Course Structure Diagram with Course Credits

1 st Year Fall Semester							
Course Code	Pre.	Course Name	Theory	Application/ Laboratory	Local Credits	ECTS	
PHY101		General Physics I	3	2	4	5	
CHM101		General Chemistry I	3	2	4	6	
MTH101		Mathematics I	4	0	4	5	
ENG101		English I	3	0	3	3	
IND 101		Fundamentals of Industrial Engineering	4	0	3	5	
YİT101		Turkish for Foreign Students I	2	0	2	2	
CHC100		Cyprus History and Culture	2	0	2	2	
CAM101		Campus Orientation	2	0	0	2	
Total						30	

1st Year Spring Semester						
Course Code	Pre.	Course Name	Theory	Application/ Laboratory	Local Credits	ECTS
PHY102		General Physics II	3	2	4	6
MTH102		Mathematics II	4	0	4	6
ECC 103		Engineering Drawing	2	2	3	5
ENG 102		English II	3	0	3	3
YİT102		Turkish for Foreign Students II	2	0	2	2
TUR 102		Turkish Language II	0	0		
CAR122		Career Planning	2	0	0	2
IND 102		Information Technologies for Industrial Engineering	4	0	3	6
Total					30	

2 nd Year Fall S	emest	er				
Course Code	Pre.	Course Name	Theory	Application/	Local	ECTS

			Laboratory	Credits	
AIT 101	Atatürk Principles and the History of Turkish Revolution I	2	0	2	2
AIT 103	Principles of Atatürk and the History of Turkish Revolution I	2	0	2	2
ECC 101	Introduction to Computers and Programming	2	2	3	5
IND 201	Elements of Linear Algebra	4	0	3	6
IND 203	Statistics I	4	0	3	6
IND 205	Production & Operations Management I	4	0	3	6
NTE	Non-Technical Electives	3	0	3	5
Total					

2nd Year Spring Semester

Course Code	Pre.	Course Name	Theory	Application/ Laboratory	Local Credits	ECTS
AIT 104		Principles of Atatürk and the History of Turkish Revolution II	2	0	2	2
ECC 108		Object Oriented Programming	2	0	3	5
IND 202		Graphing & Optimization Principles	2	2	3	6
IND 204		Statistics II	4	0	3	6
IND 206		Production & Operations Management II	4	0	3	6
IND 208		Factory Internship	4	0	0	8
NTE		Non-Technical Elective	3	0	3	4
Total					37	

3 rd Year Fall Semester						
Course Code	Pre.	Course Name	Theory	Application/ Laboratory	Local Credits	ECTS
IND 301		Analysis of Service Systems	4	0	4	7
IND 303		Operational Research I	4	0	4	7
IND 31X		Technical Elective	4	0	3	6

IND 31X	Technical Elective	4	0	3	6
NTE	Non-Technical Elective	3	0	3	4
Total					

3 rd Year Spring Semester						
Course Code	Pre.	Course Name	Theory	Application/ Laboratory	Local Credits	ECTS
IND 302		Entrepreneurship & Innovation	4	0	4	5
IND 304		Operational Research I	4	0	4	6
IND 31X		Technical Elective	4	0	3	6
IND 31X		Technical Elective	4	0	3	6
NTE		Nontechnical Elective	3	0	3	6
IND 306		Service Internship	0	0	0	7.5
Total						37

4 th Year Fall Semester						
Course Code	Pre.	Course Name	Theory	Application/ Laboratory	Local Credits	ECTS
IND 401		Transforming Ideas to Projects	2	2	4	7
IND 403		Auditing Productivity	3	2	4	7
IND 41X		Technical Elective	3	0	3	6
IND 41X		Technical Elective	3	0	3	6
NTE		Non-Technical Elective	3	0	3	4
Total					30	

4 th Year Spring Semester						
Course Code	Pre.	Course Name	Theory	Application/ Laboratory	Local Credits	ECTS
IND 402		Strategy of Quality	4	0	4	4
IND 404		Designing the Factory	4	0	4	4

IND 41X	Technical Elective	4	0	3	4
IND 41X	Technical Elective	4	0	3	4
NTE	Non-Technical Elective	3	0	3	4
IND 400	Graduation Project	3	0	3	10
Total					

Technical Elective Courses 31X

Elective Courses							
Code	Pre.	Course Name	Theory	Application/ Laboratory	Local Credits	ECTS	
IND 311		Safety & Occupational Management	3	0	3	4	
IND 312		Lean Thinking	3	0	3	4	
IND 313		Implementing Industry 4.0	3	0	3	4	
IND 314		Decision Theory	3	0	3	4	
IND 315		Forecasting	3	0	3	4	
IND 316		Supply Chain & Logistics	3	0	3	4	
MTH323		Numerical Analysis	3	0	3	4	
BME 340		Modeling of Biological Systems	3	0	3	4	
ECC 311		Management of Information Systems	3	0	3	5	

Technical Elective Courses 41X

Elective Courses							
Code	Pre.	Course Name	Theory	Application/ Laboratory	Local Credits	ECTS	
IND 411		Six Sigma	2	2	3	4	
IND 412		Digitalization & Industry 4.0	3	0	3	4	
IND 413		Economic Principles in Industrial Engineering	3	0	3	4	
IND 414		Scheduling	3	0	3	6	
IND 415		Fuzzy Systems	3	0	3	6	
IND 416		Advanced Operations Management	3	0	3	6	

IND 417	Location Techniques & Problems	3	0	3	6
IND 434	Quality Engineering	3	0	3	6
EE 432	Mechatronics	3	0	3	6
EE 463	Image Processing	3	0	3	6
BME 448	Micro and Nano Technologies in Biomedical Engineering	3	0	3	5
BME 401	Instrumental Analysis	3	0	3	5
BME 431	Cardiac Mechanics	3	0	3	5
BME 441	Orthopedic Biomechanics	2	2	3	5
BME 446	Figure Analysis and Machine Vision	3	0	3	5
BME 435	Bioinformatics	3	0	3	5
EE 437	Robotics Systems	3	0	3	5
ISE 412	Health Information Management	3	0	3	5
ISE 413	Strategic Information Systems Management	3	0	3	5
ECC 412	Database Applications	3	0	3	5
PGE 436	Simulating of Geosystems	3	0	3	5
ME 426	Introduction to Finite Elements	3	0	3	6
ME 429	Computer Aided Design (CAD)	3	0	3	6
ECC 404	Artificial Neural Network	3	0	3	6

Non-Technical (Non Field-Related) Elective Courses							
Code	Pre.	Course Name	Theory	Application/ Laboratory	Local Credits	ECTS	
MAN101		Introduction to Management	3	0	3	5	
ECON101		Introduction to Economics	3	0	3	5	
FRE101		French I	3	0	3	5	
FRE102		French II	3	0	3	5	

GER101	German I	3	0	3	5
GER102	German II	3	0	3	5
PHIL101	Introduction to Philosophy	3	0	3	5
HIST103	History of Civilization	3	0	3	5
POL101	Political Science I	3	0	3	5
SOC101	Sociology	3	0	3	5