Industria	Il Engineering Undergraduate Curriculun	n (<i>for stud</i>	lents enro	olled in TE	DU in Fal	l 2022)
Semester 1		<u> </u>				
Code	Course Title	С	Р	L	Cr	ECTS
CMPE 113	Fundamentals of Programming I	1	0	4	3	5
ENG 101	English for Academic Purposes	2	2	0	3	5
LIBE110	Critical Perspectives on Humanity	3	0	0	3	5
PHYS 101	General Physics I	3	0	2	4	6
MATH 101	Calculus of One Variable	3	2	0	4	7
TUR 101/150	Turkish I/Turkish for Foreigners I	2	0	0	2	2
TEDU 101	First Year Experience at TEDU	0	0	0	0	1
	Semester Credits Total	14	4	6	19	31
Semester 2						
Code	Course Title	С	Р	L	Cr	ECTS
ENG 102	Expository Writing	2	2	0	3	5
MATH 102	Multivariable Calculus	3	2	0	4	7
TUR 102/160	Turkish II/Turkish for Foreigners II	2	0	0	2	2
CMPE 114	Fundamentals of Programming II	2	0	2	3	6
LIBE 120	Foundations and Frontiers of Science	3	0	0	3	5
LIBE 140	Social and Political Studies	3	0	0	3	5
TEDU102	Service Learning	1	0	0	1	1
. 13 0 10 2	Semester Credits Total	16	4	2	19	31
Semester 3		1	<u> </u>	<u> -</u>	1	<u> </u>
Code	Course Title	c	Р	L	Cr	ECTS
MATH 203	Lineer Algebra and Differential Equations	3	0	0	3	5
ECON 110	Principles of Economics	3	0	0	3	5
LIBE130	Art and Design	3	0	0	3	5
ME 221	Manufacturing Processes	3	0	2	4	8
MATH 230		3	0	0	3	6
IVIA I FI 23U	Introduction to Probability Theory	٦	Į U	Į U	3	U
	Semester Credits	15	0	2	16	29
Semester 4	Semester Credits	112	<u> </u>	<u> </u>	110	29
Code	Course Title	<u></u>	Р	l,	Cr	ECTS
		C		L		
MATH 232	Introduction to Statistics	3	0	0	3	6
IE 212	Lean Process Design	3	0	0	3	6
IE 222	Engineering Economy & Cost Analysis	3	0	0	3	6
IE 232	Mathematical Modeling and Optimization I	3	0	0	3	6
LIBE 150	World Literature	3	0	0	3	5
			<u> </u>	<u> </u>		
G , F	Semester Credits	15	0	0	15	29
Semester 5						
Code	Course Title	С	P	L	Cr	ECTS
Code IE 371	Course Title Computational Tools for Industrial Engineers	C 2	P 2	L 0	Cr 3	ECTS 5
Code IE 371 IE 311	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I	C 2 3	P 2 0	L 0	Cr 3	ECTS 5 6
Code IE 371 IE 311 IE 331	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II	C 2 3 3	P 2 0 0	L 0 0 0	Cr 3 3	ECTS 5 6 6
Code IE 371 IE 311 IE 331 IE 341	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation	2 3 3 2	P 2 0 0 0 0 0	L 0 0 0 2	Cr 3 3 3 3 3	ECTS 5 6 6 6
Code IE 371 IE 311 IE 331	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I	2 3 3 2 1	P 2 0 0	L 0 0 0 0 2	Cr 3 3	ECTS 5 6 6 6 3
Code IE 371 IE 311 IE 331 IE 341	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective	2 3 3 2 1	P 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	L 0 0 0 2 0	Cr 3 3 3 3 3 1 3 3	ECTS 5 6 6 6 3 5 5
Code IE 371 IE 311 IE 331 IE 341 IE 399	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I	2 3 3 2 1	P 2 0 0 0 0 0 0 0 0	L 0 0 0 0 2	Cr 3 3 3 3 1	ECTS 5 6 6 6 3
Code IE 371 IE 311 IE 331 IE 341	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits	C 2 3 3 2 1 3 14	P 2 0 0 0 0 0 0 0 2	L 0 0 0 2 0	Cr 3 3 3 3 1 3 16	ECTS 5 6 6 6 3 5 31
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title	C 2 3 3 2 1 1 3 14 C	P 2 0 0 0 0 0 0 0 2 P	L 0 0 0 0 2 0 0 2 L	Cr 3 3 3 3 1 1 3 16 Cr	ECTS 5 6 6 6 3 5 31 ECTS
Code E 371 E 311 E 331 E 341 E 399 Semester 6 Code E 312	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II	C 2 3 3 2 1 1 3 14 C C 3	P 2 0 0 0 0 0 0 0 2	L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 3 1 1 3 1 6 Cr 3	ECTS 5 6 6 6 3 5 31 ECTS 6
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control	C 2 3 3 2 1 1 3 14 C 3 3 3 3	P 2 0 0 0 0 0 0 0 2 P	L 0 0 0 0 2 0 0 2 L 0 0 0 0 0 0 0 0 0 0	Cr 3 3 3 3 1 1 3 16 Cr	ECTS 5 6 6 6 3 5 31 ECTS 6 7
Code E 371 E 311 E 331 E 341 E 399	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II	C 2 3 3 2 1 1 3 14 C 3 3 3 3 3 3 3 3	P 2 0 0 0 0 0 0 0 2 P 0 0	L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 3 1 1 3 1 6 Cr 3	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control	C 2 3 3 2 1 1 3 14 C 3 3 3 3	P 2 0 0 0 0 0 0 2 P 0 0 0 0 0 0 0 0 0 0	L 0 0 0 0 2 0 0 2 L 0 0 0 0 0 0 0 0 0 0	Cr 3 3 3 1 1 3 16 Cr 3 3 3	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III	C 2 3 3 2 1 1 3 14 C 3 3 3 3 3 3 3 3	P 2 0 0 0 0 0 2 P 0 0 0 0 0 0 0 0 0 0 0	L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 3 16 Cr 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 5
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems	C 2 3 3 2 1 1 3 14 C 3 3 3 3 3 3 3 3 3 3	P 2 0 0 0 0 0 2 P 0 0 0 0 0 0 0 0 0 0 0	L 0 0 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 16 Cr 3 3 3 3 3 3 3 3 3 3	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective	C 2 3 3 2 1 4 C 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	P 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 16 Cr 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 5
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective	C 2 3 3 2 1 4 C 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	P 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 16 Cr 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 5
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits	C 2 3 3 2 1 4 C 3 3 3 3 3 3 3 1 5 C	P 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	L 0 0 0 0 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 16 Cr 3 3 3 3 3 3 3 15	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 29
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Course Title	C 2 3 3 2 1 1 4 C 3 3 3 3 3 3 3 1 5 C C	P 2 0 0 0 0 2 P P	L 0 0 0 0 0 2 2 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 16 Cr 3 3 3 3 15 Cr	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 29
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code IE 499	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Summer Practice II	C 2 3 3 2 1 1 3 1 4 C 3 3 3 3 3 3 1 5 C 1	P 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 3 16 Cr 3 3 3 15 Cr 1	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 29 ECTS 5
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code IE 499 IE 491 IE-DEPT	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Summer Practice II Senior Project I	C 2 3 3 2 1 1 4 C 3 3 3 3 3 3 3 1 5 C 1 1 1	P 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	L 0 0 0 0 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 16 Cr 3 3 3 15 Cr 1 3 3	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 29 ECTS 8
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code IE 499 IE 491 IE-DEPT	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Summer Practice II Senior Project I Departmental Elective	C 2 3 3 2 1 3 14 C 3 3 3 3 15 C 1 1 3	P 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 3 16 Cr 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 29 ECTS 5 8
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code IE 499 IE 491 IE-DEPT Math/Sci Elect FREE	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Summer Practice II Senior Project I Departmental Elective MATH/SCI Elective	C 2 3 3 2 1 3 14 C 3 3 3 3 3 15 C 1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	P	L 0 0 0 0 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 16 Cr 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 29 ECTS 5 8 5 5 5
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code IE 499 IE 491 IE-DEPT Math/Sci Elect FREE	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Summer Practice II Senior Project I Departmental Elective MATH/SCI Elective Free Elective	C 2 3 3 2 1 3 14 C 3 3 3 3 15 C 1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	P 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 3 16 Cr 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 29 ECTS 5 8 5 5 5 5
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code IE 499 IE 491 IE-DEPT Math/Sci Elect FREE	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Summer Practice II Senior Project I Departmental Elective MATH/SCI Elective Free Elective	C 2 3 3 2 1 3 14 C 3 3 3 3 15 C 1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	P 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 3 16 Cr 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 29 ECTS 5 8 5 5 5 5
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code IE 499 IE 491 IE-DEPT Math/Sci Elect FREE	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Summer Practice II Senior Project I Departmental Elective MATH/SCI Elective Free Elective History of Turkish Republic I	C 2 3 3 2 1 3 14 C 3 3 3 3 3 15 C 1 1 3 3 3 3 2	P 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 3 16 Cr 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 29 ECTS 5 8 5 5 2 2
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code IE 499 IE 491 IE-DEPT Math/Sci Elect FREE HIST 101/HIST	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Summer Practice II Senior Project I Departmental Elective MATH/SCI Elective Free Elective History of Turkish Republic I	C 2 3 3 2 1 3 14 C 3 3 3 3 3 15 C 1 1 3 3 3 3 2	P 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 3 16 Cr 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 29 ECTS 5 8 5 5 2 2
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code IE 499 IE 491 IE-DEPT Math/Sci Elect FREE HIST 101/HIST	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Summer Practice II Senior Project I Departmental Elective MATH/SCI Elective Free Elective History of Turkish Republic I Semester Credits	C 2 3 3 2 1 3 14 C 3 3 3 3 3 15 C 1 1 3 3 3 3 2 13	P 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 3 16 Cr 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 29 ECTS 5 8 5 5 29 30
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code IE 499 IE 491 IE-DEPT Math/Sci Elect FREE HIST 101/HIST Semester 8 Code	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Summer Practice II Senior Project I Departmental Elective MATH/SCI Elective Free Elective History of Turkish Republic I Semester Credits Course Title Semester Credits Course Title	C 2 3 3 2 1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3	P	L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 3 16 Cr 1 3 3 3 3 3 3 3 3 3 3 5 5 Cr 1 5 Cr	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 29 ECTS 5 8 5 5 2 30
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code IE 499 IE 491 IE-DEPT Math/Sci Elect FREE HIST 101/HIST Semester 8 Code IE 492	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Summer Practice II Senior Project I Departmental Elective History of Turkish Republic I Semester Credits Course Title Semester Credits Course Title Semester Credits Course Title Semester Credits Course Title Semester Credits	C 2 3 3 3 2 14 C 1 1 3 3 3 3 3 3 2 2 1 3 C 1 1 1 3 1 4 1 5 C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	L 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cr 3 3 3 16 Cr 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 29 ECTS 5 8 5 5 2 30 ECTS 8
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code IE 499 IE 491 IE-DEPT Math/Sci Elect FREE HIST 101/HIST Semester 8 Code IE 492 IE-DEPT IE-DEPT	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Summer Practice II Senior Project I Departmental Elective History of Turkish Republic I Semester Credits Course Title Semior Project II Departmental Elective History of Turkish Republic I	C 2 3 3 2 1 3 14 C 3 3 3 3 3 15 C 1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	P 2 0 0 0 0 2 P 0 0 0 0 0 0 0 0	L	Cr 3 3 3 16 Cr 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 29 ECTS 5 8 5 5 2 30 ECTS 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code IE 499 IE 491 IE-DEPT Math/Sci Elect FREE HIST 101/HIST Semester 8 Code IE 492 IE-DEPT IE-DEPT Math/Sci Elect	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Summer Practice II Senior Project I Departmental Elective History of Turkish Republic I Semester Credits Course Title Semior Project II Departmental Elective History of Turkish Republic I Departmental Elective Departmental Elective Semior Project II Departmental Elective Departmental Elective Departmental Elective Departmental Elective Departmental Elective	C 2 3 3 2 1 1 3 3 3 3 3 2 1 1 3 3 3 2 1 1 3 3 3 3 3 3 3 3	P 2 0 0 0 0 0 0 0 0 0	L	Cr	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 29 ECTS 5 8 5 5 2 30 ECTS 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code IE 499 IE 491 IE-DEPT Math/Sci Elect FREE HIST 101/HIST Semester 8 Code IE 492 IE-DEPT Math/Sci Elect FREE HIST Semester 8 Code IE 492 IE-DEPT Math/Sci Elect FREE	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Summer Practice II Senior Project I Departmental Elective History of Turkish Republic I Semester Credits Course Title Semester Credits Course Title Semester Credits Free Elective History of Turkish Republic I Departmental Elective History of Turkish Republic I Departmental Elective Free Elective Departmental Elective Departmental Elective Departmental Elective Departmental Elective MATH/SCI Elective Free Elective	C 2 3 3 2 1 3 14 C 3 3 3 3 3 3 15 C 1 1 3 3 3 3 2 13 3 3 3 3 3 3 3 3 3 3 3	P 2 0 0 0 0 0 0 0 0 0	L 0 0 0 0 2 0 0 2 0 0 0 0 0 0 0 0 0 0 0	Cr	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 29 ECTS 5 8 5 5 2 30 ECTS 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code IE 499 IE 491 IE-DEPT Math/Sci Elect FREE HIST 101/HIST Semester 8 Code IE 492 IE-DEPT Math/Sci Elect FREE HIST Semester 8 Code IE 492 IE-DEPT Math/Sci Elect FREE	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Summer Practice II Senior Project I Departmental Elective MATH/SCI Elective Free Elective History of Turkish Republic I Departmental Elective MATH/SCI Elective Departmental Elective Departmental Elective Departmental Elective Departmental Elective MATH/SCI Elective Free Elective History of Turkish Republic II	C 2 3 3 2 1 1 3 3 3 3 3 3 3 3	P	L	Cr	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 29 ECTS 5 8 5 5 5 2 30 ECTS 8 5 5 5 2 30
Code IE 371 IE 311 IE 331 IE 341 IE 399 Semester 6 Code IE 312 IE 316 IE 332 CMPE 232-N Math/Sci Elect Semester 7 Code IE 499 IE 491 IE-DEPT Math/Sci Elect FREE HIST 101/HIST Semester 8 Code IE 492 IE-DEPT Math/Sci Elect FREE HEST 101/HIST	Course Title Computational Tools for Industrial Engineers Manufacturing and Service Operations Planning I Mathematical Modeling & Optimization II Simulation Summer Practice I MATH/SCI Elective Semester Credits Course Title Manufacturing and Service Operations Planning II Quality Planning and Control Mathematical Modeling & Optimization III Database Systems MATH/SCI Elective Semester Credits Course Title Summer Practice II Senior Project I Departmental Elective History of Turkish Republic I Semester Credits Course Title Semester Credits Course Title Semester Credits Free Elective History of Turkish Republic I Departmental Elective History of Turkish Republic I Departmental Elective Free Elective Departmental Elective Departmental Elective Departmental Elective Departmental Elective MATH/SCI Elective Free Elective	C 2 3 3 2 1 3 14 C 3 3 3 3 3 3 15 C 1 1 3 3 3 3 2 13 3 3 3 3 3 3 3 3 3 3 3	P 2 0 0 0 0 0 0 0 0 0	L 0 0 0 0 2 0 0 2 0 0 0 0 0 0 0 0 0 0 0	Cr	ECTS 5 6 6 6 3 5 31 ECTS 6 7 6 5 5 29 ECTS 5 8 5 5 2 30 ECTS 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5