Course Description	
Course Code	YZ 109
Course Name	INTRODUCTION TO COMPUTER SCIENCE
Prerequisite Courses	
Language of the Course	The English
Course Coordinator	
Instructor(s)	
Course Assistants	
The aim of the course	To review the fundamental subjects and interests of computer engineering
Course Content	General introduction to computer sciences

Weekly Course Content	
Week 1	Fundamental Concepts of Computer Sciences
Week 2	Boolean Algebra
Week 3	Algorithms and Flow Charts
Week 4	Programming Languages
Week 5	Operating Systems
Week 6	Microcontrollers and Assembly Programming
Week 7	Computer Networks and Internet, coding systems in computers
Week 8	Midterm exam.
Week 9	Software Engineering
Week 10	Data Structures and Data Models in Computer Science
Week 11	Database Management Systems and SQL
Week12	Hardware Engineering
Week 13	Software Modelling Languages
Week 14	Discrete Mathematics
Week 15	Final exam.

Course Learning Outcomes	
1	Ability to apply basic sciences in the field of computer engineering
2	Ability to learn basic rules of boolean algebra
3	Ability to learn basic structures of algorithms and flow charts in order to achieve the following technical lessons related to Computer Engineering.
4	Ability to learn basic structures of programming languages in order to achieve the following technical lessons related to Computer Engineering.
5	Ability to control basic structures of operating systems in order to achieve the following technical lessons related to Computer Engineering.
6	Ability to apply basic sciences in the field of microcontrollers and assembly programming.
7	Ability to learn and control basic structures of computer networks and the Internet.
8	Ability to apply basic sciences in the field of software and hardware engineering.
9	Ability to apply basic structures of data structures, data models, and algorithms.
10	Ability to apply basic sciences and rules of database management systems and SQL.

Contribution of the Course to Program Qualifications		Contribution Level
01	The student will have the ability to apply an analytical approach, mathematics and science knowledge in software and engineering issues.	5
02	The student will have the ability to identify, define, formulate and solve a problem in software and computer systems.	5
03	The student will have gains scientific research skills in software and engineering problems, has the ability to design a system, part or process.	5
04	The student will have the ability to use the design capability, techniques and tools required for engineering applications.	5
05	The student will have the ability to design, implement and interpret experimental work and software projects by analyzing the results.	5
06	The student will have the ability to work between disciplines and teamwork.	3
07	The student will have the ability to work in international environments and adapt to different cultures.	4
08	The student will have verbal and written communication skills in Turkish and English.	3
09	The student will have the awareness of the necessity of lifelong learning and the ability to realize it.	5
10	The student will gain knowledge of legal issues with the awareness of professional and ethical responsibility.	5
11	The student will have managerial skills (leadership, organization, time and risk management, quality awareness, efficiency, etc.).	3
12	The student will have the ability to participate in social activities, to acquire regular sports habits and to use time in the best way.	5
13	The student will have the ability to find unusual ways and produce projects.	4
14	The student will have professional self-confidence, being an entrepreneur and taking initiative.	3
15	It is sensitive about the problems of the age and looks after the national interests.	5

ECTS WORKLOAD			
	Number	**Duration (hours)**	**Number*Duration**
Face to face education	14	2	28
Out-of-class study time (pre-study, reinforcement)	14	1	14
Homeworks	4	1	4
Presentation / Seminar preparation	0	0	0
Quizzes	0	0	0
Preparation for midterm exams	1	10	10
midterm exams	1	1	1
Project (Semester assignment)	0	0	0
Lab	0	0	0
field work	0	0	0
Preparation for the final exam	1	20	20
Semester final exam	1	1	1
Research	2	4	8
TOTAL WORKLOAD			**86**
ECTS			**3**

Evaluation		
SEMESTER EVALUATION	**Number**	**Contribution Percentage**
Midterm	1	20
Quiz	0	0
Homework	4	20
SEMESTER TOTAL		**40**

Contribution rate of mid-term evaluations to success		40
Contribution rate of the final exam to success		60
GRAND TOTAL		**100**

RESOURCES	
Textbook	Fundamentals of Computer Engineering (Bookin Turkish), Papatya press, Editor: Rifat ÇÖLKESEN
Helpful Resources	In addition lesson content is compiled from multiple sources