T.C.
ADANA ALPARSLAN TÜRKEŞ BİLİM VE TEKNOLOJİ ÜNİVERSİTESİ
2025/2026 EĞİTİM-ÖĞRETİM YILI
ENDÜSTRİ MÜHENDİSLİĞİ BÖLÜMÜ DERS BİLDİRİM FORMU
(%100 İNGİLİZCE PROGRAM) (İNGİLİZCE DERS LİSTESİ)

1. SEMESTER

Tarih: 16 / 07 / 2025

Code	Course Name	Compulsory/ Elective	T	P	C	ECTS
CAL1	Calculus I	C	4	0	4	7
PHY1	Physics I	C	3	0	3	6
PHY1L	Physics I Laboratory	C	0	2	1	2
IE 109	Industrial Engineering Orientation	C	2	0	2	2
IE 111	Computer Programming I	C	2	0	2	3
TUR1	Turkish Language I	C	2	0	2	2
HIS1	Ataturk's Principles and History of Turkish Revolution I	C	2	0	2	2
GCHM	General Chemistry	C	3	0	3	4
GCHML	General Chemistry Laboratory	C	0	2	1	2
	TOTAL		18	4	20	30

- During 1 . semester, elective course with minimum 0 ECTS should be taken.

2. SEMESTER

Code	Course Name	Compulsory/ Elective	T	P	C	ECTS
CAL2	Calculus II	C	4	0	4	7
PHY2	Physics II	C	3	0	3	6
PHY2L	Physics II Laboratory	C	0	2	1	2
IE 106	Computer Programming II	C	4	0	4	5
IE 104	Computer Aided Technical Drawing	C	2	1	3	4
ENG 102	English for Academic Purposes	C	2	0	2	2
TUR2	Turkish Language II	C	2	0	2	2
HIS2	Ataturk's Principles and History of Turkish Revolution II	C	2	0	2	2
	TOTAL		19	3	21	30

- During 2 . semester, elective course with minimum 0 ECTS should be taken.

3. SEMESTER

Code	Course Name	Compulsory/ Elective	T	P	C	ECTS
LIN1	Linear Algebra	C	3	0	3	5
IE 203	Principles of Economics	C	2	0	2	4
IE 207	Operations Research I	C	3	0	3	6
IE 211	Database Management	C	2	0	2	4
IE 213	Production Sytems	C	2	0	2	4
IE 215	Probability	C	4	0	4	7
	TOTAL		16	0	16	30

- During 3 . semester, elective course with minimum 0 ECTS should be taken.

4. SEMESTER

Code	Course Name	Compulsory/ Elective	T	P	C	ECTS
DIF2	Differential Equations	C	3	0	3	5
IE 202	Statistics	C	3	0	3	7
IE 204	Operations Research II	C	3	0	3	6
IE 206	Strategic Management	C	3	0	3	4
IE 208	Work Study and Analysis	C	3	0	3	4
IE 210	Data Structures and Algorithms	C	2	0	2	4
		TOTAL	17	0	17	30

- During 4 . semester, elective course with minimum 0 ECTS should be taken.

5. SEMESTER

Code	Course Name	Compulsory/ Elective	T	P	C	ECTS
IE 345	Production and Operations Management	C	3	0	3	6
IE 347	System Analysis	C	3	0	3	5
IE 349	Management Information Systems	C	3	0	3	5
OHS1	Occupational Health and Safety I	C	2	0	2	1
GENXXX	General Elective Course	E	2	0	2	3
	Elective Course	E	3	0	3	5
	Elective Course	E	3	0	3	5
		TOTAL	19	0	19	30

- During 5 . semester, elective course with minimum 13 ECTS should be taken.

6. SEMESTER

Code	Course Name	Compulsory/ Elective	T	P	C	ECTS
INT	Internship[1,2]	C	0	2	1	5
IE 344	Operations Research III	C	3	0	3	6
IE 354	Production Planning	C	3	0	3	5
IE 356	Simulation	C	3	0	3	5
OHS2	Occupational Health and Safety II	C	2	0	2	1
GENXXX	General Elective Course	E	2	0	2	3
	Elective Course	E	3	0	3	5
		TOTAL	16	2	17	30

- During 6 . semester, elective course with minimum 8 ECTS should be taken.

[1] At the end of the 6th semester, it is compulsory to do an internship for 20 working days.
[2] If necessary, this course can be opened in the 7th semester.

7. SEMESTER

Code	Course Name	Compulsory/ Elective	T	P	C	ECTS
	Elective Course	E	3	0	3	5
	Elective Course	E	3	0	3	5
	Elective Course	E	3	0	3	5
MED	Multidisciplinary Engineering Design	C	2	2	3	5
CPE	Career Planning and Entrepreneurship	C	2	0	2	2
IE 453	Graduation Project[3]	E	0	2	1	8
		TOTAL	13	4	15	30

- During 7 . semester, elective course with minimum 23 ECTS should be taken.

8. SEMESTER

Code	Course Name	Compulsory/ Elective	T	P	C	ECTS
	Elective Course	E	3	0	3	5
	Elective Course	E	3	0	3	5
	Elective Course	E	3	0	3	5
	Elective Course	E	3	0	3	5
	Elective Course[4]	E	0	4	2	10
		TOTAL	12	4	14	30

OR

Code	Course Name	Compulsory/ Elective	T	P	C	ECTS
AEE	Applied Engineering Education[5]	E	5	0	5	30
		TOTAL	5	0	5	30

- During 8 . semester, elective course with minimum 30 ECTS should be taken.

[3] IE 453 is compulsory for graduation and can be taken at 7th or 8th semester.
[4] During 8th semester, elective course with 10 ECTS should be taken.
[5] The students who will take this course are defined in the relevant regulation.

Total Credits: 140 or 131[5] ; **Total ECTS Credits**: 240

AREA ELECTIVE COURSES						
Code	**Course Name**	**Compulsory/ Elective**	**T**	**P**	**C**	**ECTS**
IE 311	Human Factors Engineering	E	3	0	3	5
IE 320	Inventory Management and Control	E	3	0	3	5
IE 321	Managerial Decision Modeling	E	3	0	3	5
IE 322	Monte Carlo Simulation	E	3	0	3	5
IE 323	Productivity Management	E	3	0	3	5
IE 324	Dynamic Programming	E	3	0	3	5
IE 325	Network Optimization	E	3	0	3	5
IE 327	Non-linear Programming Applications	E	3	0	3	5
IE 328	Expert Systems	E	3	0	3	5
IE 329	Lean Production	E	3	0	3	5
IE 331	Innovation Management	E	3	0	3	5
IE 333	Statistical Data Analysis	E	3	0	3	5
IE 335	Introduction to Forecasting	E	3	0	3	5
IE 336	Introduction to Technology Management	E	3	0	3	5
IE 337	Energy Management	E	3	0	3	5
IE 338	Production Scheduling	E	3	0	3	5
IE 339	Multiple Objective Decision Making	E	3	0	3	5
IE 340	Risk Management	E	3	0	3	5
IE 341	Total Quality Management	E	3	0	3	5
IE 346	Production Lines	E	3	0	3	5
IE 348	Revenue Management	E	3	0	3	5
IE 350	Healthcare Management	E	3	0	3	5
IE 351	Human Resources Management	E	3	0	3	5
IE 352	Data Mining	E	3	0	3	5
IE 353	Logistics Management	E	3	0	3	5
IE 358	Enterprise Resource Planning	E	3	0	3	5
IE 360	Computer Applications to Industrial Engineering	E	3	0	3	5
IE 406	Production System Design	E	3	0	3	5
IE 408	Project Management	E	3	0	3	5
IE 420	Lean Six Sigma	E	3	0	3	5
IE 421	Discrete Mathematics	E	3	0	3	5
IE 422	Case Studies in Mathematical Modeling	E	3	0	3	5
IE 423	Group Technology	E	3	0	3	5
IE 424	Introduction to Game Theory	E	3	0	3	5
IE 425	Case Studies in Industrial Engineering	E	3	0	3	5
IE 426	Introduction to Metaheuristics	E	3	0	3	5
IE 427	Numerical Analysis	E	3	0	3	5
IE 429	Introduction to Logistics	E	3	0	3	5
IE 430	Artificial Intelligence	E	3	0	3	5
IE 431	Introduction to Big Data	E	3	0	3	5
IE 433	Optimization Applications	E	3	0	3	5

IE 435	Introduction to Supply Chain Management	E	3	0	3	5
IE 436	Business Process Modeling	E	3	0	3	5
IE 438	Advanced Computer Algorithms	E	3	0	3	5
IE 441	Introduction to Experimental Design	E	3	0	3	5
IE 442	Applied Simulation Modeling	E	3	0	3	5
IE 446	Financial Engineering	E	3	0	3	5
IE 448	Marketing Management	E	3	0	3	5
IE 451	Service Systems	E	3	0	3	5
IE 455	Cost Analysis	E	3	0	3	5
IE 456	Flexible Manufacturing Systems	E	3	0	3	5
IE 458	Introduction to Data Science	E	3	0	3	5
IE 459	Statistical Quality Control	E	3	0	3	5
IE 461	Engineering Economics	E	3	0	3	5
IE 462	ARENA Applications in Simulation Modelling	E	3	0	3	5
IE 463	Facility Layout	E	3	0	3	5
IE 464	Fundamentals of Industry 4.0	E	3	0	3	5
IE 465	Int. to Object Oriented Design and Programming	E	3	0	3	5
IE 466	Warehousing and Material Handling Systems	E	3	0	3	5
IE 498	Industrial Engineering Application	E	0	4	2	10

GENERAL ELECTIVE COURSES						
Code	**Course Name**	**Compulsory/ Elective**	**T**	**P**	**C**	**ECTS**
GENXXX	Business Communications	E	2	0	2	3
GENXXX	Tourism Geography of Turkey	E	2	0	2	3
GENXXX	Organizational Behaviour	E	2	0	2	3
GENXXX	Special Interest Tourism	E	2	0	2	3
GENXXX	Business Ethics	E	2	0	2	3
GENXXX	Human Resources	E	2	0	2	3
GENXXX	Human Resources Management	E	2	0	2	3
GENXXX	History of Art	E	2	0	2	3
GENXXX	World Geography and Travel Destinations	E	2	0	2	3
GENXXX	Negotiation Skills	E	2	0	2	3
GENXXX	Management and Organization	E	2	0	2	3
GENXXX	Financial Markets and Institutions	E	2	0	2	3
GENXXX	Strategic Management	E	2	0	2	3
GENXXX	E-Commerce	E	2	0	2	3
GENXXX	World Economy	E	2	0	2	3
GENXXX	International Business Management	E	2	0	2	3
GENXXX	Introduction to Business	E	2	0	2	3
GENXXX	Entrepreneurship I	E	2	0	2	3
GENXXX	Entrepreneurship II	E	2	0	2	3
GENXXX	Principles of Marketing	E	2	0	2	3
GENXXX	Global Marketing	E	2	0	2	3
GENXXX	Consumer Behavior	E	2	0	2	3
GENXXX	Introduction to Economics	E	2	0	2	3
GENXXX	Social Entrepreneurship	E	2	0	2	3
GENXXX	Brand Management	E	2	0	2	3
GENXXX	Cultural Heritage and Tourism Development	E	2	0	2	3
GENXXX	Managing Teams	E	2	0	2	3
GENXXX	Leadership and Change	E	2	0	2	3
GENXXX	Sales Management	E	2	0	2	3
GENXXX	Theater	E	2	0	2	3
GENXXX	Engineering Management	E	2	0	2	3
GENXXX	Business Law	E	2	0	2	3
GENXXX	Engineering Economics	E	2	0	2	3
GENXXX	Production Planning	E	2	0	2	3
GENXXX	Corporate Social Responsibility Project	E	2	0	2	3
GENXXX	Intellectual Property Rights and Patent	E	2	0	2	3
GENXXX	Project Writing and Management	E	2	0	2	3
GENXXX	Career Planning	E	2	0	2	3
GENXXX	Volunteering Works	E	2	0	2	3
GENXXX	Mining History	E	2	0	2	3
GENXXX	Entrepreneurship Financing	E	2	0	2	3
GENXXX	Financial Literacy for	E	2	0	2	3

	Managers					
GENXXX	History of Science	E	2	0	2	3
GENXXX	Environmental Problems	E	2	0	2	3
GENXXX	Introduction to MATLAB for Engineers	E	2	0	2	3
GENXXX	Managerial Accounting	E	2	0	2	3

T = Theoretical; **P** = Practical; **C** = Credit

In order to obtain the BSc in Industrial Engineering degree, students must accumulate 140 or 131[5] ECTS credits and successfully complete all of the compulsory and elective courses with minimum 240 ECTS.

Bologna Coordinator of Dept. of Industrial **Engineering:** Assoc. Prof. Dr. Nuşin UNCU