Introduction to Computers and Programming (COMPE 101) Course Details

Course Name	Course Code	Term	Lecture Hours	Application Hours	Lab Hours	Credit	ECTS
Introduction to Computers and Programming		Autumn	2	2	0	3	3

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Course Language	English
Course Type	Service Courses Given to Other Departments
Course Level	Bachelor
Mode of Delivery	Face to Face
Learning and Teaching Strategies	Lecture, Question and Answer, Drill and Practice
Course Coordinator	

Course Lecturer(s)	
Course Assistants	
Course Objectives	The objective of this course is to provide the basics of information systems, application software, Internet and programming fundamentals.
Course Learning Outcomes	The students who succeeded in this course; • Differentiate between computer types and information systems • Identify the types of computer software and hardware • Gain experience in using a word processor, spreadsheet and presentation software • Understand the basic concepts of Internet and networking • Introduce concepts of programming
Course Content	Basics of information systems. Computer software. Computer hardware: CPU, memory units, and I/O devices. Internet and networking. Basic programming concepts. Hands-on experience of application software and Internet through lab sessions.

Weekly Subjects and Releated Preparation Studies

Week	Subjects	Preparation
1	Information Technology, the Internet, and You	Chapter 1 (main text)
2	The Internet, the Web, and Electronic Commerce	Chapter 2
3	Basic Application Software	Chapter 3
4	System Software	Chapter 5

5	The System Unit	Chapter 6
6	Input and Output	Chapter 7
7	Secondary Storage	Chapter 8
8	Communications and Networks	Chapter 9
9	Algorithm Development (pseudo code and flowchart)	Chapter 1,3
10	Algorithm Development (pseudo code and flowchart)	Chapter 1,3
11	Algorithm Development (pseudo code and flowchart)	Chapter 1*,3*
12	Overview of C	Chapter 2*
13	Overview of C and only Library Functions	Chapter 2*,3*
14	If-else statements (No switch)	Chapter 4*
15	Review	
16	Review	

Sources

Course Book:	1. Timothy J. O'Leary, Linda I. O'Leary, "Computing Essentials 2008", McGraw-Hill, 2008.
	2. (*) Jeri R. Hanly, Elliot B. Koffman, "Problem Solving and Program Design in C", Addison Wesley, 5th Edition, 2007.
	3. Ali Yazıcı, Çiğdem Turhan, Fügen Selbes, "C Programming: Problem Book", Atılım University, Department of Computer Engineering, 2004.
	4. The O'Leary Series: Office XP, Volume I, Timothy J O'Leary, Linda I O'Leary, McGraw-Hill/Irwin, 1st Edition, 2001.
	5. The O'Leary Series: Windows XP- Brief, Timothy J. O'Leary, Linda I. O'Leary, McGraw-Hill, 2002.

Other Sources:	1. Introduction to Computers & Information Systems, Larry Long, Nancy Long, Prentice Hall.
	2. The O'Leary Series: Office XP, Volume I, Timothy J O'Leary, Linda I O'Leary, McGraw-Hill/Irwin, 1st Edition, 2001.
	3. The O'Leary Series: Windows XP- Brief, Timothy J. O'Leary, Linda I. O'Leary, McGraw-Hill, 2002.
	4. Problem Solving Using C Structured Programming Techniques, Yuksel Uckan, McGraw- Hill, 2nd Edition, 1999.
	5. C: How to Program, H.M. Deitel, P.J.Deitel, Prentice Hall, 5th Edition, 2006.

Evaluation System

Requirements	Number	Percentage of Grade
Attendance/Participation	-	-
Laboratory	2	20
Application	-	-
Field Work	-	-
Special Course Internship	-	-
Quizzes/Studio Critics	-	-
Homework Assignments	-	-
Presentation	-	-
Project	-	-
Seminar	-	-
Midterms Exams/Midterms Jury	2	40
Final Exam/Final Jury	1	40
Total	5	100

Percentage of Semester Work	50
Percentage of Final Work	50
Total	100

Course Category

Core Courses	
Major Area Courses	
Supportive Courses	
Media and Managment Skills Courses	
Transferable Skill Courses	

The Relation Between Course Learning Competencies and Program Qualifications

#	Program Qualifications / Competencies		Level of Contribution				
		1	2	3	4	5	
1	An ability to apply knowledge of computing, sciences and mathematics to solve computer engineering problems						

An ability to analyze and model computer systems specific problems, identify and define the appropriate requirements for their solutions.					
An ability to design, implement and evaluate a computing system, component, process or program that meets specified requirements.					
An ability to use the modern techniques and engineering tools necessary for computer engineering practices.					
An ability to design experiments, gather/acquire, analyze, interpret data and make decisions to understand computing requirements.					
An ability to demonstrate the necessary organizational and business skills to work effectively in inter- and in-disciplinary teams or individually.					
An ability to communicate effectively in Turkish and English.					
Recognition of the need for, and the ability to access information, to follow recent developments in science and technology and to engage in life-long learning.					
An understanding of professional, legal, ethical and social issues and responsibilities related to computer engineering.					
Skills in project and risk management, awareness about importance of entrepreneurship, innovation and long-term development, and recognition of international standards and methodologies.					
An understanding about the impact of Computer Engineering solutions in a global, environmental, societal and legal context while making decisions.					
An ability to describe, analyze and design digital computing and representation systems.					
An ability to use appropriate computer engineering concepts and programming languages in solving computing problems.					
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ECTS/Workload Table

Activities	Number	Duration (Hours)	Total Workload
Course Hours (Including Exam Week: 16 x Total Hours)	16	4	64
Laboratory	1	2	2
Application			
Special Course Internship			
Field Work			
Study Hours Out of Class	14	1	14
Presentation/Seminar Prepration			
Project			
Homework Assignments	2	4	8
Quizzes/Studio Critics			
Prepration of Midterm Exams/Midterm Jury	1	2	2
Prepration of Final Exams/Final Jury	1	5	5
Total Workload	95		