

Year One

1st. Term

Code	Course Name	T	U	L	K	ECTS	Prerequisite
IE 101	Introduction to Industrial Eng.	2	2	0	3	3	
MATH 101	Calculus-I	3	2	0	4	6	
PHYS 101	Physics-I	3	0	2	4	6	
CHEM 101	General Chemistry-I	3	0	2	4	6	
ENG 101	English-I	3	0	0	3	3	
TURK 101	Turkish Language-I	2	0	0	2	3	
RPSC 109	Positive Psychology and Communication Skills	3	0	0	3	5	
RCUL 101	University Culture	0	2	0	1	1	
Total Credits		19	6	4	24	33	

2nd. Term

Code	Course Name	T	U	L	K	ECTS	Prerequisite
COME102	Introduction to Algorithms and Programming	2	0	2	3	4	
MATH 102	Calculus-II	3	2	0	4	6	
PHYS 102	Physics-II	3	0	2	4	6	
ENG 102	English-II	3	0	0	3	3	
TURK 102	Turkish Language-II	2	0	0	2	3	
COME 210	Probability and Statistics	3	0	0	3	5	
RCUL102	University Culture	0	2	0	1	1	
Total Credits		16	4	4	20	28	

Year Two

3rd. Term

Code	Course Name	T	U	L	K	ECTS	Prerequisite
IE 201	Management Accounting	2	0	2	3	4	
IE 215	Operations Research I	3	2	0	4	5	
MAT 201	Linear Algebra and Engineering Applications	2	0	2	3	5	
MAT 203	Differential Equations	2	2	0	3	5	
ENG 211	Professional English- I	3	0	0	3	3	
IE 203	Introduction to Manufacturing Systems	3	2	0	4	5	
ATA 101	Principles of Atatürk and History of Revolutions-I	2	0	0	2	3	
Total Credits		17	6	4	22	30	

4th. Term

Code	Course Name	T	U	L	K	ECTS	Prerequisite
MATH 302	Numerical Analysis	3	0	0	3	5	
IE 202	Thermodynamics	2	2	0	3	4	
IE 226	Operations Research II	3	2	0	4	5	
IE 228	Supply Chain Management	2	2	0	3	4	
ENG 212	Professional English-II	3	0	0	3	3	
IE XXX	Departmental Elective -I	3	0	0	3	5	
ATA 102	Principles of Atatürk and History of Revolutions-II	2	0	0	2	3	
IE 282	Summer Practice -I	0	0	0	0	4	
Total Credits		18	6	0	21	33	

Year Three

5th. Term

Code	Course Name	T	U	L	K	ECTS	Prerequisite
IE 3XX	Departmental Elective - II	3	0	0	3	5	
IE 303	Facilities Design and Planning	3	0	2	4	5	
IE 305	Economics and Financial Modeling	2	2	0	3	4	
RPRE 104	Entrepreneurship and Project Culture	2	0	0	2	3	
IE XXX	Departmental Elective- III	3	0	0	3	5	
XXXXXX	Field Elective-I	3	0	0	3	5	
Total Credits		16	2	2	18	27	

6th. Term

Code	Course Name	T	U	L	K	ECTS	Prerequisite
IE 302	System Engineering Methods	3	0	0	3	4	
IE 304	Modeling & System Simulation	3	2	0	4	5	
IE XXX	Departmental Elective-IV	3	0	0	3	5	
XXXXXX	Field Elective-II	3	0	0	3	5	
XXXXXX	Social Elective - I	3	0	0	3	5	
IE382	Summer Practice-II	0	0	0	0	4	
Total Credits		15	2	0	16	28	

Year Four

7th. Term

Code	Course Name	T	U	L	K	ECTS	Prerequisite
IE 491	Graduation Project	2	4	0	4	5	
IE 403	Introduction to Systems Dynamics	3	0	2	4	5	
IE 405	Statistical Quality Control	2	2	0	3	5	
IE XXX	Departmental Elective - V	3	0	0	3	5	
XXXXX	Field Elective-III	3	0	0	3	5	
XXXXXX	Social Elective-II	3	0	0	3	5	
Total Credits		16	6	2	20	30	

8th. Term

Code	Course Name	T	U	L	K	ECTS	Prerequisite
IE 492	Graduation Thesis	2	8	0	6	9	IE 491
IE 402	Ergonomics	2	2	0	3	4	
IE 404	Design in Industrial Engineering	3	0	0	3	5	
IE XXX	Departmental Elective-VI	3	0	0	3	5	
IE 406	Production Planning and Inventory Control	2	2	0	3	5	
XXXXXX	Elective (2nd Foreign Language)	2	0	0	2	3	
Total Credits		14	10	0	20	31	

Total Credits	161
ECTS Credits	240
Elective Courses ECTS Credits	55
Elective Courses Ratio	23%

IE 282	Summer Practice I (Service Sector)
IE 382	Summer Practice II (Manufacturing Sector)

Elective Course -Pool

Departmental Electives		2nd. Foreign Language Elective Course
IE 214 Reliability Engineering and System Safety	IE 337 Principles of Programmable Automation	XXX Spanish XXX Arabic XXX Chinese XXX Russian
IE 216 Project Management for Engineers	IE 350 Large Assembly Manufacturing Systems	
IE 309 Analytical Methods in Transportation	IE 401 Elements of Dynamic Enterprise Modeling	For Technical Elective course, any course having appropriate credits from other departments of Faculty of Engineering and Natural Sciences can be elected.
IE 310 Linear and Network Programming	IE 408 Reliability in Product Design and Testing	
IE 311 Systems and Control	IE 410 Nonlinear Dynamical Systems	For Social Elective course, any course having appropriate credits from other faculties can be elected.
IE 312 Human Resources Management	IE 412 Game Theory	
IE 314 Forecasting Methods	IE 414 Technology-Based Entrepreneurship	
IE 316 Decision Making in Health Services	IE 417 Design in the Manufacturing Firm	
IE 317 Industrial Organizations	IE 420 Renewable Energy Systems	
IE 318 Applied Occupational Health and Safety	IE 421 Robotics	
IE 319 Computer Integrated Manufacturing (CIM)	IE 425 Innovation Management	
IE 332 Work Study	IE 443 Special Topics in Industrial Engineering	