EPOKA UNIVERSITY

COMPUTER ENGINEERING DEPARTMENT
ACTIVITY REPORT - 2014/2015

For submission to the Epoka University,
Faculty of Architecture and Engineering

Tirana, June 2015

Department of Computer Engineering

1.

Contents

INTRODUCTORY KNOWLEDGE, MISSION AND GOALS

1.1 GENERAL

Computer Engineering covers a wide range of engineering applications from hardware, software, networking, system administration, database managements systems, etc. Computer Engineering is distinguished as being one of the latest engineering disciplines. It is involved to all sciences, being able to take those all more forward from their current positions by computerization.

1.2 MISSION

The mission of the Department of Computer Engineering is to educate the students to gain an understanding of the fundamentals of science and engineering so that they can develop solutions to Computer Engineering problems and enhance their computing, engineering, and research skills. It is aimed to especially emphasize teamwork, independent and innovative thinking and leadership qualities. In particular, the Computer Engineering Program aims to:

- Train the students to have theoretical background in basic sciences and engineering and to be equipped with necessary technical skills,
- Provide practical experience which will enable students to utilize and enhance their engineering knowledge,
- Promote students' self-discipline and self-assurance and the ability to learn on their own,
- Encourage team work, collaboration and development of interpersonal skills,
- Motivate the students towards contributing to the progress of science and technology,
- Teach the importance of ethical behavior in social and professional life,
- Produce graduates for the engineering and the business communities who are observant, inquisitive and open to new technologies for developing better solutions,
- Produce graduates for the engineering and business communities with integrity, determination, judgment, motivation, ability and education to assume a leadership role to meet the demanding challenges of the society.
- Develop students' competency in reading, writing and oral communication,
- The vision of the Department of Computer Engineering is to be a department whose graduates are highly preferred in worldwide IT industry and to gain a leadership position in Albania and Balkans.

1.3 PROGRAM

Computer engineering program is based on three year Bachelor Degrees. The first year of the program is mostly dedicated to the study of basic sciences and mathematics which provide the engineering fundamentals. The second and third year are mainly composed of basic engineering courses besides fundamental courses of computer engineering. Summer practice at the end of the second year and the courses at the last year aim to provide a Computer Engineering perspective to students.

Curriculum of the program includes elective courses, which give an opportunity to students to improve their professional skills according to their interests. Some courses are nontechnical and free elective courses, the remaining are computer engineering electives. The requirements for a Diploma in Computer Engineering include the completion of minimum of 180 ECTS credits of formal course work and 30 days of approved practical training.

1.4 JOB PPORTUNITIES

In the global industry, there is a strong demand for Computer Engineers particularly those who combine technical skills with good communication skills and team-work ability. Some but not all of the job opportunities can be summarized as follows:

- Working for companies such as banks, airline industries, government departments, consulting companies, and computer organizations that run large computer based systems, and firms specifying computer equipment for a certain application,
- Implementing data communication systems and Internet technologies,
- Designing and developing hardware components and interface cards for computer systems,
- Managing and working in high level software development projects,
- Maintaining and administering distributed databases and corporate local area networks.

1.5 Educational aims and objectives

Aim

To produce graduates who have the potential to become future leaders of this profession. In their careers our graduates will,

- ➢ Work productively as Computer Engineers, including supportive and leadership roles on multidisciplinary teams,
- ➢ Communicate effectively, recognize and incorporate societal needs and constraints in their professional endeavors, and practice their profession with high regard to legal and ethical responsibilities,
- ➢ Engage in life-long learning, such as graduate study, to remain current in their profession and be leaders in our technological society.

1.6 Program outcomes

CEN Outcomes (Program Competencies) according to ABET Criterion 3

"Computer engineering program must demonstrate that their graduates have: Program Competencies-

Program Learning Outcomes	
1	an ability to apply knowledge of mathematics, probability & statistics, computer science, and engineering as it applies to the fields of computer software and hardware,
2	an ability to design and construct a hardware and software system, component, or process to meet desired needs, within realistic constraints such as economic, environmental, social, political, ethical, health & safety, manufacturability, and sustainability,
3	an ability to function on multidisciplinary teams,
4	an ability to identify, formulate, and solve hardware and software problems using computer engineering principles,
5	an understanding of professional, legal, and ethical issues and responsibilities as it pertains to computer engineering,
6	an ability to effectively communicate technical information in speech, presentation, and in writing,

7	the broad education necessary to understand the impact of computing in a global, economic, environmental, and societal context,
8	a recognition of the need for an ability to engage in lifelong learning,
9	a knowledge of contemporary issues, and
10	an ability to use the techniques, skills, and modern hardware and software tools necessary for computer engineering practice.

1.7 Department academic staff

1.7.1 Full Time Faculty Members

	Title	*Name Surname*
1.	Asst. Prof. Dr.	Albana Halili
2.	Asst. Prof. Dr.	Arban Uka
3.	Asst. Prof. Dr.	Endri Stoja
4.	Asst. Prof. Dr.	Elton Domnori
5.	Asst. Prof. Dr.	Ilir Çapuni
6.	Asst. Prof. Dr.	Oguz Altun
7.	MSc	Ahmet Fatih Ersoy
8.	MSc	İbrahim Mesecan
9.	MSc	Igli Hakrama
10.	MSc	Ozgur Ornek
11.	MSc	Meral Ari
12.	MSc	Mukremin Ozkul
13.	BA	Albana Roci
14.	BA	Anisa Halimi
15.	BA	Nertil Zhuri
16.	BA	Marsel Omeri
17.	BA	Sidrit Reka

1.7.2 Adjunct Faculty Members

	Title	*Name Surname*
1.	Prof. Dr.	Betim Çiço
2.	Dr	Blerina Zanaj
3.	Dr.	Erind Bedalli
4.	MSc	Artur Koci
5.	MSc	Ali Osman Topal
6.	Prof. Assoc.	Indrit Enesi
7.	MSc	Adriola Faqolli
8.	Dr	Elvana Stepani
9.	M.Sc.	Gerion Treska

10. M. Sc.   Arian Berdellima

1.8   Students

Table 2-1 Number of students at the undergraduate level (as of June, 2015)

FACULTY	DEPARTMENT	STUDENTS
Faculty of Architecture and Engineering	Computer Engineering	**147**

Table 2-2 Number of students registered at the graduate level (as of June, 2015)

FACULTY	PROGRAM	STUDENTS
Faculty of Architecture and Engineering - Department of Computer Engineering	Master of Science in Computer engineering	**39**
	Professional Master in Computer Engineering	**3**
	Total	**42**

Table 2-3 Number of Admitted Students and High School Average

2010-2011		2011-2012		2012-2013		2013-2014		2014-2015	
Students	**Average**	**Students**	**Average**	**Students**	**Average**	**Students**	**Average**	**Students**	**Average**
34	8.69	24	8.8	37	8.74	63	8.8	68	9.3

Table 2-4 Number of Students per Each Course of Study

DEPARTMENT	1st year	2nd year	3rd year	4rth year	DND/M.Sc.	MND	PM
Computer Engineering	22	30	36	19	36	18	1

2　Curricula and teaching activity

Students are accepted to 3 years bachelor education after completing their 12 years high school education. All of the course syllabuses were revised and updated according to Albanian Government regulations and ABET criterion.

2.1　Aims and objectives for study program

General

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fundamentals. The second and third year are mainly composed of basic engineering courses besides fundamental courses of computer engineering. Summer practice takes place at the end of the second year. In this aspect the courses at the last year as well aim to provide a Computer Engineering perspective to students.

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Program Outcomes

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