne perfundim te lendes student do te di arkitekturen e PC
2	Studenti do te njihet me proceorin, memoriet kryesore Rom, Ram, Cache, dhe input/outputs te kompjuterit
3	Studenti do njihet me rrjetat kompjuterike, si vazhdim i arkitektures se kompjuterit
4	Studenti do njihet me klasat IP, konvertimet e IP-ve ne sistemin binar, dhe perllogaritje te ndryshme te klasave IP
5	Studenti do jete ne gjendje te futet ne certifikime nderkombetare te rrjetave kompjuterike, kryesisht ne Mikrotik dhe Cisco

Course Evaluation

In-term Studies	Quantity	Percentage
Midterms	1	50
Quizzes	0	0
Projects	0	0
Term Projects	0	0
Laboratory	0	0
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	1	1
Final Exam	1	1	1
Other	0	0	0
Total Work Load			**122**
Total Work Load / 25 (hours)			**4.88**
ECTS			**5.00**