

TOTAL COURSE-PROGRAMME OUTCOMES RELATIONSHIP

					Programme Outcomes										
Course Code	Course Name	T	P	ECTS	1	2	3	4	5	6	7	8	9	10	11
1st Year - 1st Semester															
EEM1001	MATHEMATICS-I	4	2	6	5	0	0	0	0	2	0	2	3	0	0
EEM1003	PHYSICS-I	3	1	5	5	1	2	3	3	2	0	3	2	1	0
EEM1005	GENERAL CHEMISTRY	2	1	4	5	0	1	1	1	3	2	3	2	1	1
EEM1007	LINEAR ALGEBRA	3	0	3	5	0	1	3	0	0	0	2	1	0	0
EEM1009	INT TO ELECTRICAL AND ELECTRONICS ENGINEERING	2	0	2	2	1	3	5	5	2	5	5	3	5	1
TDL1011	TURKISH-I	2	0	2	1	1	1	1	2	3	5	4	3	2	1
EEM1013	FOREIGN LANGUAGE-I	3	0	3	1	1	1	1	1	2	5	3	3	1	1
ATA1015	PRINCIPLES OF ATATURK AND HISTORY OF TURKISH REVOLUTION-I	2	0	2	1	1	1	1	1	2	2	4	3	1	1
ENF1021	BASIC COMPUTER	2	2	3	1	1	1	4	1	2	1	4	1	1	1
1st Year - 2nd Semester															
EEM1002	MATHEMATICS-II	4	2	6	5	0	0	0	0	2	0	2	3	0	0
EEM1004	PHYSICS-II	2	1	4	5	1	2	3	3	2	0	3	2	1	0

EEM1006	COMPUTER AIDED TECNICAL DRAWING	2	1	5	2	1	2	5	4	5	3	2	5	4	4
EEM1008	COMPUTER PROGRAMMING	2	0	3	5	5	5	5	5	4	4	3	4	2	2
EEM1010	FUNDAMENTALS OF ELECTRIC CIRCUITS	3	0	5	5	4	2	1	1	1	1	1	2	1	2
TDL1012	TURKISH-II	2	0	2	1	1	1	1	2	3	5	4	3	2	1
EEM1014	FOREIGN LANGUAGE -II	3	0	3	1	1	1	1	1	2	5	3	3	1	1
ATA1016	PRINCIPLES OF ATATURK AND HISTORY OF TURKISH REVOLUTION - II	2	0	2	1	1	1	1	1	2	2	4	3	1	1
2nd Year - 3rd Semester															
EEM2001	DIFFERENTIAL EQUATIONS	3	0	5	5	5	2	1	2	4	1	1	1	1	1
EEM2003	PROBABILITY AND STATISTICS	2	0	3	4	3	1	1	2	3	3	3	3	3	1
EEM2005	CIRCUIT THEORY-I	3	0	4	5	4	3	4	5	4	3	5	4	2	1
EEM2007	ELECTRONICS -I	3	0	4	5	5	5	5	5	4	3	5	2	2	2
EEM2009	LOGIC CIRCUITS	3	0	5	5	5	5	3	3	3	3	4	3	3	3
EEM2011	ELECTRICAL MEASUREMENT LABORATORY	0	2	5	5	5	4	4	5	4	2	3	3	3	2
EEM2013	PROFESSIONAL FOREIGN LANGUAGE-I	2	0	2	2	2	1	3	1	2	5	5	1	1	1
	SUMMER PRACTICE	0	0	2	5	5	4	5	4	5	5	4	4	5	4
2nd Year - 4th Semester															

EEM2002	ENGINEERING MATHEMATICS	4	0	5	5	5	2	1	2	4	1	1	1	1	1
EEM2004	ELECTROMAGNETIC FIELDS	3	0	4	5	5	3	4	3	3	2	4	2	1	1
EEM2006	CIRCUIT THEORY -II	3	0	4	5	4	3	4	5	4	3	5	3	2	1
EEM2008	ELECTRONICS -II	3	0	4	5	5	5	5	5	4	3	3	3	3	3
EEM2010	LOGIC CIRCUITS LABORATORY	0	2	4	5	5	4	5	5	5	4	5	3	3	1
EEM2012	CIRCUIT THEORY LABORATORY	0	2	4	5	5	4	4	5	5	4	4	3	3	1
EEM2014	PROFESSIONAL FOREIGN LANGUAGE-II	2	0	2	3	3	2	3	2	2	5	5	2	2	2
	SUMMER PRACTICE	0	0	3	5	5	4	5	4	5	5	4	4	5	4
3rd Year - 5th Semester															
EEM3001	SIGNALS AND SYSTEMS	3	0	6	5	5	3	3	5	3	3	4	2	1	1
EEM3003	POWER ELECTRONICS	3	0	6	5	5	5	5	5	3	5	3	2	2	1
EEM3005	ELECTROMAGNETIC WAVES	3	0	4	5	5	3	3	4	4	2	5	3	2	1
EEM3007	ELECTRONICS LABORATORY I	0	2	3	5	5	5	5	4	3	3	4	3	3	2
	TECHNICAL ELECTIVE COURSE	3	0	4											
	TECHNICAL ELECTIVE COURSE	3	0	4											
	SUMMER PRACTICE	0	0	3	5	5	4	5	4	5	5	4	4	5	4

3rd Year - 6th Semester															
EEM3002	MICROWAVE THEORY	3	0	5	5	5	4	4	3	3	1	4	2	2	1
EEM3004	ELECTRICAL MACHINES-I	3	0	4	5	5	3	5	5	4	5	5	1	2	2
EEM3006	COMMUNICATION THEORY	3	0	4	5	5	3	5	4	2	2	3	2	1	2
EEM3008	POWER GENERATION AND TRANSMISSION	3	0	6	5	5	4	5	5	2	2	1	1	1	1
	GENERAL ELECTIVE COURSE	2	0	4											
	SOCIAL ELECTIVE COURSE	2	0	4											
	SUMMER PRACTICE	0	0	3	5	5	4	5	4	5	5	4	4	5	4
4th Year - 7th Semester															
EEM4001	GRADUATION THESIS	0	2	5	5	5	5	5	5	5	4	5	4	4	3
	TECHNICAL ELECTIVE COURSE	3	0	6											
	TECHNICAL ELECTIVE COURSE	3	0	6											
	TECHNICAL ELECTIVE COURSE	3	0	5											
	TECHNICAL ELECTIVE COURSE	3	0	5											
	TECHNICAL ELECTIVE LABORATORY	0	2	3											
4th Year - 8th Semester															

EEM4001	GRADUATION THESIS	0	2	5	5	5	5	5	5	5	4	5	4	4	3
	TECHNICAL ELECTIVE COURSE	3	0	6											
	TECHNICAL ELECTIVE COURSE	3	0	5											
	TECHNICAL ELECTIVE COURSE	3	0	5											
	TECHNICAL ELECTIVE COURSE	3	0	5											
	TECHNICAL ELECTIVE LABORATORY	0	2	4											
3rd Year - 5th Semester Technical Elective Courses															
EEM3009	ELECTRONICS-III	3	0	4	5	5	5	5	5	5	2	2	2	2	2
EEM3011	LOGIC CIRCUIT DESIGN	3	0	4	5	5	5	5	5	4	3	3	3	3	3
EEM3015	ILLUMINATION PROJECT	3	0	4	4	4	4	4	1	4	1	2	3	4	1
EEM3017	CIRCUIT SYNTHESIS	3	0	4	5	5	5	5	3	2	2	2	1	1	2
EEM3019	NUMERICAL METHODS	3	0	4	5	5	1	3	1	2	1	2	2	1	2
3rd Year - 6th Semester General Elective Courses															
EEM3010	ENTREPRENEURSHIP AND BUSINESS MANAGEMENT	2	0	4	0	0	0	0	0	3	0	4	3	5	0
EEM3012	FACILITY ORGANIZATION	2	0	4	0	0	0	3	0	4	0	0	2	0	2
EEM3014	ENGINEERING APPLICATIONS	2	0	4	0	0	0	0	0	0	0	0	4	4	4

EEM3016	LEADERSHIP AND MOTIVATION	2	0	4	0	0	0	0	0	4	3	4	4	4	2
EEM3018	HUMAN RESOURCES MANAGEMENT	2	0	4	0	0	0	0	0	4	0	0	3	4	0
3rd Year - 6th Semester Social Elective Courses															
EEM3026	FOLK DANCES	2	0	4	0	0	0	0	0	4	0	4	0	0	0
EEM3028	LIFELONG SPORTS	2	0	4	0	0	0	0	0	4	0	4	3	0	0
EEM3030	NATURAL DISASTER and DISASTER EDUCATION	2	0	4	0	0	0	0	0	4	0	4	4	4	4
EEM3038	ART OF PHOTOGRAPHY	2	0	4	0	0	0	0	0	4	0	4	3	0	0
EEM3046	ACADEMIC WRITING	2	0	4	0	0	0	0	4	4	4	4	5	0	0
EEM3048	ACADEMIC WRITING	2	0	4	0	0	0	0	4	4	4	4	5	0	0
EEM3050	COMMUNICATION	2	0	4	0	0	0	0	0	0	5	4	2	0	0
EEM3052	GERMAN	2	0	4	0	0	0	0	0	0	3	4	0	0	0
EEM3054	HISTORY OF ART	2	0	4	0	0	0	0	0	0	0	4	2	0	0
EEM3056	TRADITIONAL TURKISH HAND ARTS	2	0	4	0	0	0	0	0	0	0	4	0	0	0
EEM3064	INTRODUCTION TO SOCIOLOGY	2	0	4	0	0	0	0	0	0	0	4	2	0	0
EEM3070	HISTORY AND PHILOSOPHY OF SCIENCE	2	0	4	0	0	0	0	0	0	0	4	4	0	0

EEM3074	URBANIZATION PROBLEMS	2	0	4	0	0	0	0	0	0	0	4	3	0	3	
EEM3080	DEMOCRACY AND HUMAN RIGHTS	2	0	4	0	0	0	0	0	0	0	4	4	0	0	
EEM3086	FIRST AID	2	0	4	0	0	0	0	0	5	0	4	2	0	4	
EEM3088	CHINESE	2	0	4	0	0	0	0	0	0	3	4	0	0	0	
EEM3090	RUSSIAN	2	0	4	0	0	0	0	0	0	3	4	0	0	0	
EEM3092	KAZAKH	2	0	4	0	0	0	0	0	0	3	4	0	0	0	
4th Year - 7th Semester Technical Elective Courses																
EEM4003	AUTOMATIC CONTROL	3	0	6	5	5	5	5	5	5	5	5	3	1	2	1
EEM4005	DIGITAL SIGNAL PROCESSING	3	0	6	5	5	5	5	5	4	4	4	4	2	2	2
EEM4007	HARDWARE DESCRIPTION LANGUAGES	3	0	6	5	5	5	5	5	5	4	4	4	1	2	1
EEM4009	POWER SYSTEM ANALYSIS	3	0	6	5	5	4	5	5	2	2	1	1	1	1	1
EEM4011	INDUSTRIAL ELECTRONICS	3	0	6	5	5	5	5	5	5	5	3	1	2	2	1
EEM4013	HIGH VOLTAGE TECHNIQUE	3	0	5	5	5	2	1	1	2	1	1	1	2	2	3
EEM4015	ELECTRICAL MACHINES -II	3	0	5	5	5	3	5	5	4	5	5	5	1	2	2
EEM4017	ARTIFICIAL INTELIGENCE AND ITS APPLICATIONS	3	0	5	5	5	4	5	5	4	2	1	1	1	1	2
EEM4019	INTRODUCTION TO BIOMEDICAL ENGINEERING	3	0	5	5	5	5	5	5	4	3	2	1	2	2	1
EEM4021	RENEWABLE ENERGY SOURCES	3	0	5	5	5	3	1	4	2	1	1	1	2	2	3
EEM4023	DIGITAL COMMUNICATION	3	0	5	5	5	4	5	5	4	2	1	1	1	2	2

EEM4025	FILTER DESIGN	3	0	5	5	5	5	4	5	4	2	1	2	1	1	
EEM4027	MICROPROCESSORS	3	0	5	5	5	5	5	5	5	4	4	1	2	1	
EEM4029	DIGITAL ELECTRONICS	3	0	5	5	5	5	5	5	5	4	3	2	2	2	
4th Year - 7th Semester Technical Elective Laboratories																
EEM4031	POWER ELECTRONICS LABORATORY	0	2	3	5	5	5	5	5	4	5	2	1	1	1	
EEM4033	ENERGY SYSTEMS LABORATORY	0	2	3	5	5	4	5	5	2	2	1	1	1	1	
EEM4035	ELECTRICAL MACHINES LABORATORY -I	0	2	3	5	5	5	5	5	5	5	2	1	1	1	
EEM4037	HARDWARE DESCRIPTION LANGUAGES LABORATORY	0	2	3	5	5	5	5	5	5	3	3	3	3	3	
EEM4039	ELECTRONICS LABORATORY -II	0	2	3	5	5	5	5	5	3	2	3	1	2	1	
EEM4041	ANALOG COMMUNICATION LABORATORY	0	2	3	5	5	5	5	5	3	2	2	1	2	2	
4th Year - 8th Semester Technical Elective Courses																
EEM4004	POWER QUALITY	3	0	6	5	5	4	5	5	2	1	2	1	1	1	
EEM4006	PROGRAMMABLE LOGIC CONTROLLERS	3	0	6	5	5	5	5	5	5	5	2	1	1	1	
EEM4008	INTRODUCTION TO VLSI	3	0	6	5	5	5	5	5	5	5	2	2	2	2	
EEM4010	EMBEDDED SYSTEMS	3	0	6	5	5	5	5	5	5	5	2	2	2	2	
EEM4012	IMAGE PROCESSING	3	0	5	5	5	5	5	5	2	1	2	1	1	2	
EEM4014	BIOMEDICAL ELECTRONICS CIRCUIT DESIGN	3	0	5	5	5	5	5	4	3	2	2	1	1	2	
EEM4016	ELECTRICAL FACILITY PROJECT	3	0	5	4	4	4	4	1	4	1	2	3	4	1	

EEM4018	SIMULATION OF POWER SYSTEMS	3	0	5	5	4	4	4	5	3	1	1	2	1	2	
EEM4020	THERMODYNAMICS	3	0	5	5	2	2	2	2	3	2	4	2	2	1	
EEM4022	CODING THEORY	3	0	5	5	5	5	5	5	5	5	2	1	2	2	
EEM4024	ENERGY DISTRIBUTION	3	0	5	5	4	2	1	1	2	1	1	3	1	2	
EEM4026	SIGNAL PROCESSING HARDWARES	3	0	5	5	5	5	5	5	5	5	2	2	2	2	
EEM4028	MICROCONTROLLERS	3	0	5	5	5	5	5	5	5	4	4	1	2	1	
EEM4030	ANTENNAS AND PROPAGATION	3	0	5	5	5	4	4	5	3	1	4	2	2	3	
EEM4048	TELECOMMUNICATION SYSTEMS	3	0	5	5	5	5	5	3	2	1	3	2	4	2	
4th Year - 8th Semester Technical Elective Laboratories																
EEM4032	VLSI DESIGN LABORATORY	0	2	4	5	5	5	5	5	5	5	5	2	2	2	2
EEM4034	ELECTRICAL MACHINES LABORATORY -II	0	2	4	5	5	5	5	5	5	5	5	2	1	1	1
EEM4036	BIOMEDICAL LABORATORY	0	2	4	5	5	5	5	5	5	4	5	2	1	2	1
EEM4038	INDUSTRIAL AUTOMATION LABORATORY	0	2	4	5	5	5	5	5	5	5	5	2	1	2	1
EEM4040	EMBEDDED SYSTEMS LABORATORY	0	2	4	5	5	5	5	5	5	5	5	1	1	1	1
EEM4042	DIGITAL COMMUNICATION LABORATORY	0	2	4	5	5	5	5	5	5	3	2	2	1	1	2

* Level of Contribution: 0-None, 1-Lowest, 2-Low, 3-Average, 4-High, 5-Highest