Course Description Form	
Course Code and Name	CENG372 JAVA PROGRAMMING (TECH.ELECT.)
Course Semester	6
Catalog Content	Introduction to Java and Java Virtual Machine, Classes and Objects: A Deeper Look, Object-Oriented Programming: Inheritance, Object-Oriented Programming: Polymorphism, GUI Components: Part 1, GUI Components: Part 2 , Exception Handling, Multithreading, Multithreading with GUI, Networking, Graphics & Java 2D, Applets
Textbook	Java How to Program 9th edition, Deitel & Deitel, 2011.
Supplementary Textbooks	Java: The Complete Reference, Tenth Edition (Complete Reference Series) by Herbert Schildt, 2017. Java Programming (MindTap Course List) 8th Edition by Joyce Farrell, 2015.
Credit	6
Prerequisites of the Course (*Attendance Requirements*)	There is no prerequisite or co-requisite for this course.
Type of the Course	Elective
Instruction Language	English
Course Objectives	To inform the students about the contents of the course, to teach the fundamentals of Java programming and advanced Java concepts
Course Learning Outcomes	1. Developing extensible applications by using Java technologies 2. Grasping the Java Virtual Machine 3. Gaining debugging ability in Java
Instruction Methods	The mode of delivery of this course is face to face.
Weekly Schedule	1. Week: Introduction to Java and Java Virtual Machine 2. Week: Classes and Objects: A Deeper Look 3. Week: Object-Oriented Programming: Inheritance 4. Week: Object-Oriented Programming: Polymorphism 5. Week: GUI Components: Part 1 6. Week: GUI Components: Part 2 7. Week: Exception Handling 8. Week: Multithreading 9. Week: Multithreading 10. Week: Multithreading with GUI 11. Week: Networking 12. Week: Networking 13. Week: Graphics & Java 2D 14. Week: Applets

Teaching and Learning Methods *(These are examples. Please fill which activities you use in the course)*	Weekly theoretical course hours: 3 Reading Activities Internet browsing, library work Designing and implementing materials Report Preparing Preparation of Midterm and Midterm Exam Final Exam and Preparation for Final Exam		

Assessment Criteria		Numbers	Total Weighting (%)	
	Midterm Exams	1	30	
	Assignment			
	Application			
	Projects	1	20	
	Practice			
	Quiz	3	10	
	Percent of In-term Studies (%)		60	
	Percentage of Final Exam to Total Score (%)		40	
	Attendance			

	Activity	Total Number of Weeks	Duration (weekly hour)	Total Period Work Load
Workload	Weekly Theoretical Course Hours	14	3	42
	Weekly Tutorial Hours			
	Reading Tasks	10	2	20
	Studies	10	1	10
	Material Design and Implementation	3	15	45
	Report Preparing	1	8	8
	Preparing a Presentation			
	Presentations			
	Midterm Exam and Preparation for Midterm Exam	1	10	10
	Final Exam and Preparation for Final Exam	1	15	15
	Other (should be emphasized)			
	Total Workload			150
	Total Workload / 25			6
	Course Credit (ECTS)			6

	No	Program Outcomes	1	2	3	4	5
Contribution Level Between Course Learning Outcomes and Program Outcomes	1	Sufficient knowledge on mathematics, science and computer engineering; ability to apply theoretical and practical knowledge in these areas to model and solve engineering problems			X		
	2	Ability to identify, define, formulate and solve complex engineering problems; ability to choose and apply appropriate analysis and modelling methods for these purposes				X	
	3	Ability to design a complex system, process, device, software, algorithm, or product under realistic constraints and circumstances to meet certain requirements; ability to apply modern design techniques for this purpose			X		
	4	Ability to choose, develop and use modern techniques and tools necessary for engineering applications; ability to effectively use computing technologies				X	
	5	Ability to design and implement systems or experiments to solve engineering problems, collect and interpret data to evaluate and analyze the results of solutions				X	
	6	Ability to work effectively in intradisciplinary and interdisciplinary teams or individually				X	
	7	Ability to efficiently prepare, evaluate and interpret reports					X
	8	Ability to make presentations and conduct effective verbal and written communication in Turkish and English		X			
	9	Awareness of the necessity of lifelong learning; ability to access information, follow scientific and technological developments; ability to perpetually renew oneself				X	
	10	Awareness of professional and ethical responsibility, ability to act in accordance with ethical principles	X				

#		1	2	3	4	5
11	Ability to apply knowledge on project management, risk management and change management			X		
12	Awareness of entrepreneurship and innovation, ability to design and build sustainable systems		X			
13	Ability to devise local and global solutions to contemporary issues considering the effects of engineering applications on health, environment and security		X			
14	Awareness of the legal consequences of engineering solutions	X				
15	Ability to apply knowledge on software development process and documentation rules			X		
16	Knowledge on standards used in engineering applications			X		
17	Awareness of occupational health and security, information security and privacy	X				

The Course's Lecturer(s) and Contact Information	Assoc. Prof. Dr. Murat HACIÖMEROĞLU murath@gazi.edu.tr