

## BURSA ULUDAĞ UNIVERSITY GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES 2023-2024 ACADEMIC YEAR COURSE PLAN

FR 1.1.1\_02

DEPARTMENT OF INDUSTRIAL ENGINEERING

DEPARTMENT / PROGRAM | INDUSTRIAL ENGINEERING / Doctoral Program

DEPARTMENT / PROGRAM   INDUSTRIAL ENGINEERING / Doctoral Program																
	I. TERM / FALL								II. TERM / SPRING							
GE	Code	Course Title	Type	TU	J L	Credit	ECTS	Code	Course Title	Type	T	U	L	Credit	ECTS	
STAGE	END6101	LINEAR PROGRAMMING	C	3 (	0 (	3	7.5	END6102	INTEGER PROGRAMMING	C	3	0	0	3	7.5	
S	END	ELECTIVE COURSE	Е	3 (	0 (	3	7.5	END6112	ADVANCED SIMULATION TECHNIQUES	C	3	0	0	3	7.5	
SE	END	ELECTIVE COURSE	Е	3 (	0 (	3	7.5	END	ELECTIVE COURSE	Е	3	0	0	3	7.5	
COURSE		ELECTIVE COURSE *	Е	3 (	0	3	7.5		ELECTIVE COURSE *	Е	3	0	0	3	7.5	
00																
	Total Credits/ECTS 12 30								Total Credits/ECTS 12							
	III. TERM / FALL							IV. TERM / SPRING								
	END6171	SEMINAR	C	0 2	2 0	0	5	FEN6002	TECHNOLOGY TRANSFER, RESEARCH- DEVELOPMENT AND INNOVATION	С	2	0	0	2	2	
	YET6177	PHD PROFICIENCY EXAMINATION **	С	0 (	0 (	0	25	END6182	ADVANCED TOPICS IN PHD THESIS I	С	4	0	0	0	5	
THESIS		RESEARCH TECHNIQUES AND PUBLICATION ETHICS IN INDUSTRIAL ENGINEERING***						END6192	PHD THESIS I	С	0	1	0	0	23	
HE	Total Credits/ECTS						30	Total Credits/ECTS						2	30	
	V. TERM / FALL								VI. TERM / SPRING							
AGE	END6183	ADVANCED TOPICS IN PHD THESIS II	С	4 (	0 (	0	5	END6184	ADVANCED TOPICS IN PHD THESIS III	C	4	0	0	0	5	
ST.	END6193	PHD THESIS II	С	0	1 0	0	25	END6194	PHD THESIS III	С	0	1	0	0	25	
		Total Credits/ECTS 0 30							Total Credits/ECTS 0 3							
	VII. TERM / FALL								VIII. TERM / SPRING							
	END6185	ADVANCED TOPICS IN PHD THESIS IV	С	4 (	0	0	5	END6186	ADVANCED TOPICS IN PHD THESIS V	C	4	0	0	0	5	
	END6195	PHD THESIS IV	С	0	1 0	0	25	END6196	PHD THESIS V	C	0	1	0	0	25	
		To	tal Cred	lits/E	CTS	0	30			Total Cre	dits/	EC7	ΓS	0	30	
				TOTAL CREDITS: 28 - TOTAL ECTS: 240												

**Note:** The student is expected to take a total of 12 credits (30 ECTS) compulsory and elective courses per term, in terms I and II. The prerequisites of all courses are the courses in C and E groups in the Master's Program or their equivalents. The consents of the student's supervisor and the course instructor are taken for satisfying the prerequisites of the courses.

<sup>(\*)</sup> The student has the option of choosing at most one elective course from another department per term with the approval of the supervisor and Head of Department.

<sup>(\*\*)</sup> Success in Ph.D. proficiency exam is a prerequisite for registering the courses specified in the 3<sup>rd</sup> term and the following terms.

<sup>(\*\*\*)</sup> Students who have not taken END5000 RESEARCH TECHNIQUES AND PUBLICATION ETHICS IN INDUSTRIAL ENGINEERING or equivalent courses at the master's level must take the END5000 RESEARCH TECHNIQUES AND PUBLICATION ETHICS IN INDUSTRIAL ENGINEERING course not be counted towards credits. Academic advisors approval is required for exemption.



## BURSA ULUDAĞ UNIVERSITY GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES 2023-2024 ACADEMIC YEAR COURSE PLAN (ELECTIVE COURSES)

FR 1.1.1 02

**DEPARTMENT OF** 

INDUSTRIAL ENGINEERING

**DEPARTMENT / PROGRAM** INDUSTRIAL ENGINEERING / Doctoral Program

	I. TERM / FALL									II. TERM / SPRING							
	Code	Course Title	Type	T	U	L	Credit	ECTS	Code	Course Title	Type	T	U	L	Credit	ECTS	
	END6105	DYNAMIC PROGRAMMING	Е	3	0	0	3	7.5	END6104	NONLINEAR PROGRAMMING	Е	3	0	0	3	7.5	
GE	END6113	SUPPLY CHAIN MANAGEMENT	Е	3	0	0	3	7.5	END6114	DESIGN OF INTEGRATED MANUFACTURING SYSTEMS	Е	3	0	0	3	7.5	
STA	END6115	MANAGEMENT OF INTEGRATED MANUFACTURING SYSTEMS	Е	3	0	0	3	7.5	END6116	ADVANCED TOPICS IN QUALITY CONTROL	Е	3	0	0	3	7.5	
RSE	END6117	MANAGEMENT OF PRODUCT DESIGN	Е	3	0	0	3	7.5	END6122	ARTIFICIAL INTELLIGENCE	Е	3	0	0	3	7.5	
COUR	END6123	DEEP NEURAL NETWORKS	Е	3	0	0	3	7.5	END6142	PHYSIOLOGY AND PSYCHOLOGY IN ERGONOMICS	Е	3	0	0	3	7.5	
	END6131	FINANCIAL ENGINEERING	Е	3	0	0	3	7.5	END6144	ERGONOMICS IN PRODUCT DESIGN	Е	3	0	0	3	7.5	
	END6141	HUMAN-MACHINE SYSTEMS	Е	3	0	0	3	7.5	END6126	ADVANCED DATA MINING	Е	3	0	0	3	7.5	
	END6107	MULTI-OBJECTIVE OPTIMIZATION	Е	3	0	0	3	7.5									

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