

KOCAELİ HEALTH AND TECHNOLOGY UNIVERSITY
FACULTY OF ENGINEERING AND NATURAL SCIENCES
COMPUTER ENGINEERING 2023-2024 COURSE SCHEDULE

1ST SEMESTER				
CODE	COURSE TITLE	T	P	ECTS
MAT110	Mathematics I	3	2	5
FIZ110	Physics I	3	2	5
ATA101	Principles of Atatürk and History of Revolution I	2	0	2
TUR101	Turkish Language I	2	0	2
MAT125	Linear Algebra	3	0	4
BLM111	Introduction to Computer Engineering	2	0	3
BLM112	Computer Programming I	3	0	4
BML113	Computer Programming Lab - I	0	2	3
DIL101	English I	2	0	2
TOTAL		20	6	30

2ND SEMESTER				
CODE	COURSE TITLE	T	P	ECTS
MAT120	Mathematics II	3	2	5
FIZ120	Physics II	3	2	5
ATA102	Principles of Atatürk and History of Revolution II	2	0	2
TUR102	Turkish Language II	2	0	2
BLM121	Computer Programming Lab - II	0	2	3
BLM122	Computer Programming II	3	0	4
BLM123	Electrical Circuit Basics	3	0	4
DIL102	English II	2	0	2
	University Elective Course I	2	0	3
TOTAL		20	6	30

3RD SEMESTER				
CODE	COURSE TITLE	T	P	ECTS
MAT211	Differential Equations	3	0	4
MAT213	Discrete Mathematics	3	0	4
BLM211	Object-Oriented Programming	3	1	5
BLM213	Data Structures	3	1	5
BLM215	Basic Electronics And Its Applications	2	1	4
BLM217	Programming Lab - I	0	3	5
	University Elective Course II	2	0	3
TOTAL		16	6	30

4TH SEMESTER				
CODE	COURSE TITLE	T	P	ECTS
MAT220	Numerical Methods	3	0	4
MAT222	Probability And Statistics	3	0	4
BLM224	Database Management Systems	3	0	5
BLM226	Numerical Design And Applications	2	1	4
BLM228	Programming Lab - II	0	3	5
	University Elective Course III	2	0	3
	Internship I			5
TOTAL		13	4	30

5TH SEMESTER				
CODE	COURSE TITLE	T	P	ECTS
BLM311	Operating Systems	3	0	5
BLM313	Software Engineering	3	0	5
BLM315	Software Laboratory - I	0	3	5
BLM317	Computer Networks	3	0	5
	Field Elective Course I	3	0	4
	University Elective Course IV (Interdisciplinary)	2	0	3
	University Elective Course V	2	0	3
TOTAL		16	3	30

6TH SEMESTER				
CODE	COURSE TITLE	T	P	ECTS
BLM322	Algorithm Design And Analysis	3	0	5
BLM324	Software Laboratory - II	0	3	5
BLM326	Web Technologies	2	1	4
BLM328	Computer Architecture and Organization	3	0	4
	Field Elective Course II	3	0	4
	University Elective Course VI (Interdisciplinary)	2	0	3
	Internship II			5
TOTAL		13	4	30

7TH SEMESTER				
CODE	COURSE TITLE	T	P	ECTS
BLM411	Programming Languages	3	0	5
BLM413	Formal Languages And Automata	3	0	5
BLM415	Research Problems	3	0	4
BLM417	Occupational Health And Safety - I	2	0	2
	Field Elective Course III	3	0	4
	Field Elective Course IV	3	0	4
	University Elective Course VII	2	0	3
	University Elective Course VIII (Interdisciplinary)	2	0	3
TOTAL		21	0	30

8TH SEMESTER				
CODE	COURSE TITLE	T	P	ECTS
BLM422	Final Project (Thesis)	0	3	10
BLM424	Artificial Intelligence	3	0	4
BLM426	Occupational Health And Safety - II	2	0	2
	Field Elective Course V	3	0	4
	Field Elective Course VI	3	0	4
	University Elective Course IX	2	0	3
	University Elective Course X (Interdisciplinary)	2	0	3
TOTAL		15	3	30

TECHNICAL ELECTIVE COURSES

V. SEMESTER (Elective I)				
CODE	COURSE TITLE	T	P	ECTS
SMUH307	Human Computer Interaction	3	0	4
SMUH311	Computer Ethics and Law	3	0	4
SMUH313	Introduction To Robotics	3	0	4
SMUH315	Computer Graphics	3	0	4
SMUH317	Data Mining	3	0	4

VI. SEMESTER (Elective II)				
CODE	COURSE TITLE	T	P	ECTS
SMUH304	Cloud Computing Technologies	3	0	4
SMUH306	Robot Programming	3	0	4
SMUH308	User Experience Design	3	0	4
SMUH310	Business Organization	3	0	4
SMUH312	Game Development	3	0	4
SMUH314	Natural Language Processing and Text Mining	3	0	4
SMUH316	Fundamentals of Signal Processing	3	0	4

VII. SEMESTER (Elective III, IV, V, VI)				
CODE	COURSE TITLE	T	P	ECTS
SMUH401	Agile Software Development	3	0	4
SMUH405	Introduction to Cryptography	3	0	4
SMUH407	Introduction to Computer Networks and Cybersecurity	3	0	4
SMUH409	Fundamentals of Image Processing	3	0	4
SMUH413	Introduction to Cybersecurity	3	0	4
SMUH415	Mobile Software Development	3	0	4
SMUH417	Microprocessors	3	0	4
SMUH419	Secure Programming	3	0	4
SMUH421	Data Processing and Visualization	3	0	4

VIII. SEMESTER (Elective VII, VIII, IX, X)				
CODE	COURSE TITLE	T	P	ECTS
SMUH402	Embedded System Programming	3	0	4
SMUH406	Big Data Analysis	3	0	4
SMUH408	IoT and OT Systems	3	0	4
SMUH416	Software Testing and Quality	3	0	4
SMUH418	Industrial Networking	3	0	4
SMUH420	Deep Learning	3	0	4
SMUH422	Computer Vision	3	0	4

SMUH423	Digital Transformation	3	0	4		SMUH424	Fuzzy Logic	3	0	4
						SMUH426	Scientific Research Methods	3	0	4
UNIVERSITY ELECTIVE COURSES (BLMUSD)										
C. CODE	COURSE TITLE	T	P	ECTS				T	P	ECTS
UNI001	Research Methods	2	0	3						
UNI002	Ethics and Human Relations	2	0	3						
UNI003	Project Preparation and Management	2	0	3						
UNI004	Digital Transformation Management	2	0	3						
UNI005	Digital Literacy	2	0	3						
UNI006	Communication Skills	2	0	3						
UNI007	Teamwork	2	0	3						
USD101	Internet and Security	2	0	3						
UNI009	Technical Communication	2	0	3						
UNI010	Photography	2	0	3						
UNI011	Strategic Management	2	0	3						
TOTAL								134	32	240