

FACULTY OF ENGINEERING, ARCHITECTURE AND DESIGN															
INDUSTRIAL ENGINEERING															
CURRICULUM															
1st SEMESTER								2nd SEMESTER							
C.Code	Course Name	Type	T	A	L	C	ECTS	C.Code	Course Name	Type	T	A	L	C	ECTS
CAP 101	Career Planning	C	2	0	0	2	0	CENG 154	Computer Programming	C	2	0	2	3	4
CENG 153	Introduction to Information Technologies and Programming	C	2	0	2	3	4	ENG 112	English for Academic Purposes II	C	2	0	0	2	2
CHEM 101	General Chemistry	C	3	0	1	3	5	ENGR 104	Computer Aided Design	C	2	0	2	3	4
ENG 111	English for Academic Purposes I	C	2	0	0	2	2	HIST 102	Ataturk's Principles and History of Revolution II	C	2	0	0	2	2
HIST 101	Ataturk's Principles and History of Revolution I	C	2	0	0	2	2	IE 151	Fundamentals of Economics	C	3	0	0	3	4
IE 111	Introduction to Industrial Engineering & Ethics	C	3	0	0	3	3	MATH 122	Calculus II	C	4	0	0	4	6
MATH 121	Calculus I	C	4	0	0	4	6	PHYS 122	Physics II	C	3	0	2	4	6
PHYS 121	Physics I	C	3	0	2	4	6	TUR 102	Turkish Language II	C	2	0	0	2	2
TUR 101	Turkish Language I	C	2	0	0	2	2								
TOTAL						25	30	TOTAL						23	30
3rd SEMESTER								4th SEMESTER							
C.Code	Course Name	Type	T	A	L	C	ECTS	C.Code	Course Name	Type	T	A	L	C	ECTS
IE 202	Systems Analysis and Design	C	3	0	0	3	5	ENGR 202	Applied Statistics	C	2	0	2	3	6
IE 209	Materials Science	C	3	0	0	3	5	IE 206	Engineering Economics	C	3	0	0	3	4
IE 211	Work Methods and Measurement	C	3	0	0	3	6	IE 290	Practicum I	C	0	0	0	0	3
MATH 221	Differential Equations	C	4	0	0	4	6	MATH 124	Linear Algebra	C	3	0	0	3	5
MATH 225	Probability and Statistics	C	3	0	0	3	5	OHS 204	Occupational Health and Safety I	C	2	0	0	2	2
	University Elective	E	2	0	0	2	3		Departmental Elective	E				3	5
									Departmental/Non-departmental Elective	E				3	5
TOTAL						18	30	TOTAL						17	30
5th SEMESTER								6th SEMESTER							
C.Code	Course Name	Type	T	A	L	C	ECTS	C.Code	Course Name	Type	T	A	L	C	ECTS
IE 303	Production Management I	C	2	2	0	3	5	IE 302	Operations Research II	C	2	2	0	3	5
IE 305	Operations Research I	C	2	2	0	3	6	IE 304	Production Management II	C	2	2	0	3	5
IE 307	Systems Modelling and Simulation	C	2	0	2	3	6	IE 390	Practicum II	C	0	0	0	0	3
	Departmental Elective	E				3	5	IE 403	Quality Engineering	C	2	0	2	3	5
	Departmental/Non-departmental Elective	E				3	5	OHS 304	Occupational Health and Safety II	C	2	0	0	2	2
	University Elective	E	2	0	0	2	3		Departmental Elective	E				3	5
									Departmental/Non-departmental Elective	E				3	5
TOTAL						17	30	TOTAL						17	30
7th SEMESTER								8th SEMESTER							
C.Code	Course Name	Type	T	A	L	C	ECTS	C.Code	Course Name	Type	T	A	L	C	ECTS
IE 405	Graduation Project	C	2	4	0	4	5	IE 400	MUDU COOP	C	0	40	0	20	30
	Departmental Elective	E				3	5								
	Departmental Elective	E				3	5								
	Departmental Elective	E				3	5								
	Departmental/Non-departmental Elective	E				3	5								
	Departmental/Non-departmental Elective	E				3	5								
TOTAL						19	30	TOTAL						20	30

TOTAL ECTS	240
TOTAL COURSE CREDITS	156
ELECTIVE COURSES TOTAL ECTS	61
ELECTIVE COURSE RATIO (%)	25,42

DEPARTMENTAL ELECTIVE COURSES															
C.Code	Course Name	Type	T	A	L	C	ECTS	C.Code	Course Name	Type	T	A	L	C	ECTS
IE 252	Cost Accounting	E	3	0	0	3	5	IE 376	Leadership and Teamwork	E	3	0	0	3	5
IE 331	Database Management	E	2	0	2	3	5	IE 377	Introduction to Data Science	E	2	0	2	3	5
IE 333	Computer Integrated Manufacturing	E	2	0	2	3	5	IE 384	Manufacturing Methods	E	2	0	2	3	5
IE 350	Project Management	E	3	0	0	3	5	IE 422	Artificial Intelligence Applications in Industrial Engineering	E	2	0	2	3	5
IE 351	Total Quality Management	E	3	0	0	3	5	IE 423	Enterprise Resource Planning	E	2	0	2	3	5
IE 355	Small and Medium Enterprises (SME) Management	E	3	0	0	3	5	IE 424	Modeling and Analysis of Manufacturing Systems	E	2	0	2	3	5
IE 356	Group Technology and Flexible Manufacturing Systems	E	3	0	0	3	5	IE 425	Applied Optimization	E	2	0	2	3	5
IE 357	Production Information Systems	E	3	0	0	3	5	IE 426	Applied Data Science	E	2	0	2	3	5
IE 358	Entrepreneurship and Innovation	E	3	0	0	3	5	IE 451	Marketing Management	E	3	0	0	3	5
IE 359	Assembly Line Balancing	E	3	0	0	3	5	IE 452	Network Optimization	E	3	0	0	3	5
IE 360	Special Topics in Industrial Engineering I	E	3	0	0	3	5	IE 453	Introduction to Scheduling	E	3	0	0	3	5
IE 361	Special Topics in Industrial Engineering-II	E	3	0	0	3	5	IE 454	Technology Management	E	3	0	0	3	5
IE 362	Revenue Management	E	3	0	0	3	5	IE 455	Design of Experiment	E	3	0	0	3	5
IE 363	Problem Solving and Innovation	E	3	0	0	3	5	IE 456	Introduction to Fuzzy Logic	E	3	0	0	3	5
IE 364	Risk Analysis	E	3	0	0	3	5	IE 457	Introduction to Heuristics	E	3	0	0	3	5
IE 365	Ergonomics	E	3	0	0	3	5	IE 458	Stochastic Processes	E	3	0	0	3	5
IE 366	Financial Management	E	3	0	0	3	5	IE 459	Advanced Quality Control Techniques	E	3	0	0	3	5
IE 368	Inventory Control and Planning	E	3	0	0	3	5	IE 460	Inventory Systems	E	3	0	0	3	5
IE 369	Multi-Criteria Decision Making	E	3	0	0	3	5	IE 461	Discrete Optimization	E	3	0	0	3	5
IE 370	Supply Chain and Logistics Management	E	3	0	0	3	5	IE 462	Constraint Programming	E	3	0	0	3	5
IE 371	Lean Production	E	3	0	0	3	5	IE 463	Game Theory	E	3	0	0	3	5
IE 372	Time Series and Forecasting	E	2	0	2	3	5	IE 464	Design for Sustainability	E	3	0	0	3	5
IE 373	Sustainability and Green Engineering	E	3	0	0	3	5	IE 466	Dynamic Programming	E	3	0	0	3	5
IE 375	Decision Analysis	E	3	0	0	3	5	IE 467	Facilities Design and Planning	E	3	0	0	3	5