

MALTEPE UNIVERSITY
FACULTY OF ENGINEERING AND NATURAL SCIENCES
COMPUTER ENGINEERING (ENGLISH)
2020-2021 Fall Term

Course name: Introduction to Computer Engineering			Course code: CEN 105
ECTS: 6	1st year - 1st semester	Undergraduate	Required
4 h/week	Lectures:2 h/week Application:2 h/week		Course language:English

Lecturer of the Course and contact info:

Prof. Dr. Asaf VAROL (Fall)

Faculty of Engineering and Natural Science Office no: Basement ,e-mail:asafvarol@maltepe.edu.tr,extension:

Section Code:

CEN 105 01, CEN 105 0101

Office Hours:

Monday 15:00-16:50, Tuesday 13:00-16:50, Wednesday 13:00-16:50

(If any) Web address of the course or the lecturer:

<http://www.asafvarol.com>

Objectives of the Course:

Detailed examination of the coding phase of the software development life cycle. The design of program logic. Programming languages. Introduction to Object-oriented methods. Database management systems. Computer networks and communication. Internet and World Wide Web. Programming technologies for the Web. Computers and security. Computers and social issues. Course objectives: After taking this course, students will be able to understand following topics: 01. History and Implications 02. Computing Security and Ethics 03. Computing Computer Architecture 04. Networks 05. The Internet 06. Database Fundamentals 07. Data Structure 08. Operating Systems 09. Numbering Systems 10. File Structure

Learning Outcomes and Subordinate Skills:

At the end of the semester the students will be able to:

1. To know the working principles of a computer
2. To know the basic units of a computer system
3. Understand how computers represent data
4. To understand all kinds of I/O units

Generic Competencies:

1. Questioning, Entrepreneur, Follow ethics of computer usage, Civic awareness, Work in teams

Instructional Methods and Techniques:

2 hours lecture and also 2 hours lab session are included.

Mode of Delivery:

E-Learning

Place of Special Course Internship (If any):

None.

Pre-requisites:

None.

Co-requisites:

None.

Recommended Optional Programme Components:

None.

Course Contents:

Principles of a computer system, I/O units- memory , -cpu principles of these units, programming languages, database systems, operating systems, flow charts

Course Category:

1.	Core Courses	X
2.	Major Area Courses	
3.	Supportive Courses	
4.	Transferable Skill Courses	
5.	Communication and Management Skills Courses	

Textbooks:

1. Grey Anderson, David Ferro, Robert Hilton, Connecting with Computer Science, 2nd Edition.

Course Outline:

Weeks	Subjects to be Discussed / Covered
1 . Week	General Introduction Review of Syllabus
2 . Week	History and Implications
3 . Week	Computing Security and Ethics (I)
4 . Week	Computing Security and Ethics (II)
5 . Week	Computer Architecture (I)
6 . Week	Computer Architecture (II)
7 . Week	Midterm
8 . Week	Networks (I)
9 . Week	Networks (II)
10. Week	The Internet (I)
11. Week	The Internet (II)
12. Week	Numbering Systems
13. Week	File Structures (I and II) , Quiz
14. Week	Revision for Final
15. Week	Final Exam
16. Week	Final Exam

In Maltepe University, there is no general mid-term week for all courses. Each midterm for each course is given by the instructor of the course, by adding an extra week to the above 16 weeks course outline.

Evaluation System

Semester Requirements	Number	Percentage of grade
Attendance	14	-
Laboratory	10	-
Application	-	-
Field Work	-	-
Special Course Internship (If any)	-	-
Homework Assignments	-	-
Presentations	-	-
Project	-	-
Seminar	-	-
Quiz	1	20 (%)
Listening	-	-
Mid-Terms	1	35 (%)
Final	1	45 (%)
	Total	100

ECTS Student Workload Table

Activities	Number	Duration (hours)	Workload
Course Hours (Including exam week 14x hours/week)	14	2	28
Laboratory	10	2	20
Application	-	-	-
Field Work	-	-	-
Special Course Internship (If any)	-	-	-
Study Hours-out of Class (pre/after studies)	14	2	28
Presentation / Seminar Preparation	-	-	-
Project	-	-	-
Homework Assignments	-	-	-
Quiz	1	10	10
Listening	-	-	-
Mid-Terms	1	15	15
Final	1	20	20
Total Workload			121

Relationship Between Course Learning Outcomes and COMPUTER ENGINEERING (ENGLISH)(ENGLISH) Programme Key Learning Outcomes

		Level of Contribution				
		1	2	3	4	5
No	Programme Key Learning Outcomes					
1	Applies mathematics, science and engineering knowledge towards solving computer engineering problems.					X
2	Solves computer engineering problems by identifying the problem, and, determining the appropriate modeling and solution methods		X			
3	Has the skills to design and develop computer engineering solutions to meet the requirements of various systems problems		X			
4	The ability to use computer engineering tools and skills effectively		X			
5	Gathers data, processes analyzes, and, reports the results.			X		
6	Follows the technological advances and the awareness for life-long learning.				X	
7	Takes active and effective duties in team studies as well as interdisciplinary activities and shows leadership.				X	
8	Has the skills to have effective oral and written communication		X			
9	Has the skills to follow and utilize international publications			X		
10	Takes professional and ethical responsibilities					X
11	Aware of real life applications and problems			X		
12	Understand the national and international level legal, social, and cultural and environmental effects of engineering applications.			X		