BANDIRMA ONYEDİ EYLÜL UNIVERSITY
FACULTY OF ENGINEERING AND NATURAL SCIENCES
DEPARTMENT OF COMPUTER ENGINEERING 2021-2022 CURRICULUM

I. SEMESTER/FALL

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
FZI1101	C	Physics I	3	2	4	5
MTI1121	C	Mathematics I	5	0	5	5
BMI1121	C	Linear Algebra (UÖ)	3	0	3	4
BMI1122	C	Introduction to Computer Engineering	2	0	2	2
BMI1123	C	Introduction to Programming	3	2	4	4
	SUM		16	4	18	20
AIT1101	C	Atatürk's Principles and History of Revolutions I (UÖ)	2	0	2	2
TDI1101	C	Turkish Language I (UÖ)	2	0	2	2
YDI1101	C	Foreign Language I (UÖ)	3	0	3	4
KAR1101	C	Career Planning	1	0	1	2
GRAND SUM			24	4	26	30

II. SEMESTER/SPRING

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
FZI1201	C	Physics II	3	2	4	5
MTI1221	C	Mathematics II	5	0	5	5
BMI1221	C	Discrete Mathematics	3	0	3	4
BMI1222	C	Object Oriented Programming*	3	2	4	4
BMI1223	C	Analysis of Circuits	3	2	4	4
	SUM		17	6	20	22
AIT1201	C	Atatürk's Principles and History of Revolutions II	2	0	2	2
TDI1201	C	Turkish Language II	2	0	2	2
YDI1201	C	Foreign Language II	3	0	3	4
GRAND SUM			24	6	27	30

Precondition: Being successful from BMI1123

III. SEMESTER/FALL

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
BLI2120	C	Differential Equations (UÖ)	3	0	3	5
BMI2121	C	Probability and Statistics	3	0	3	5
BMI2122	C	Electronics*	3	2	4	5
BMI2123	C	Data Structures** (UÖ)	4	0	4	5
BMI2124	C	Advanced Programming	3	2	4	6
	E	Elective Course I	3	0	3	4
SUM			19	4	21	30

Precondition: Being successful from BMI1223
**Precondition: Being successful from BMI1222*

IV. SEMESTER/SPRING

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
BMI2221	C	Logic Circuits	3	0	3	4
BMI2222	C	Programming Languages Concepts	3	2	4	6
BMI2223	C	Database Management Systems	3	2	4	6
BMI2224	C	Algorithms	4	0	4	5
BMI2225	C	Internet Based Programming	3	0	3	5
	E	Elective Course I	3	0	3	4
SUM			19	4	21	30

V. SEMESTER/FALL

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
BMI3120	C	Summer Practice I	0	0	0	2
BMI3121	C	Microprocessor Systems	3	2	4	4
BMI3122	C	Numerical Analysis*	3	0	3	5
BMI3123	C	Data Communications	3	0	3	5
BMI3124	C	Computer Operating Systems	3	0	3	5
	E	Elective Course I	3	0	3	4
	E	Elective Course II	3	0	3	4
SUM			18	2	19	29

Precondition: Being successful from BMI1121

VI. SEMESTER/SPRING

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
BMI3221	C	Automata Theory	3	0	3	4
BMI3222	C	Signals And Systems*	3	0	3	5
BMI3223	C	Software Engineering	2	0	2	4
BMI3224	C	Computer Architecture**	3	0	3	4
BMI3225	C	Computer Networks	3	0	3	4
	E	Elective Course I	2	0	2	3
	E	Elective Course II	2	0	2	3
	E	Elective Course III	2	0	2	3
SUM			20	0	20	29

Precondition: Being successful from BMI2121
**Precondition: Being successful from BMI2123*

VII. SEMESTER/FALL

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
BMI4120	C	Summer Practice II	0	0	0	2
BMI4121	C	Engineering Design	0	4	2	6
MIS4101	C	Occupational Health and Safety I	2	0	2	2
	E	Elective Course I	3	0	3	5
	E	Elective Course II	3	0	3	5
	E	Elective Course III	3	0	3	5
	E	Elective Course IV	3	0	3	5
SUM			14	4	16	30

VIII. SEMESTER/SPRING

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
BMI4220	C	Graduation Project *	0	4	2	3
MIS4201	C	Occupational Health and Safety II	2	0	2	2
	E	Elective Course I	3	0	3	5
	E	Elective Course II	3	0	3	5
	E	Elective Course III	3	0	3	5
	E	Elective Course IV	3	0	3	5
	E	Elective Course V	3	0	3	5
SUM			17	4	19	30

Precondition: Being successful from BMI4121

DEPARTMENT OF COMPUTER ENGINEERING 2021-2022 ACADEMIC YEAR ELECTİVE COURSES

III. SEMESTER/FALL — Elective Courses

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
BMI2131	OE	Professional Foreign Language I	3	0	3	4
BMI2132	OE	Patent and Industrial Design	3	0	3	4
ATU2199	OE	Academic Turkish*	3	0	3	4

Precondition: Foreign students can only take it.

IV. SEMESTER/SPRING — Elective Courses

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
BMI2231	OE	Professional Foreign Language II	3	0	3	4
BMI2232	OE	Engineering Management and Human Relations	3	0	3	4
BMI2233	OE	Software Project Management	3	0	3	4
ATU2299	OE	Academic Turkish*	3	0	3	4

Precondition: Foreign students can only take it.

V. SEMESTER/FALL — Elective Courses

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
BMI3141	OE	Computer Graphics	3	0	3	4
BMI3142	OE	Robotics	3	0	3	4
BMI3143	OE	Digital Design With Verilog-HDL	3	0	3	4
BMI3144	OE	Visual Programming	3	0	3	4
BMI3145	OE	Functional Programming	3	0	3	4

VI. SEMESTER/SPRING — Elective Courses

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
BMI3241	OE	File Organization	2	0	2	3
BMI3242	OE	Remote Sensing Technologies	2	0	2	3
BMI3243	OE	Embedded Systems	2	0	2	3
BMI3244	OE	System Programming	2	0	2	3
BMI3245	OE	Data Security	2	0	2	3

VII. SEMESTER/FALL — Elective Courses

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
BMI4141	OE	Mobile Programming	3	0	3	5
BMI4142	OE	Image Processing	3	0	3	5
BMI4143	OE	Artificial Intelligence	3	0	3	5
BMI4144	OE	Wireless Networks	3	0	3	5
BMI4145	OE	Compiler Design	3	0	3	5
BMI4146	OE	Data Mining	3	0	3	5
BMI4147	OE	Server Side Programming	3	0	3	5
BMI4148	OE	Cloud Computing	3	0	3	5
BMI4149	OE	Internet of Things	3	0	3	5

VIII. SEMESTER/SPRING — Elective Courses

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
BMI4241	OE	Parallel Programming	3	0	3	5
BMI4242	OE	Game Programming	3	0	3	5
BMI4243	OE	Geographic Information Systems	3	0	3	5
BMI4244	OE	Pattern Recognition	3	0	3	5
BMI4245	OE	Bioinformatics	3	0	3	5
BMI4246	OE	Optimization Theory	3	0	3	5
BMI4247	OE	Computer Vision And Imaging Techniques	3	0	3	5
BMI4248	OE	Computer And Network Security	3	0	3	5

Total number of courses	58		National Credit Sum / 128 Credit Boundary	132,0%
National Credit Sum	169		AKTS Credit Sum / National Credit Sum	140,8%
AKTS Credit Sum	238		Total number of elective courses / National Credit Sum	26,6%
Total course hours	183		Total hours of theoritical courses / Total course hours	84,7%
Total number of elective courses	11		Total hours of practice courses / Total course hours	13,1%
Total hours of elective courses	45		Total AKTS credits of elective courses/ AKTS Credit Sum	29,4%
Total credits of elective courses	45			
Total ECTS credits of elective courses	70			
Total hours of theoritical courses	155			
Total hours of practice courses	24			

Total Compulsory Summer Practice: 20 working days internship at the end of IV-VI-VIII
MN: Management (Course Code: 1)
VL: Vocational Lessons (Course Code: 2)
PI: Personal Improvement (Course Code: 3)
OE: Occupational Equipment (Course Code: 4,5,...)
OC: Other Compulsory
Course Codes: First digit year, second digit term, third digit course type, fiurth digit course order