

		<div>BURSA ULUDAĞ UNIVERSITY</div> <div>GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES</div> <div>2022-2023 ACADEMIC YEAR COURSE PLAN</div>														FR 1.1.1_02		
DEPARTMENT OF		INDUSTRIAL ENGINEERING																
DEPARTMENT / PROGRAM		INDUSTRIAL ENGINEERING / Doctoral 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		
	END6101	LINEAR PROGRAMMING	C	3	0	0	3	7.5	END6102	INTEGER PROGRAMMING	C	3	0	0	3	7.5		
	END	ELECTIVE COURSE	E	3	0	0	3	7.5	END6112	ADVANCED SIMULATION TECHNIQUES	C	3	0	0	3	7.5		
	END	ELECTIVE COURSE	E	3	0	0	3	7.5	END	ELECTIVE COURSE	E	3	0	0	3	7.5		
		ELECTIVE COURSE *	E	3	0	0	3	7.5		ELECTIVE COURSE *	E	3	0	0	3	7.5		
	Total Credits/ECTS							12	30	Total Credits/ECTS							12	30
STAGE THESIS	III. TERM / FALL								IV. TERM / SPRING									
	END6171	SEMINAR	C	0	0	0	0	5	FEN6002	TECHNOLOGY TRANSFER, RESEARCH-DEVELOPMENT AND INNOVATION	C	2	0	0	2	2		
	YET6177	PHD PROFICIENCY EXAMINATION **	C	0	0	0	0	25	END6182	ADVANCED TOPICS IN PHD THESIS I	C	3	0	0	0	5		
		RESEARCH TECHNIQUES AND PUBLICATION ETHICS IN INDUSTRIAL ENGINEERING***							END6192	PHD THESIS I	C	0	0	0	0	23		
	Total Credits/ECTS							2	30	Total Credits/ECTS							2	30
	V. TERM / FALL								VI. TERM / SPRING									
	END6183	ADVANCED TOPICS IN PHD THESIS II	C	4	0	0	0	5	END6184	ADVANCED TOPICS IN PHD THESIS III	C	4	0	0	0	5		
	END6193	PHD THESIS II	C	0	0	0	0	25	END6194	PHD THESIS III	C	0	0	0	0	25		
	Total Credits/ECTS							0	30	Total Credits/ECTS							0	30
	VII. TERM / FALL								VIII. TERM / SPRING									
	END6185	ADVANCED TOPICS IN PHD THESIS IV	C	4	0	0	0	5	END6186	ADVANCED TOPICS IN PHD THESIS V	C	4	0	0	0	5		
	END6195	PHD THESIS IV	C	0	0	0	0	25	END6196	PHD THESIS V	C	0	0	0	0	25		
	Total Credits/ECTS							0	30	Total Credits/ECTS							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.

(*) 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.

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

(***) 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
2022-2023 ACADEMIC YEAR COURSE PLAN (ELECTIVE COURSES)

FR 1.1.1_02

DEPARTMENT OF INDUSTRIAL ENGINEERING
DEPARTMENT / PROGRAM INDUSTRIAL ENGINEERING / Doctoral 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
	END6105	DYNAMIC PROGRAMMING	E	3	0	0	3	7.5	END6104	NONLINEAR PROGRAMMING	E	3	0	0	3	7.5
	END6113	SUPPLY CHAIN MANAGEMENT	E	3	0	0	3	7.5	END6114	DESIGN OF INTEGRATED MANUFACTURING SYSTEMS	E	3	0	0	3	7.5
	END6115	MANAGEMENT OF INTEGRATED MANUFACTURING SYSTEMS	E	3	0	0	3	7.5	END6116	ADVANCED TOPICS IN QUALITY CONTROL	E	3	0	0	3	7.5
	END6117	MANAGEMENT OF PRODUCT DESIGN	E	3	0	0	3	7.5	END6122	ARTIFICIAL INTELLIGENCE	E	3	0	0	3	7.5
	END6123	DEEP NEURAL NETWORKS	E	3	0	0	3	7.5	END6142	PHYSIOLOGY AND PSYCHOLOGY IN ERGONOMICS	E	3	0	0	3	7.5
	END6131	FINANCIAL ENGINEERING	E	3	0	0	3	7.5	END6144	ERGONOMICS IN PRODUCT DESIGN	E	3	0	0	3	7.5
	END6141	HUMAN-MACHINE SYSTEMS	E	3	0	0	3	7.5	END6126	ADVANCED DATA MINING	E	3	0	0	3	7.5
	END6107	MULTI-OBJECTIVE OPTIMIZATION	E	3	0	0	3	7.5								

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