



COURSE / MODULE / BLOCK DETAILS

ACADEMIC YEAR / SEMESTER

Offered by: Faculty of Engineering			
Course Title: BASIC CYBER SECURITY		Course Org. Title: BASIC CYBER SECURITY	
Course Level: Bachelor's Degree		Course Code: MTH 3501	
Language of Instruction: English		Form Submitting/Renewal Date 09/02/2023	
Weekly Course Hours: 2		Course Coordinator: DOÇ.DR. GÖKHAN DALKILIÇ	
Theory	Application	Laboratory	National Credit: 2
2	0	0	ECTS Credit: 4



DOKUZ EYLUL UNIVERSITY

FACULTY OF ENGINEERING OFFICE OF THE DEAN



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Offered to:

Course Status: Compulsory/Elective

Name of the Department:

Instructor/s:

DOÇ.DR. GÖKHAN

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Course Objective:

This course aims to provide a general introduction to basic concepts in cyber security. Anyone with a good general knowledge of information and communication technology can take this course. The nature, scope and importance of cyber security are explained, and basic concepts are justified and researched within the course. This course covers the types of threats and attacks that cybersecurity must address, as well as technologies and processes that can be deployed.

Learning Outcomes:

1. Defines the characteristics of criminals and experts in the cyber security world.
2. Explains how the principles of confidentiality, integrity and availability relate to data states and cybersecurity measures.
3. Explains the tactics, techniques and procedures used by cybercriminals.
4. Explains how technologies, products and procedures are used to protect privacy, ensure integrity and high availability.
5. Explains how cybersecurity professionals use technologies, processes, and procedures to defend all components of the network.
6. Explains the purpose of cyber security laws.

Learning and Teaching Strategies:

Lectures
Exams
Practice

Assessment Methods:

Name	Code	Calculation formula
MIDTERM EXAM	MTE	
PROJECT	PRJ	
FINAL EXAM	FIN	
FINAL COURSE GRADE	FCG	$MTE * 025 + PRJ * 025 + FIN * 050$
RESIT	RST	
FINAL COURSE GRADE (RESIT)	FCGR	$MTE * 025 + PRJ * 025 + RST * 050$



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Further Notes about Assessment Methods:

Assessment Criteria:

In addition to midterm and final exams, the performance of the student in the course is evaluated with project / practice assignments.

Textbook(s)/References/Materials:

Course Policies and Rules:

Participation is mandatory.

Contact Details for the Instructor:

dalkilic@cs.deu.edu.tr

Office Hours:

To be announced

Course Outline:

Week	Topics:	Notes:
1	Information and Introduction of the Course and Preliminaries.	
2	Historical Development of Security, Understanding the Danger	
3	Risk Management Approach and Basic Principles of Cyber Security	
4	Cyber Threat and Attacks -1	
5	Cyber Threat and Attacks -2	



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6	Information Security, Security in Social Environments in Mobile Networks
7	Midterm
8	Cryptology and Access Control in Cyber Security
9	How to Ensure Data Integrity in the Cyber World?
10	How is Accessibility Provided in the Cyber World?
11	How Do We Secure the System and Devices?
12	Cyber Security Technologies and Features
13	Human Factor, Ethics and Career in Cyber Security
14	Student presentations and face-to-face lecture



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ECTS Table

Course Activities	Number	Duration (hour)	Total Work Load (hour)
In Class Activities			
Lectures	13	3	39

Exams

Final	1	4	4
Midterm	1	4	4

Out of Class activities

Preparations before/after weekly lectures	13	1	13
Preparation for midterm exam	1	4	4
Preparation for final exam	1	4	4
Preparing assignments	4	8	32
Total Work Load (hour)			100
ECTS Credits of the Course= Total Work Load (hour) / 25			4