



ADIYAMAN UNIVERSITY  
FACULTY OF ENGINEERING  
DEPARTMENT OF  
COMPUTER ENGINEERING

INTRODUCTORY BOOKLET

2006

2024 - 2025

## CONTENTS

- Our Department
- Mission & Vision
- The Importance of Department and Educational Objectives
- Why Computer Engineering?
- Job Opportunities for Graduates
- The Highest and the Lowest Placement Scores According to the Central Placement Results
- Undergraduate Course Catalogue
- Activities

## **Department of Computer Engineering**

The department of computer engineering was established in 2012 and will continue to accept students from the 2022-2023 academic year. Computer Engineering Department provides service in the Faculty of Engineering building completed in 2016, the new building with a total area of 4000 m<sup>2</sup> has 8 classrooms for 50 people and a PC laboratory for 60 people.

As of 2024, there are a total of 6 faculty members working in our department, including 1 associate professor, 3 assistant professors, 1 lecturer and 1 research assistant.

### **Head of Department**

Asst. Prof. Dr. Saadin OYUCU

### **Deputy Head of Department**

Assoc. Prof. Dr. Sercan YALÇIN

### **Academic Staff**

Asst. Prof. Dr. Ferdi DOĞAN

Asst. Prof. Dr. Hüseyin VURAL

Lec. Dr. Zeynel Abidin SAMAK

Rsc. Asst. Abuzer DOĞAN

### **Secretary of Department**

İrem AKDULUM

## **Mission & Vision**

### **Mission**

To train computer engineers who have the potential to shape the information age we are in and are well-equipped in basic computer and informatics subjects; to instil in them a sceptical approach and awareness of ethical behavior and to teach them lifelong learning. To undertake universal studies in all fields of computer engineering; To be an R&D partner where cooperation is sought in all kinds of scientific activities.

### **Vision**

To be a department where qualified academics train globally sought- after graduates in the field of computer engineering in cooperation with industry and government institutions in a synergetic framework, using a highly developed research and teaching infrastructure, and direct academic studies in the field with their publications.

## **The Importance of Computer Engineering Department**

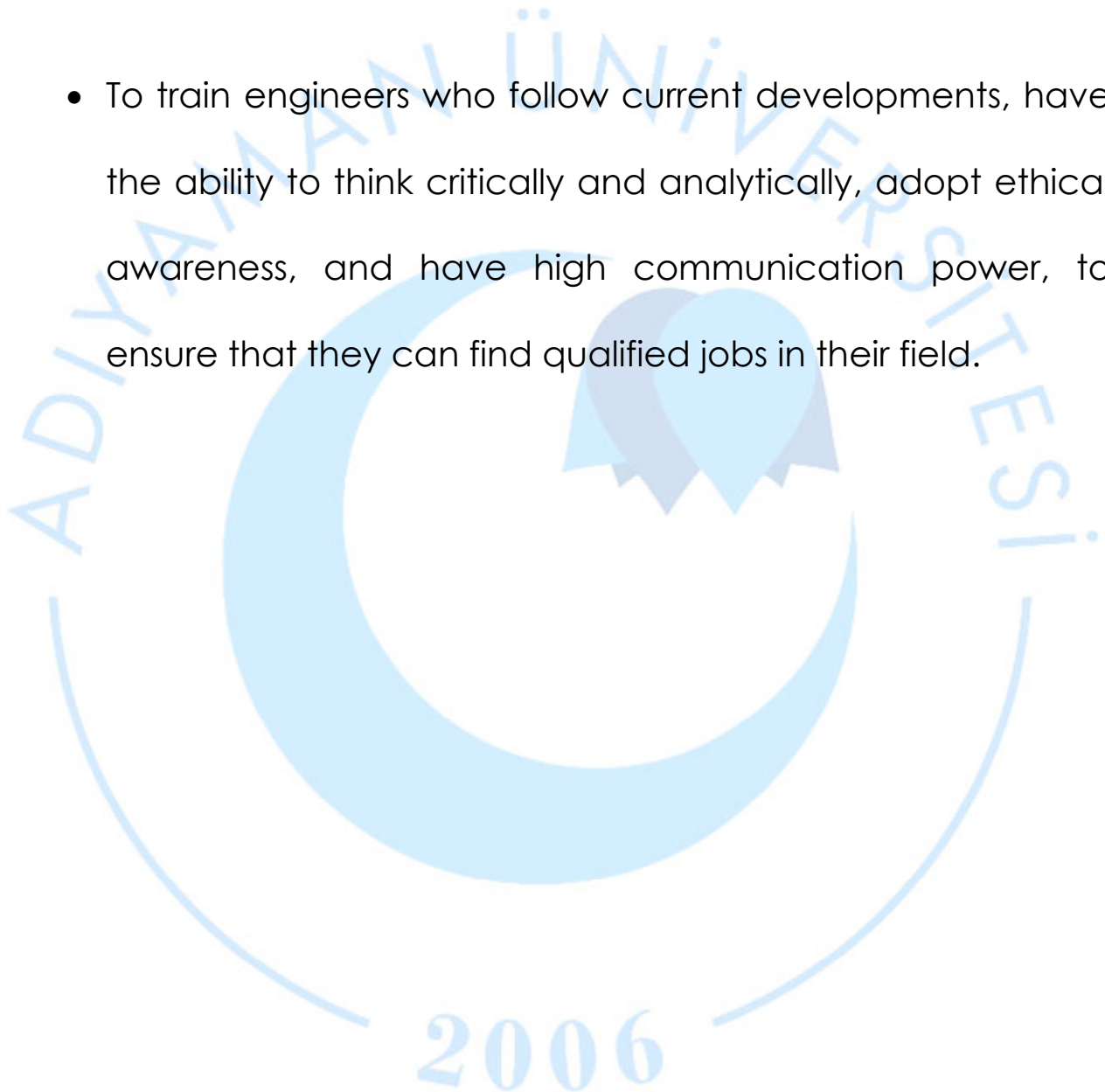
Department of Computer Engineering, with the title of computer engineer gained on a solid foundation and engineering sciences background, can find a qualified job in national or international information institutions or in the academic field, analyze the functioning of an existing system, identify problems and find original and creative solutions, design and implement a new system, able to design projects, to make progress in business life, to make individual and team work, to express himself orally and in writing, to follow the sources written in a foreign language, to be open to innovations and self-confident, as well as sensitive to the problems of our age and fulfilling his profession with the responsibility required by this sensitivity, In order to train computer engineers who can act in accordance with ethical principles, it carries out an education plan that aims to train our students in the best way in both respects by reconciling theory and practice. The program includes compulsory courses related to both basic

engineering sciences and computer engineering. In addition to the compulsory courses in the education plan, there are also optional courses that students can choose according to their own preferences. Thus, the Department of Computer Engineering trains modern engineers who are equipped with the knowledge and skills to serve in all areas of the Computer Engineering profession on a national and international scale, develop themselves by following the developments in their field, are prone to teamwork, are inquisitive, and attach importance to ethical values.

Educational Objectives of the Department include;

- To train researcher graduates who can work in national and international universities and research institutions and do postgraduate studies.
- To train computer engineers who can pursue successful careers and reach leading positions in national and international organizations operating in the field of computer software/hardware.

- To train engineers who can produce professional and scientific projects and take an active role in these projects with the knowledge and skills they have acquired.
- To train engineers who follow current developments, have the ability to think critically and analytically, adopt ethical awareness, and have high communication power, to ensure that they can find qualified jobs in their field.





## **Why Computer Engineering?**

Having a degree in computer engineering gives you the benefits of a broad knowledge, problem-solving and logical thinking ability, no matter what field you're working in. Many universities and employers see success in a computer science course or field as an indicator of versatility.

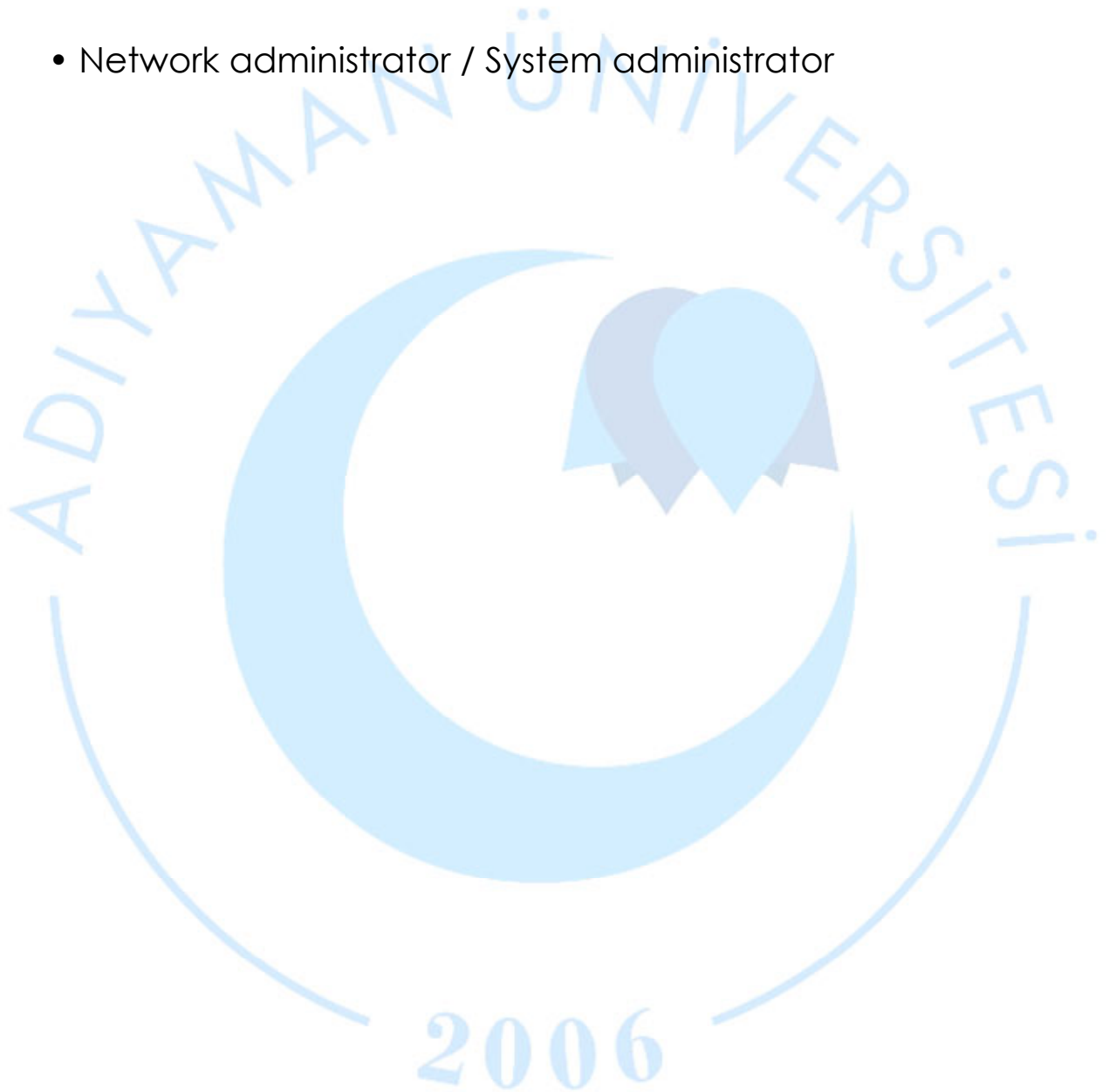
## **Job Opportunities for Graduates**

Computer Engineering is a sought-after and in-demand field in all fields of technology. Our graduates can work in a wide range of positions, from software development to hardware design, from cyber security to data science.

Graduates of our department has the opportunity to work both in the public and private sectors as;

- Software / Hardware Specialist,
- Data Analyst,
- Database Specialist,
- Business analyst / System analyst
- Quality Control and Testing Specialist,
- Web Design Specialist,
- Graphic Design and Drawing,

- Information System Specialist
- Game engineer
- System programmer,
- Network administrator / System administrator



## **The Highest and the Lowest Placement Scores According to the Central Placement Results**

According to the central placement results announced by the Presidency of Measurement, Selection and Placement Center (OSYS) in 2023 undergraduate students were placed in our department with the highest score of 432.36122 and the lowest score of 340.92535. Our quota for 40 undergraduate students has been filled. A total of 94 undergraduate students continues their education in our department.

## Undergraduate Course Catalogue

### 1. Semester

Course Code	Course Name	C/E	T	P	L	Credit	ECTS
AİİT101	Ataturk's Principles and History of Revolutions I	C	2	0	0	2	2
FİZ101	Physics I	C	2	0	2	3	4
KİM101	Chemistry	C	2	0	2	3	4
MAT101	Calculus I	C	3	1	0	4	5
TD101	Turkish Language I	C	2	0	0	2	2
YD101	English Language I	C	2	0	0	2	3
BİL101	Algorithm and Programming I	C	3	0	2	4	6
BİL103	Introduction to Computer Engineering	C	2	2	0	3	4
<b>Total</b>			<b>18</b>	<b>3</b>	<b>6</b>	<b>23</b>	<b>30</b>

### 2. Semester

Course Code	Course Name	C/E	T	P	L	Credit	ECTS
AİİT102	Ataturk's Principles and History of Revolutions II	C	2	0	0	2	2
FİZ102	Physics II	C	2	0	2	3	4
MAT102	Calculus II	C	3	1	0	4	5
MAT104	Linear Algebra	C	2	0	0	2	3
TD102	Turkish Language II	C	2	0	0	2	2
YD102	English Language II	C	2	0	0	2	3
BİL102	Algorithm and Programming II	C	3	0	2	4	6
BİL104	Computer Hardware	C	2	1	0	3	5
<b>Total</b>			<b>18</b>	<b>2</b>	<b>4</b>	<b>22</b>	<b>30</b>

### 3. Semester

Course Code	Course Name	C/E	T	P	L	Credit	ECTS
MUH201	Statistics for Engineers	C	2	0	0	2	3
BİL201	Discrete Mathematics	C	3	1	0	4	5
BİL203	Database	C	2	0	1	3	5
BİL205	Object Oriented Programming	C	3	0	1	4	6
BİL207	Data Structures	C	3	0	1	4	6
BİL209	Professional English Language I	C	3	0	0	3	3
SOSSEC1	Social Elective Course	E	2	0	0	2	2
<b>Total</b>			<b>18</b>	<b>1</b>	<b>3</b>	<b>22</b>	<b>30</b>

#### 4. Semester

Course Code	Course Name	C/E	T	P	L	Credit	ECTS
<b>MAT202</b>	Differential Equations	C	3	0	0	3	4
<b>MUH204</b>	Occupational Health and Safety	C	2	0	0	2	3
<b>BIL202</b>	Electrical Circuits and Electronics	C	3	0	1	4	5
<b>BIL204</b>	Digital Design	C	3	0	1	4	5
<b>BIL206</b>	Principles of Programming Languages	C	4	0	0	4	6
<b>BIL208</b>	Professional Foreign Language II	C	3	0	0	3	3
<b>BIL210</b>	Internship I	C	0	2	0	1	2
<b>SOSSEC2</b>	Social Elective Course	E	2	0	0	2	2
<b>Total</b>			<b>20</b>	<b>2</b>	<b>2</b>	<b>23</b>	<b>30</b>

#### 5. Semester

Course Code	Course Name	C/E	T	P	L	Credit	ECTS
<b>BIL301</b>	Numerical Methods	C	3	0	0	3	4
<b>BIL303</b>	Computer Organization and Architecture	C	2	1	0	3	5
<b>BIL305</b>	Internet Programming	C	3	1	0	4	5
<b>BIL307</b>	Formal Languages and Automata Theory	C	3	0	0	3	5
<b>BIL309</b>	Software Engineering	C	3	0	0	3	5
<b>BILSEC1</b>	Technical Elective Course	E	3	0	0	3	4
<b>SOSSEC3</b>	Social Elective Course	E	2	0	0	2	2
<b>Total</b>			<b>19</b>	<b>2</b>	<b>0</b>	<b>21</b>	<b>30</b>

#### 6. Semester

Course Code	Course Name	C/E	T	P	L	Credit	ECTS
<b>BIL302</b>	Algorithm Analysis	C	3	0	0	3	4
<b>BIL304</b>	Computer Networks	C	2	1	0	3	4
<b>BIL306</b>	Operating Systems	C	3	0	0	3	4
<b>BIL308</b>	Microprocessors and Controllers	C	2	0	1	3	5
<b>BILSEC2</b>	Technical Elective Course 1	E	3	0	0	3	4
<b>BILSEC2</b>	Technical Elective Course 2	E	3	0	0	3	4
<b>SOSSEC4</b>	Social Elective Course	E	2	0	0	2	2
<b>BIL310</b>	Internship II	C	0	2	0	0	3
<b>Total</b>			<b>18</b>	<b>3</b>	<b>1</b>	<b>20</b>	<b>30</b>

### 7. Semester

Course Code	Course Name	C/E	T	P	L	Credit	ECTS
BIL401	Graduation Project	C	0	2	0	1	8
BIL403	IT Law	C	3	0	0	3	4
BILSEC3	Technical Elective Course 1	E	3	0	0	3	4
BILSEC3	Technical Elective Course 2	E	3	0	0	3	4
BILSEC3	Technical Elective Course 3	E	3	0	0	3	4
BILSEC3	Technical Elective Course 4	E	3	0	0	3	4
SOSSEC5	Social Elective Course	E	2	0	0	2	2
<b>Total</b>			<b>17</b>	<b>2</b>	<b>2</b>	<b>18</b>	<b>30</b>

### 8. Semester

Course Code	Course Name	C/E	T	P	L	Credit	ECTS
BIL402	Adaptation to Engineering	C	0	2	0	1	15
MUHSEC	Engineering Elective Course 1	E	2	0	0	2	5
MUHSEC	Engineering Elective Course 2	E	2	0	0	2	5
MUHSEC	Engineering Elective Course 3	E	2	0	0	2	5
<b>Total</b>			<b>6</b>	<b>2</b>	<b>0</b>	<b>7</b>	<b>30</b>

### Technical Elective Courses

#### BILSEC1 (5. Semester)

Course Code	Course Name	C/E	T	P	L	Credit	ECTS
BIL311	Signals and Systems	E	3	0	0	3	4
BIL313	Information Systems	E	3	0	0	3	4
BIL315	Data Mining	E	3	0	0	3	4
BIL317	Computer Graphics and Animation	E	3	0	0	3	4
BIL319	Research Methods and Techniques	E	3	0	0	3	4
BIL321	Simulation and Modeling	E	3	0	0	3	4
BIL323	Advanced Programming	E	3	0	0	3	4
BIL325	Human Computer Interaction	E	3	0	0	3	4

#### BILSEC2 (6. Semester)

Course Code	Course Name	C/E	T	P	L	Credit	ECTS
BIL312	Artificial Intelligence	E	3	0	0	3	4

<b>BIL314</b>	Data Science and Big Data Analysis	E	3	0	0	3	4
<b>BIL316</b>	Game Programming	E	3	0	0	3	4
<b>BIL318</b>	Wireless and Cellular Networks	E	3	0	0	3	4
<b>BIL320</b>	Deep Learning	E	3	0	0	3	4
<b>BIL322</b>	Automated Data Collection Techniques	E	3	0	0	3	4
<b>BIL324</b>	Graph Theory	E	3	0	0	3	4
<b>BIL326</b>	Cloud Computing	E	3	0	0	3	4
<b>BIL328</b>	System Programming	E	3	0	0	3	4
<b>BIL330</b>	Industrial Communication Systems	E	3	0	0	3	4
<b>BIL332</b>	Robotics	E	3	0	0	3	4
<b>BIL334</b>	Artificial Neural Networks	E	3	0	0	3	4
<b>BIL336</b>	Model Based Software Development	E	3	0	0	3	4
<b>BIL338</b>	Web Services	E	3	0	0	3	4
<b>BIL340</b>	Non-Relational Databases	E	3	0	0	3	4
<b>BIL342</b>	Electronic Commerce Applications	E	3	0	0	3	4
<b>BIL344</b>	Quantum Computing	E	3	0	0	3	4
<b>BIL346</b>	Server Based Operating Systems	E	3	0	0	3	4
<b>BIL348</b>	Open-Source Operating Systems	E	3	0	0	3	4
<b>BIL350</b>	Medical Image Processing	E	3	0	0	3	4
<b>BIL352</b>	Introduction to Cryptography	E	3	0	0	3	4

### BILSEC3 (7. Semester)

Course Code	Course Name	C/E	T	P	L	Credit	ECTS
<b>BIL405</b>	Distributed Systems and Parallel Programming	E	3	0	0	3	4
<b>BIL407</b>	Blockchain and Digital Currencies	E	3	0	0	3	4
<b>BIL409</b>	Sensor Networks	E	3	0	0	3	4
<b>BIL411</b>	Embedded Systems	E	3	0	0	3	4
<b>BIL413</b>	Information Retrieval Systems	E	3	0	0	3	4
<b>BIL415</b>	Natural Language Processing	E	3	0	0	3	4
<b>BIL417</b>	Text Classification	E	3	0	0	3	4
<b>BIL419</b>	Image Processing	E	3	0	0	3	4
<b>BIL421</b>	Bioinformatics	E	3	0	0	3	4
<b>BIL423</b>	Voice Processing and Recognition	E	3	0	0	3	4
<b>BIL425</b>	Social Network Analysis	E	3	0	0	3	4
<b>BIL427</b>	Pattern Recognition	E	3	0	0	3	4
<b>BIL429</b>	Internet of Things	E	3	0	0	3	4
<b>BIL431</b>	Machine Learning	E	3	0	0	3	4
<b>BIL433</b>	Forensics	E	3	0	0	3	4
<b>BIL435</b>	Mobile Programming	E	3	0	0	3	4
<b>BIL437</b>	Computer and Network Security	E	3	0	0	3	4



<b>BIL439</b>	Advanced Internet Programming	E	3	0	0	3	4
<b>BIL441</b>	Autonomous Systems	E	3	0	0	3	4
<b>BIL443</b>	Python Programming	E	3	0	0	3	4
<b>BIL445</b>	Java Programming	E	3	0	0	3	4
<b>BIL447</b>	C# Programming	E	3	0	0	3	4
<b>BIL449</b>	.Net Programming	E	3	0	0	3	4
<b>BIL451</b>	Network Programming	E	3	0	0	3	4

## Social Elective Courses

### SOSSEC1 (3. Semester)

Course Code	Course Name	C/E	T	P	L	Credit	ECTS
<b>SOS201</b>	Communication	E	2	0	0	2	2
<b>SOS203</b>	Environment Management Systems	E	2	0	0	2	2
<b>SOS205</b>	Engineering Economy	E	2	0	0	2	2
<b>SOS207</b>	Critical Analytic Thinking	E	2	0	0	2	2
<b>SOS209</b>	History of Science	E	2	0	0	2	2
<b>SOS211</b>	Volunteering Study	E	2	0	0	2	2

### SOSSEC2 (4. Semester)

Course Code	Course Name	C/E	T	P	L	Credit	ECTS
<b>SOS202</b>	Public Relations	E	2	0	0	2	2
<b>SOS204</b>	First Aid	E	2	0	0	2	2
<b>SOS206</b>	Environmental Pollution and Control	E	2	0	0	2	2
<b>SOS208</b>	Artificial Intelligence Methods	E	2	0	0	2	2
<b>SOS210</b>	Research and Investigation Techniques	E	2	0	0	2	2

### SOSSEC3 (5. Semester)

Course Code	Course Name	C/E	T	P	L	Credit	ECTS
<b>SOS301</b>	Patent and Industrial Design	E	2	0	0	2	2
<b>SOS303</b>	Environment and Ecology	E	2	0	0	2	2
<b>SOS305</b>	History of Art	E	2	0	0	2	2
<b>SOS307</b>	Sign Language	E	2	0	0	2	2
<b>SOS309</b>	Operations Research	E	2	0	0	2	2
<b>SOS311</b>	Technology and Innovation Management	E	2	0	0	2	2

**SOSSEC4 (6. Semester)**

Course Code	Course Name	C/E	T	U	L	Credit	ECTS
SOS302	Entrepreneurship	E	2	0	0	2	2
SOS304	Akhism and Professional Ethics	E	2	0	0	2	2
SOS306	Production Planning	E	2	0	0	2	2
SOS308	Ergonomics	E	2	0	0	2	2
SOS310	Climate Change and Sustainable Management	E	2	0	0	2	2
SOS312	Career Planning and Development	E	2	0	0	2	2
SOS314	International Relations	E	2	0	0	2	2

**SOSSEC5 (7. Semester)**

Course Code	Course Name	C/E	T	P	L	Credit	ECTS
SOS401	Occupational Law	E	2	0	0	2	2
SOS403	Intellectual and Industrial Property	E	2	0	0	2	2
SOS405	Energy Saving in Industry	E	2	0	0	2	2
SOS407	Business Administration and Management	E	2	0	0	2	2
SOS409	Factory Organization and Facility Planning	E	2	0	0	2	2
SOS411	Productivity Measurement and Analysis	E	2	0	0	2	2
SOS413	Risk Management	E	2	0	0	2	2
SOS415	Energy and Environment	E	2	0	0	2	2

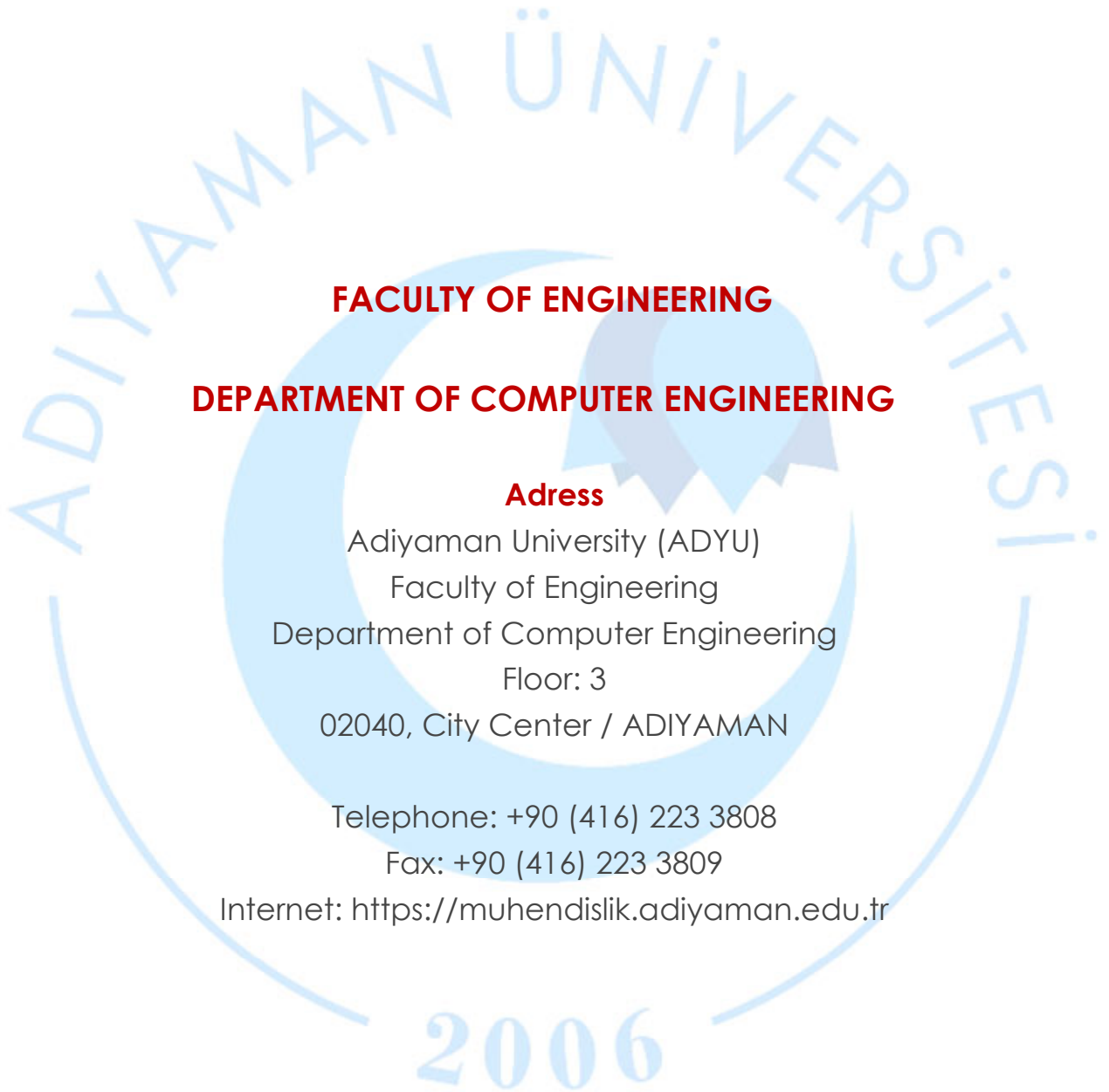
**Engineering Elective Courses****MUHSEC (7. Semester)**

Course Code	Course Name	C/E	T	P	L	Credit	ECTS
MUH402	Innovation and Product Development	E	2	0	0	2	5
MUH404	Quality Control and Standards	E	2	0	0	2	5
MUH406	Productivity Management	E	2	0	0	2	5
MUH408	Organizational Behavior for Engineers	E	2	0	0	2	5
MUH410	Business Establishment and Government Supports	E	2	0	0	2	5

**C:** Compulsory **E:** Elective **T:** Theoretical **P:** Practical **L:** Laboratory **Credit:** National Credit  
**ECTS:** European Credit Transfer and Accumulation System

## **Activities**

The Computer Engineering Department organizes Tea Talk events annually, where informative seminars on new research topics are held. These Tea Talk seminars are open to all faculty and students. The goal is to increase students' interest in academia and to create a scientific discussion environment. In addition, Career Talks are held regularly every year, where experts in the field give seminars. The aim of these talks is to inform students about job opportunities and market conditions.



**FACULTY OF ENGINEERING**

**DEPARTMENT OF COMPUTER ENGINEERING**

**Adress**

Adiyaman University (ADYU)  
Faculty of Engineering  
Department of Computer Engineering  
Floor: 3  
02040, City Center / ADIYAMAN

Telephone: +90 (416) 223 3808

Fax: +90 (416) 223 3809

Internet: <https://muhendislik.adiyaman.edu.tr>