

<b>COURSE DESCRIPTION FORM</b>	
<b>Course Code and Name</b>	CENG482 INTRODUCTION TO COMPUTER SECURITY (TECH.ELECT.)
<b>Course Semester</b>	8
<b>Catalog Content</b>	Learning the basic principles to provide computer security
<b>Textbook</b>	Computer Security Fundamentals (Prentice Hall Security Series) by Chuck Easttom, 2005.
<b>Supplementary Textbooks</b>	Security Engineering by R. Anderson, 2001.  Cryptography and Network Security Principles and Practices by W. Stallings, 2003.  Security in Computing, Charles R. Pfleeger and Shari Lawrence Pfleeger, Prentice Hall, 2006.
<b>Credit</b>	6
<b>Prerequisites of the Course</b> ( Attendance Requirements)	-
<b>Type of the Course</b>	Elective
<b>Instruction Language</b>	English
<b>Course Objectives</b>	Learning the precautions to be taken by focusing on current threats on computer security.
<b>Course Learning Outcomes</b>	At the end of this course, the students will be able to 1. Learn basic concepts of computer security 2. Learn threats and vulnerabilities for computers 3. Developing awareness about current threats and simple applications 4. Developing countermeasures
<b>Instruction Methods</b>	The mode of delivery of this course is face to face
<b>Weekly Schedule</b>	Week 1: Introduction to Computer Security and Basic Concepts Week 2: Classification of threats, Passwords Week 3: Access Permissions Week 4: Symmetric and Asymmetric Encryption Techniques Week 5 Introduction to security life cycle Week 6: Security Policies and Standards Week 7: Firewalls Week 8: Viruses and Antivirus Software Week 9: Spyware and Protection Techniques Week 10: Spyware and Protection Techniques Week 11: Intrusion Detection Systems Week 12: Intrusion Detection Systems Week 13: Spam & Anti-spam Week 14: personal information and computer security
<b>Teaching and Learning Methods</b> (These are examples. Please fill which activities you use in the course)	Weekly Theoretical Course Hours: 3 Reading Tasks Studies Material Design and Implementation Preparing Reports Preparing Presentation Presentation Midterm and Studying for Midterm

	Final and Studying for Final					
<b>Assessment Criteria</b>		<b>Quantity</b>	<b>Total Contribution (%)</b>			
	Midterm Exams	1	20			
	Assignment	5	20			
	Application	0	0			
	Projects	1	20			
	Practice	0	0			
	Quiz	0	0			
	Percent of In-term Studies (%)		60			
	Percentage of Final Exam to Total Score (%)		40			
	Attendance	-	-			
<b>Workload</b>	<b>Activity</b>	<b>Total Number of Weeks</b>	<b>Duration (weekly hour)</b>	<b>Total Period Work Load</b>		
	Weekly Theoretical Course Hours	14	3	42		
	Weekly Tutorial Hours	0	0	0		
	Reading Tasks	8	4	32		
	Studies	8	4	32		
	Material Design and Implementation	12	1	12		
	Report Preparing	1	3	3		
	Preparing a Presentation	1	3	3		
	Presentations	1	1	1		
	Midterm Exam and Preparation for Midterm Exam	1	10	10		
	Final Exam and Preparation for Final Exam	1	15	15		
	Other ( should be emphasized)	0	0	0		
	Total Workload			150		
	Total Workload / 25			6		
	Course Credit (ECTS)			6		
<b>Contribution Level Between Course Learning Outcomes and Program Outcomes</b>	Program Outcomes	1	2	3	4	5
	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	
	Ability to identify, define, formulate and solve complex engineering problems; ability to choose and apply appropriate analysis and modelling methods for these purposes					X

	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		
	Ability to choose, develop and use modern techniques and tools necessary for engineering applications; ability to effectively use computing technologies						X
	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			
	Ability to work effectively in intradisciplinary and interdisciplinary teams or individually				X		
	Ability to efficiently prepare, evaluate and interpret reports				X		
	Ability to make presentations and conduct effective verbal and written communication in Turkish and English			X			
	Awareness of the necessity of lifelong learning; ability to access information, follow scientific and technological developments; ability to perpetually renew oneself				X		
	Awareness of professional and ethical responsibility, ability to act in accordance with ethical principles				X		
	Ability to apply knowledge on project management, risk management and change management						X
	Awareness of entrepreneurship and innovation, ability to design and build sustainable systems					X	
	Ability to devise local and global solutions to contemporary issues considering the effects of engineering applications on health, environment and security		X				
	Awareness of the legal consequences of engineering solutions		X				
	Ability to apply knowledge on software development process and documentation rules				X		
	Knowledge on standards used in engineering applications						X
	Awareness of occupational health and safety, information security and privacy			X			
<b>The Course's Lecturer(s) and Contact Information</b>	Prof. Dr. Şeref SAĞIROĞLU ss@gazi.edu.tr						