



**BURSA ULUDAĞ UNIVERSITY**  
**GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES**  
**2022-2023 ACADEMIC YEAR COURSE PLAN**

**FR 1.1.1\_02**

**DEPARTMENT OF**

**INDUSTRIAL ENGINEERING**

**DEPARTMENT / PROGRAM**

**INDUSTRIAL ENGINEERING / Master's Degree Program**

COURSE STAGE	I. TERM / FALL								II. TERM / SPRING							
	Code	Course Title	Type	T	U	L	Credit	ECTS	Code	Course Title	Type	T	U	L	Credit	ECTS
	END5101	MATHEMATICAL PROGRAMMING	C	3	0	0	3	7.5	END	ELECTIVE COURSE	E					7.5
	END	ELECTIVE COURSE	E					7.5	END	ELECTIVE COURSE	E					7.5
	END	ELECTIVE COURSE	E					7.5	END	ELECTIVE COURSE	E					7.5
		ELECTIVE COURSE *	E					7.5		ELECTIVE COURSE *	E					7.5

**Note:** The student is expected to register at least 30 ECTS compulsory and elective courses in every academic term. In terms I and II, minimum 8 courses must be taken from C and E groups in total.

(\*) The student has the option of choosing one elective course from another department with the approval of the supervisor and Head of Department.

An elective course from the doctorate program of the department is accepted as out of field course.



**BURSA ULUDAĞ UNIVERSITY**  
**GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES**  
**2022-2023 ACADEMIC YEAR COURSE PLAN (ELECTIVE COURSES)**

**FR 1.1.1\_02**

**DEPARTMENT OF**

**INDUSTRIAL ENGINEERING**

**DEPARTMENT / PROGRAM**

**INDUSTRIAL ENGINEERING / Master's Degree Program**

COURSE STAGE	I. TERM / FALL								II. TERM / SPRING							
	Code	Course Title	Type	T	U	L	Credit	ECTS	Code	Course Title	Type	T	U	L	Credit	ECTS
	END5113	COMPUTER AND MANUFACTURING	E	3	0	0	3	7.5	END5110	PRODUCTION SYSTEMS	E	3	0	0	3	7.5
	END5115	SIMULATION ANALYSIS	E	3	0	0	3	7.5	END5112	JOB SEQUENCING AND SCHEDULING	E	3	0	0	3	7.5
	END5121	DESIGN AND ANALYSIS OF ALGORITHMS	E	3	0	0	3	7.5	END5114	ANALYSIS OF INVENTORY SYSTEMS	E	3	0	0	3	7.5
	END5123	HEURISTIC ALGORITHMS	E	3	0	0	3	7.5	END5116	FACILITY LOCATION AND LAYOUT	E	3	0	0	3	7.5
	END5131	TOTAL QUALITY MANAGEMENT	E	3	0	0	3	7.5	END5132	ENGINEERING ECONOMY	E	3	0	0	3	7.5
	END5151	STATISTICAL DATA ANALYSIS	E	3	0	0	3	7.5	END5134	TECHNOLOGY MANAGEMENT	E	3	0	0	3	7.5
	END5153	EXPERIMENTAL DESIGN	E	3	0	0	3	7.5	END5136	STRATEGIC DECISION SUPPORT SYSTEMS	E	3	0	0	3	7.5
	END5155	STOCHASTIC PROCESSES	E	3	0	0	3	7.5	END5156	RELIABILITY ENGINEERING	E	3	0	0	3	7.5
	END5117	MANUFACTURING PROCESSES CONTROL	E	3	0	0	3	7.5	END5140	NOISE IMPACT ENGINEERING	E	3	0	0	3	7.5
	END5119	SUSTAINABLE ENGINEERING	E	3	0	0	3	7.5	END5138	MULTICRITERIA DECISION MAKING	E	3	0	0	3	7.5
	END5161	DATA MINING	E	3	0	0	3	7.5	END5122	EMBEDDED OPTIMIZATION TECHNIQUES	E	3	0	0	3	7.5
									END5124	CONSTRAINT PROGRAMMING	E	3	0	0	3	7.5
									END5162	APPLIED MACHINE LEARNING	E	2	0	1	3	7.5

**Note:** The student is expected to register at least 30 ECTS compulsory and elective courses in every academic term. In terms I and II, minimum 8 courses must be taken from C and E groups in total.

(\*) The student has the option of choosing one elective course from another department with the approval of the supervisor and Head of Department.

An elective course from the doctorate program of the department is accepted as out of field course.