

Course Description Form	
Course Code and Name	5341329 Counter Forensics
Course Semester	Fall-Spring
Catalog Data of the Course (Course Content)	Providing security by developing attacks against the science of forensic science, basics of counter forensics, counter-criminal techniques, protection methodologies and mechanisms
Textbook of the Course	Counter Hack Reloaded: A Step-by-Step Guide to Computer Attacks and Effective Defenses (2nd Edition) by Edward Skoudis (Author), Tom Liston (Author)
Supplementary Textbooks	Investigating the Cyber Breach: The Digital Forensics Guide for the Network Engineer 1st Edition by Joseph Muniz (Author), Aamir Lakhani (Author)
Credit (ECTS)	8
Prerequisites of the Course (Attendance Requirements)	There is no prerequisite or co-requisite for this course.
Type of the Course	Elective
Instruction Language of the Course	Turkish
Course Objectives	Establishing security by developing attacks against the science of forensic science, establishing the necessary infrastructure for cyber warfare
Learning Outcomes	<p>Student who pass this course will:</p> <ol style="list-style-type: none"> 1. Having a basic knowledge about counter forensic 2. To be able to understand and analyze literature including forensic and counter-forensic topics in the literature 3. To be able to understand and use the operation of algorithms and methods used in the study of counter-forensic knowledge 4. To have the knowledge and equipment to implement and develop the methods necessary for effective use of counter-criminal techniques in homeland security, 5. To understand the functioning of the instruments to be used in order to prevent the acquisition of data, information and knowledge to develop proper protection methodology and mechanism, 6. To be able to fulfill the requirements in the homework and reports and to present them in accordance with the content
Instruction Method	The mode of delivery of this course is Face to face
Weekly Schedule of the Course	<ol style="list-style-type: none"> 1. Week: An Overview of Counter Forensic 2. Week: Forensic and Counter Forensic Relation 3. Week: Counter-Forensic Methods and Processes 4. Week:Counter-Forensic and Homeland Security 5. Week: Counter-Forensic and Information Security 6. Week: Counter-Forensic and Secure Data Deletion 7. Week:Counter-Forensic Applications and Tools 8. Week:Mid-term exam 9. Week: Counter-Forensic and Steganography 10. Week: Counter-Forensic and Cryptology 11. Week: Counter-Forensic and Digital Content Protection 12. Week: Counter-Forensic and Buffer Overflow 13. Week: Student Presentations 14. Week: Final Exam
Assesment Tasks <i>(The time spent for the activities listed here will determine the amount of credit required.)</i>	<p>Weekly theoretical course hours Reading Activities Internet browsing, library work Designing and implementing materials Report preparing Preparing a Presentation Presentations Preparation of Midterm and Midterm Exam Final Exam and Preparation for Final Exam</p>

Assesment Criteria		Numbers	Total Weighting (%)				
	Midterm Exams	1	40				
	Assignment	5	20				
	Application	0					
	Projects	1	40				
	Practise	0					
	Quizes	0					
	Percent of In-term Studies to Year- to Year (%)		60				
	Percentage of Final Exam to Total Score (%)		40				
Attendance							
Workload of the Course	Activity	Total Number of Weeks	Duration (weekly hour)	Total Period Work Load			
	Weekly Theoretical Course Hours	14	3	42			
	Hours Per Week			0			
	Reading Tasks	8	3	24			
	Internet Browsing, Library Work	8	3	24			
	Designing and Implementing Materials	8	3	24			
	Report Preparing	1	1	1			
	Preparing a Presentation	14	2	28			
	Presentations	14	3	42			
	Midterm Exam and Preperation for Midterm Exam	1	1	1			
	Final Exam and Preperation for Final Exam	1	1	1			
	Other	1	1	1			
	Total Workload			188			
	Total Workload / 25			7.52			
	Course Credit (ECTS)			8			
Contribution Level Between Course Outcomes and Program Outcomes	No	Program Outcomes	1	2	3	4	5
	1	Reaches the expansion of knowledge by conducting scientific research in the field of engineering and evaluation, interpretation and application of information.					X
	2	Has extensive and in depth knowledge including the latest techniques, methods applied and their limitations in engineering.					X
	3	Completes and applies knowledge by using scientific methods by using limited or missing data and integrates information from different disciplines.				X	

	4	Be aware of new and developing practices of the profession, examines and learns when needed.					X
	5	Defines and formulates problems related to the field, develops methods to solve them and applies innovative methods in solutions.				X	
	6	Develops new and / or original ideas and methods, designs complex systems or processes and develops innovative / alternative solutions in their designs.				X	
	7	Designs and applies theoretical, experimental and modeling based researches, examines and solves the complex problems encountered in this process.					X
	8	Works effectively in disciplinary and multidisciplinary teams, leads such teams and develops solution approaches in complex situations, works independently and takes responsibility.			X		
	9	Communicates oral and written using a foreign language at least at the level of European Language Portfolio B2.		X			
	10	Conveys the process and results of the studies in written and oral form in a systematic and clear manner in national and international environments within or outside the field.					X
	11	Knows the social, environmental, health, security, legal aspects of engineering applications; project management, and business life applications and be aware of the constraints of these engineering applications.					
	12	Considers social, scientific and ethical values in the stages of data collection, interpretation and announcement and in all professional activities.		X			
The Course's Lecturer(s) and Contact Informations		Name, Surname: Asst. Prof. Dr. Uraz Yavanoğlu E-mail address: uraz@gazi.edu.tr					