

Course Code: CSE101				Course Name: Introduction to Programming			
Semester	(Lc + T + L)	Credit	ECTS	Language	Category	Instructional Methods	Prerequisites
1	3+0+2	4	7	English	Core	Course,Laboratory, Project	---
Course Content			Introduction to computers, programs and Java language, markers, variables, assignment statements, constants, data types, type conversion, selection, loops, methods, sequences, strings and characters.				
Course Objectives			To introduce basic of programming, and gain experience on solving relatively small problems using Java.				
Course Outcomes			CO1. To be able to develop programs, which are not object oriented, in Java,				
Textbook			1. Y. Daniel Liang, Introduction to Java Programming, Pearson, International Edition, Brief 8th /9th Edition 2. Lecture notes, Laboratory notes, Example problems				
Other References			Computer and projector				

**CONTRIBUTION of the COURSE on ELECTRICAL and ELECTRONICS ENGINEERING
PROGRAM OUTCOMES**

DERSİN ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ PROGRAM ÇIKTILARINA KATKISI

Contribution degree: 1-low, 2-medium, 3-high

Katkı Derecesi: 1 düşük, 2 orta, 3 yüksek

Electrical and Electronics Engineering Program Outcomes Elektrik Elektronik Mühendisliği Program Çıktıları		1	2	3
1	A comprehension of mathematics (algebra, differential, integral and probability), science (physics and chemistry) and fundamentals of computer science (programming and simulation) Matematik (cebir, diferansiyel, integral ve olasılık), fen bilimleri (fizik ve kimya) ve bilgisayar bilimlerinin (programlama ve benzetim) temellerini kavrama.			X
2	Ability to apply knowledge of mathematics, science, and engineering to problems in electrical and electronics engineering Matematik, fen ve temel mühendislik bilgilerini elektronik mühendisliği problemlerine uygulama yeteneği			
3	Ability to recognize the needs and challenges of our age, and to assess the global and social impacts of engineering solutions Çağımızın ihtiyaç ve sorunlarını tanıma, mühendislik çözümlerinin küresel ve toplumsal etkilerini değerlendirebilme			
4	Comprehension of professional and ethical responsibility Mesleki ve etik sorumluluk gereklerini kavrama			
5	Ability to design and conduct experiments, as well as to analyze and interpret data Deney tasarlama, gerçekleştirme, verileri analiz etme ve yorumlama yeteneği			
6	Ability to identify, formulate and solve engineering problems Mühendislik projeleri kapsamında problemleri tanımlama, modelleme ve çözme yeteneği			

7	Ability to design and integrate electronic system components to satisfy given requirements Elektronik uygulamalarına yönelik sistem ve süreçleri analiz etme, değerlendirme, sistem bileşenlerini isterleri karşılayacak şekilde tasarlama ve entegre etme yeteneği			
8	Ability to take individual responsibilities and to work as part of a team Takım içerisinde çalışabilme, bireysel sorumluluk alabilme yeteneği			
9	Ability to effectively communicate knowledge and opinions via written, oral and visual means Bilgi ve görüşlerini, yazılı, sözlü ve görsel araçlarla etkin olarak aktarabilme yeteneği			
10	Ability to recognize the need for, and be motivated to engage in life-long learning Yaşam boyu eğitim ihtiyacını tanıma ve bu eğitime katılma yönelimi			
11	Ability to use the hardware and software based modeling, simulation, design and communication tools necessary for engineering practice Mühendislik uygulamaları için gereken donanım ve yazılım tabanlı modelleme, benzetim, tasarım ve iletişim araçlarını kullanma yeteneği			X

COURSE PLAN

Week	Topics	Lab/Tutorial
1	Computers, programming, and introduction to Java	Introduction to the tools to be used
2	Basic programming: writing simple programs in Java language, assignment statements, data types.	Java programming environment, compiler, simple Java programs
3	Variables, constants, data types, and examples	simple Java programs, debugging, variables
4	Case studies	Data types, and exercises
5	Boolean data type, selection statements, program flow	Data types, and exercises
6	Loops: while and do-while loops	Selection statements
7	Loops: for loops, nested loops, break, continue	while, do-while examples
8	Case Study	For loop, nested loops samples
9	Objects and Methods	Nested Loop, break, continue
10	Arrays	Method examples
11	Copying arrays, passing and returning arrays to/from methods	Array examples
12	Linear and binary search	Methods and arrays
13	Selection and insertion sort	Searching arrays for a value
14	2D arrays	Sort and two dimensional arrays

COURSE ASSESSMENT AND ECTS WORK LOAD

Type of Work	Count	Contribution (%)	ECTS WORK LOAD	
			Time (Hour) (Including prep. time)	Work load
Attendance	14	10	3	42
Final Exam	1	40	30	30
Quizzes				0
Term project				0
Reports				0
Final Project				0
Seminar				0
Assignments				0
Presentation				0
Midterms	2	40	20	40
Project	2	10	10	20
Laboratory	14	0	2	28
Tutorial				0
Other(Self study)	5	0	2	10
CONTRIBUTION OF SEMESTER LONG STUDIES		60	Total work load	170
CONTRIBUTION OF END OF SEMESTER STUDIES		40	Total work load / 25	6.8
Total:		100	ECTS Credit	7
Preparation Date /Revision Date:	Prepared by /Revised by : Asst.Prof. M. Taner ESKİL		Approved by:	