



**BANDIRMA ONYEDİ EYLÜL UNIVERSITY**  
**FACULTY OF ENGINEERING AND NATURAL SCIENCES**  
**DEPARTMENT OF COMPUTER ENGINEERING SCIENCES**  
**2023-2024 CURRICULUM**

**I. SEMESTER/FALL**

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
FZ11101	C	Physics I	3	2	4	5
MT11121	C	Mathematics I	5	0	5	5
BMI1121	C	Linear Algebra	3	0	3	4
BMI1122	C	Introduction to Computer Engineering	2	0	2	2
BMI1123	C	Introduction to Programming	3	2	4	4
<b>SUM</b>			<b>16</b>	<b>4</b>	<b>18</b>	<b>20</b>
AIT1101	C	Atatürk's Principles and History of Revolutions I (UO)	2	0	2	2
TD11101	C	Turkish Language I	2	0	2	2
YD11101	C	Foreign Language I	3	0	3	4
KAR1101	C	Career Planning	1	0	1	2
<b>SUM</b>			<b>24</b>	<b>4</b>	<b>26</b>	<b>30</b>

**II. SEMESTER/SPRING**

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
FZ11201	C	Physics II	3	2	4	5
MT11221	C	Mathematics II	5	0	5	5
BMI11221	C	Discrete Mathematics	3	0	3	4
BMI11222	C	Object Oriented Programming*	3	2	4	4
BMI11223	C	Analysis of Circuits	3	2	4	4
<b>SUM</b>			<b>17</b>	<b>6</b>	<b>20</b>	<b>22</b>
AIT1201	C	Atatürk's Principles and History of Revolutions II	2	0	2	2
TD11201	C	Turkish Language II	2	0	2	2
YD11201	C	Foreign Language II	3	0	3	4
<b>SUM</b>			<b>24</b>	<b>6</b>	<b>27</b>	<b>30</b>

\* Prerequisite: BMI1123 should have been taken (It will be also applied to students enrolled in 2021 and previous years.)

**III. SEMESTER/FALL**

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
BMI2120	C	Differential Equations	3	0	3	5
BMI2121	C	Probability and Statistics	3	0	3	5
BMI2122	C	Electronics*	3	2	4	5
BMI2123	C	Data Structures	4	0	4	5
BMI2124	C	Advanced Programming**	3	2	4	6
	E	Elective Course I	3	0	3	4
<b>SUM</b>			<b>19</b>	<b>4</b>	<b>21</b>	<b>30</b>

\* Prerequisite: BMI1223 should have been taken (It will be also applied to students enrolled in 2021 and previous years.)

\*\* Prerequisite: BMI1222 should have been taken (It will be also applied to students enrolled in 2021 and previous years.)

**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	4	0	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
<b>SUM</b>			<b>20</b>	<b>2</b>	<b>21</b>	<b>30</b>

**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	5
BMI3122	C	Numerical Analysis*	3	0	3	5
BMI3123	C	Data Communications	3	0	3	5
BMI3126	C	Computer Operating Systems	3	0	3	5
	E	Elective Course I	3	0	3	4
	E	Elective Course II	3	0	3	4
<b>SUM</b>			<b>18</b>	<b>2</b>	<b>19</b>	<b>30</b>

\* Prerequisite: BMI1121 should have been taken (It will be also applied to students enrolled in 2021 and previous years.)

**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
BMI3227	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
<b>SUM</b>			<b>20</b>	<b>0</b>	<b>20</b>	<b>30</b>

\* Prerequisite: BMI2121 should have been taken (It will be also applied to students enrolled in 2021 and previous years.)

\*\* Prerequisite: BMI2123 should have been taken (It will be also applied to students enrolled in 2021 and previous years.)

**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
<b>SUM</b>			<b>14</b>	<b>4</b>	<b>16</b>	<b>30</b>

**VIII. SEMESTER/SPRING**

COURSE CODE	COURSE TYPE	COURSE NAME	T	P	C	ECTS
BMI4201	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
<b>SUM</b>			<b>17</b>	<b>4</b>	<b>19</b>	<b>30</b>

\* Prerequisite: BMI4121 should have been taken (It will be also applied to students enrolled in 2021 and previous years.)

**DEPARTMENT OF COMPUTER ENGINEERING 2023-2024 ACADEMIC YEAR ELECTIVE 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

\* Prerequisite: 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

\* Prerequisite: 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
BMI3144	OE	Visual Programming	3	0	3	4
BMI3145	OE	Functional Programming	3	0	3	4
BMI3146	OE	Digital Design With Verilog-HDL	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
BMI3245	OE	Data Security	2	0	2	3
BMI3246	OE	System Programming	2	0	2	3
BMI3247	OE	Fundamental of Big Data	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
BMI4150	OE	Introduction to Social Network Analysis	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
BMI4249	OE	Introduction to Machine Learning	3	0	3	5