

Industrial Engineering 2020 Curriculum

1. Year 1. Semester Courses						
Course Code	Course Name	Type	Hour		Credit	ECTS
			T	U		
ECON 213	Principles of Economics	Must	4	0	4	4
ENG 121	Academic English I	Must	3	0	3	4
HIST 201	Principles of Atatürk and History of Turkish Revolution I	Must	2	0	2	3
IE 117	Computational Programming Tools in Industrial Engineering	Must	3	0	3	5
MATH 157	Calculus for Engineering I	Must	4	0	4	5
PHYS 131	Physics I	Must	3	2	4	6
TURK 101	Turkish I	Must	2	0	2	3
			21	2	22	30
Total ECTS Credits (Compulsory): 30,00	Total ECTS Credits (Elective): 0	Total ECTS Credits: 30,00				

1. Year 2. Semester Courses						
Course Code	Course Name	Type	Hour		Credit	ECTS
			T	U		
ENG 122	Academic English II	Must	3	0	3	4
HIST 202	Principles of Atatürk and History of Turkish Revolution II	Must	2	0	2	3
IE 101	Industrial Engineering Orientation	Must	2	0	2	3
MATH 158	Calculus for Engineering II	Must	4	0	4	5
ME 113	Computer Aided Engineering Drawing I	Must	2	2	3	6
PHYS 132	Physics II	Must	3	2	4	6
TURK 102	Turkish II	Must	2	0	2	3
			18	4	20	30
Total ECTS Credits (Compulsory): 30,00	Total ECTS Credits (Elective): 0	Total ECTS Credits: 30,00				

2. Year 1. Semester Courses						
Course Code	Course Name	Type	Hour		Credit	ECTS
			T	U		
IE 227	Introduction to Probability	Must	3	2	4	6
IE 241	Cost Analysis in Engineering	Must	3	0	3	5
MATH 205	Basic Linear Algebra	Must	3	0	3	4
ME 210	Manufacturing Processes	Must	3	2	4	5
ME 215	Fundamentals of Thermal Systems	Must	3	0	3	4
MSE 225	Introduction to Materials Science	Must	3	2	4	6
			18	6	21	30
Total ECTS Credits (Compulsory): 30,00	Total ECTS Credits (Elective): 0	Total ECTS Credits: 30,00				

Industrial Engineering 2024 Curriculum

1. Year 1. Semester Courses						
Course Code	Course Name	Type	Hour		Credit	ECTS
			T	U		
ECON 213	Principles of Economics	Must	4	0	4	4
ENG 121	Academic English I	Must	3	0	3	4
HIST 201	Principles of Atatürk and History of Turkish Revolution I	Must	2	0	2	3
IE 117	Computational Programming Tools in Industrial Engineering	Must	3	0	3	5
MATH 157	Calculus for Engineering I	Must	4	0	4	5
PHYS 131	Physics I	Must	3	2	4	6
TURK 101	Turkish I	Must	2	0	2	3
			21	2	22	30
Total ECTS Credits (Compulsory): 30,00	Total ECTS Credits (Elective): 0	Total ECTS Credits: 30,00				

1. Year 2. Semester Courses						
Course Code	Course Name	Type	Hour		Credit	ECTS
			T	U		
ENG 122	Academic English II	Must	3	0	3	4
HIST 202	Principles of Atatürk and History of Turkish Revolution II	Must	2	0	2	3
IE 101	Industrial Engineering Orientation	Must	2	0	2	3
MATH 158	Calculus for Engineering II	Must	4	0	4	5
ME 113	Computer Aided Engineering Drawing I	Must	2	2	3	6
PHYS 132	Physics II	Must	3	2	4	6
TURK 102	Turkish II	Must	2	0	2	3
			18	4	20	30
Total ECTS Credits (Compulsory): 30,00	Total ECTS Credits (Elective): 0	Total ECTS Credits: 30,00				

2. Year 1. Semester Courses						
Course Code	Course Name	Type	Hour		Credit	ECTS
			T	U		
IE 227	Introduction to Probability	Must	3	2	4	7
IE 241	Cost Analysis in Engineering	Must	3	0	3	5
MATH 205	Basic Linear Algebra	Must	3	0	3	4
ME 210	Manufacturing Processes	Must	3	2	4	5
MATH 254	Introduction to Differential Equations	Must	4	0	4	4
CHEM 103	Chemistry I	Must	3	2	4	5
			19	6	22	30
Total ECTS Credits (Compulsory): 30,00	Total ECTS Credits (Elective): 0	Total ECTS Credits: 30,00				

2. Year 2. Semester Courses						
Course Code	Course Name	Type	Hour		Credit	ECTS
			T	U		
ELEC	Social Science Elective (Any course from the Pool)	Elective	3	0	3	4
IE 202	Work Study and Ergonomics	Must	3	2	4	7
IE 218	Computer Applications in Industrial Engineering	Must	4	0	4	7
IE 228	Engineering Statistics	Must	4	0	4	6
IE 232	Operations Research I - Modelling	Must	3	2	4	6
			17	4	19	30
Total ECTS Credits (Compulsory): 26,00	Total ECTS Credits (Elective): 4,00	Total ECTS Credits: 30,00				

3. Year 1. Semester Courses						
Course Code	Course Name	Type	Hour		Credit	ECTS
			T	U		
ESR 103	Ethical Principles and Social Responsibility	Must	1	0	1	1
IE 333	Operations Research II - Deterministic Problems	Must	3	2	4	6
IE 334	Operations Research III - Stochastic Problems	Must	3	2	4	7
IE 341	Engineering Economic Analysis	Must	3	0	3	5
IE 365	Manufacturing and Service Systems Planning I	Must	4	0	4	6
IE 200	Practical Training I	Must	0	0	0	5
			14	4	16	30
Total ECTS Credits (Compulsory): 30,00	Total ECTS Credits (Elective): 0	Total ECTS Credits: 30,00				

3. Year 2. Semester Courses						
Course Code	Course Name	Type	Hour		Credit	ECTS
			T	U		
IE 302	Facilities Design and Location	Must	4	0	4	6
IE 326	Quality Engineering	Must	4	0	4	6
IE 327	System Simulation	Must	3	2	4	6
IE 364	Production Information Systems	Must	3	0	3	6
IE 366	Manufacturing and Service Systems Planning II	Must	4	0	4	6
			18	2	19	30
Total ECTS Credits (Compulsory): 30,00	Total ECTS Credits (Elective): 0	Total ECTS Credits: 30,00				

2. Year 2. Semester Courses						
Course Code	Course Name	Type	Hour		Credit	ECTS
			T	U		
ELEC	Social Science Elective (Any course from the Pool)	Elective	3	0	3	4
IE 202	Work Study and Ergonomics	Must	3	2	4	7
IE 218	Computer Applications in Industrial Engineering	Must	4	0	4	7
IE 228	Engineering Statistics	Must	4	0	4	6
IE 232	Operations Research I - Modelling	Must	3	2	4	6
			17	4	19	30
Total ECTS Credits (Compulsory): 26,00	Total ECTS Credits (Elective): 4,00	Total ECTS Credits: 30,00				

3. Year 1. Semester Courses						
Course Code	Course Name	Type	Hour		Credit	ECTS
			T	U		
ESR 103	Ethical Principles and Social Responsibility	Must	1	0	1	1
IE 333	Operations Research II - Deterministic Problems	Must	3	2	4	6
IE 334	Operations Research III - Stochastic Problems	Must	3	2	4	7
IE 341	Engineering Economic Analysis	Must	3	0	3	5
IE 365	Manufacturing and Service Systems Planning I	Must	4	0	4	6
IE 200	Practical Training I	Must	0	0	0	5
			14	4	16	30
Total ECTS Credits (Compulsory): 30,00	Total ECTS Credits (Elective): 0	Total ECTS Credits: 30,00				

3. Year 2. Semester Courses						
Course Code	Course Name	Type	Hour		Credit	ECTS
			T	U		
ELEC	Management Elective (Any course from MAN 1 ELEC POOL: MAN 404 and MAN 431)	Elective	3	0	3	4
ELEC	IE REST. ELEC 1	Elective	4	0	4	7
IE 327	System Simulation	Must	3	2	4	6
IE 364	Production Information Systems	Must	3	0	3	6
ELEC	IE REST. ELEC 2	Elective	4	0	4	7
			17	2	18	30
Total ECTS Credits (Compulsory): 12,00	Total ECTS Credits (Elective): 18	Total ECTS Credits: 30,00				

4. Year 1. Semester Courses						
Course Code	Course Name	Type	Hour		Credit	ECTS
			T	U		
ELEC	IE Elective 1	Elective	3	0	3	5
ELEC	IE Elective 2	Elective	3	0	3	5
IE 407	Systems' Analysis	Must	1	4	3	7
IE 499	Seminar in IE Practise	Must	2	0	2	3
MAN 433	Fundamentals of Business and Management	Must	3	0	3	4
IE 300	Practical Training II	Must	0	0	0	6
			12	4	14	30
Total ECTS Credits (Compulsory): 20,00	Total ECTS Credits (Elective): 10,00	Total ECTS Credits: 30,00				

4. Year 2. Semester Courses						
Course Code	Course Name	Type	Hour		Credit	ECTS
			T	U		
ELEC	IE Elective 3	Elective	3	0	3	5
ELEC	Social Sciences Elective (Any course with MAN/ECON code from the Pool)	Elective	3	0	3	5
IE 408	Systems' Design and Implementation	Must	1	4	3	8
IE 464	Law for Engineers	Must	3	0	3	4
MAN 431	Human in Organizations	Must	3	0	3	4
IE 446	Project Engineering Management	Must	3	0	3	4
			16	4	18	30
Total ECTS Credits (Compulsory): 20,00	Total ECTS Credits (Elective): 10,00	Total ECTS Credits: 30,00				

4. Year 1. Semester Courses						
Course Code	Course Name	Type	Hour		Credit	ECTS
			T	U		
ELEC	IE Elective 1	Elective	3	0	3	5
ELEC	IE Elective 2	Elective	3	0	3	5
IE 407	Systems' Analysis	Must	1	4	3	7
IE 499	Seminar in IE Practise	Must	2	0	2	3
ELEC	Management Elective (Any course from MAN 2 ELEC POOL: MAN 401 and MAN 433)	Elective	3	0	3	4
IE 300	Practical Training II	Must	0	0	0	6
			12	4	14	30
Total ECTS Credits (Compulsory): 16,00	Total ECTS Credits (Elective): 14,00	Total ECTS Credits: 30,00				

4. Year 2. Semester Courses						
Course Code	Course Name	Type	Hour		Credit	ECTS
			T	U		
ELEC	IE Elective 3	Elective	3	0	3	5
ELEC	Social Science Elective (Any course from the Pool)	Elective	3	0	3	5
IE 408	Systems' Design and Implementation	Must	1	4	3	7
IE 464	Law for Engineers	Must	3	0	3	4
ELEC	IE Elective 4	Elective	3	0	3	4
IE 446	Project Engineering Management	Must	3	0	3	5
			16	4	18	30
Total ECTS Credits (Compulsory): 16,00	Total ECTS Credits (Elective): 14,00	Total ECTS Credits: 30,00				