

TOTAL COURSE-PROGRAMME OUTCOMES RELATIONSHIP

					PROGRAMME OUTCOMES □																						
KODU	DERS ADI	T	P	ECTS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1. YIL - 1. YARIYIL																											
MAD1001	MATHEMATICS I	4	2	6	5	5	4	0	1	3	5	3	1	2	2	2	1	0	1	3	0	2	3	1	0	0	1
MAD1003	PHYSICS I	3	1	5	4	3	3	4	2	4	4	5	4	3	4	2	5	1	1	3	3	4	4	1	0	0	2
MAD1005	GENERAL CHEMISTRY	2	1	4	4	3	4	4	2	3	4	4	4	3	4	3	4	1	1	3	3	4	4	1	0	0	2
MAD1007	LINEAR ALGEBRA	3	0	3	4	5	4	0	1	3	5	4	1	2	2	4	1	0	1	3	0	3	4	1	0	0	1
MAD1009	INTRODUCTION TO MINING ENGINEERING	2	0	2	5	3	4	4	3	4	5	4	4	4	5	4	5	4	3	4	4	4	3	4	4	4	4
TDL1011	TURKISH LANGUAGE I	2	0	2	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	2	5	5	1	1
YDL1013	FOREIGN LANGUAGE I	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4	5	4	3	5	5	1	2
ATA1015	ATATÜRK PRINCIPLES AND THE HISTORY OF REVOLUTION I	2	0	2	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ENF1021	BASIC COMPUTER	2	2	3	2	1	1	3	3	2	2	3	4	3	3	5	5	2	1	2	1	3	2	4	3	1	3
1. YIL - 2. YARIYIL																											
MAD1002	MATHEMATICS II	4	2	6	5	5	4	0	1	3	5	3	1	2	2	2	1	0	1	3	0	2	3	1	0	0	1
MAD1004	PHYSICS II	2	1	4	4	3	3	4	2	4	4	5	4	3	4	2	5	1	1	3	3	4	4	1	0	0	2
MAD1006	COMPUTER AIDED ENGINEERING DRAWING	2	1	5	2	0	3	2	5	5	1	2	4	5	0	2	2	4	2	3	2	1	1	3	1	2	2
MAD1008	COMPUTER PROGRAMMING	2	0	3	2	1	1	3	3	2	2	3	4	3	3	5	5	2	1	2	1	3	2	4	3	1	3

MAD1010	GEOLOGY AND MAP INFORMATION	3	1	5	3	1	2	0	1	4	2	1	1	1	3	2	1	3	2	2	4	0	3	1	1	0	0
TDL1012	TURKISH LANGUAGE II	2	0	2	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	2	5	5	1	1
YDL1014	FOREIGN LANGUAGE II	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4	5	4	3	5	5	1	2
ATA1016	ATATÜRK PRINCIPLES AND THE HISTORY OF REVOLUTION II	2	0	2	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2. YIL - 3. YARIYIL																										
MAD2001	DIFFERENTIAL EQUATIONS	3	0	6	4	5	4	3	1	1	5	3	1	1	3	2	2	2	1	1	0	3	2	0	0	0	3
MAD2003	PROBABILITY AND STATISTICS	3	0	5	3	2	3	2	1	1	1	3	4	3	3	3	5	1	1	2	1	2	1	0	0	0	2
MAD2005	ANALYTICAL CHEMISTRY	2	1	4	4	5	4	3	4	1	0	3	4	4	3	3	1	2	1	1	3	2	1	2	1	1	1
MAD2007	ENGINEERING MECHANICS	3	0	5	4	4	5	4	1	3	1	0	0	1	1	0	5	4	0	4	2	0	1	0	0	3	3
MAD2009	SURFACE MINING METHODS	3	0	4	5	4	4	4	3	4	5	4	4	4	5	4	5	4	3	4	4	5	4	4	4	4	4
MAD2011	INDUTRIAL RAW MATERIALS	3	0	3	2	0	0	0	0	3	0	0	0	0	1	2	1	2	2	1	4	1	2	0	2	1	3
	PROBATION	0	0	3	2	0	3	2	5	5	1	2	4	5	0	2	2	4	2	3	2	1	1	3	1	2	2
	2. YIL - 4. YARIYIL																										
MAD2002	THERMODYNAMICS AND FLUID MECHANICS	3	0	4	4	5	5	4	2	2	1	2	3	3	2	3	1	2	1	2	3	0	1	2	1	1	0
MAD2004	STRENGTH OF MATERIALS	2	0	3	4	4	4	4	1	3	1	0	0	1	1	0	5	4	0	4	2	0	1	0	0	3	3
MAD2006	MINERALOGY AND PETROGRAPHY	2	1	5	2	1	2	1	1	3	1	1	3	3	3	1	1	4	1	2	3	1	2	1	1	0	2
MAD2008	UNDERGROUND MINING METHODS	3	0	5	1	3	4	3	2	4	1	2	0	3	5	5	4	5	0	5	3	4	5	5	1	4	4
MAD2010	MINERAL PROCESSING	2	2	5	4	5	4	4	5	3	2	5	4	4	3	3	4	1	3	2	3	0	4	4	3	1	1
MAD2012	MINE EXPLORATION AND DRILLING TECHNIQUE	3	0	5	5	4	4	4	5	4	3	4	5	5	4	5	4	3	4	5	4	4	5	4	3	4	4
	PROBATION	0	0	3	2	0	3	2	5	5	1	2	4	5	0	2	2	4	2	3	2	1	1	3	1	2	2

3. YIL - 5. YARIYIL																											
MAD3001	ROCK MECHANICS	2	1	4	5	5	5	5	2	4	1	5	5	4	4	4	2	4	0	3	2	2	3	2	0	2	2
MAD3003	ORE DEPOSITS	2	0	3	2	2	1	0	1	4	1	1	0	1	3	2	1	4	1	1	3	0	2	0	1	1	2
MAD3005	ORE DRESSING I	2	2	5	3	4	3	5	5	3	2	5	5	4	3	5	5	5	0	3	4	2	3	5	1	4	3
	TECHNICAL ELECTIVE COURSE I	3	0	5																							
	TECHNICAL ELECTIVE COURSE II	3	0	5																							
	TECHNICAL ELECTIVE COURSE III	3	0	5																							
	PROBATION	0	0	3	2	0	3	2	5	5	1	2	4	5	0	2	2	4	2	3	2	1	1	3	1	2	2
3. YIL - 6. YARIYIL																											
MAD3002	SUPPORTS IN MINES	3	0	5	4	4	4	4	4	3	1	3	2	3	3	4	4	5	0	3	3	5	4	4	1	4	3
MAD3004	MINE EXCAVATION AND MECHANIZATION	3	0	4	5	4	5	4	4	3	2	1	2	3	2	1	5	4	3	5	5	4	3	3	0	5	3
MAD3006	ORE DRESSING II	2	1	5	2	4	3	4	5	3	3	5	5	5	2	4	4	4	0	3	5	1	3	4	1	4	3
	TECHNICAL ELECTIVE COURSE I	3	0	5																							
	TECHNICAL ELECTIVE COURSE II	3	0	5																							
	SOCIAL ELECTIVE COURSE	2	0	4																							
	PROBATION	0	0	2	2	0	3	2	5	5	1	2	4	5	0	2	2	4	2	3	2	1	1	3	1	2	2
4. YIL - 7. YARIYIL																											
MAD4000	GRADUATION PROJECT	0	2	5	3	2	3	3	4	5	1	3	3	4	1	5	5	5	3	3	3	5	3	4	4	2	2
MAD4003	MINING MACHINERIES AND TRANSPORT	3	0	5	5	4	3	5	4	4	4	4	5	4	3	4	4	5	3	4	4	5	4	4	4	5	4
MAD4005	MINE VENTILATION AND SAFETY	3	0	6	4	5	5	5	4	4	1	2	2	2	3	5	5	5	0	5	4	5	5	4	2	5	4

	TECHNICAL ELECTIVE COURSE I	3	0	5																								
	TECHNICAL ELECTIVE COURSE II	3	0	5																								
	GENERAL ELECTIVE COURSE	2	0	4	4	4	4	3	5	4	3	4	3	5	3	2	5	2	1	1	1	2	1	0	0	0	2	
	4. YIL - 8. YARIYIL																											
MAD4000	GRADUATION PROJECT	0	2	5	3	2	3	3	4	5	1	3	3	4	1	5	5	5	3	3	3	5	3	4	4	2	2	
MAD4004	PROJECT AND DESIGN IN MINING	3	0	6	5	5	5	5	5	5	2	2	2	5	5	5	5	5	0	5	5	4	5	5	3	5	4	
	TECHNICAL ELECTIVE COURSE I	3	0	5																								
	TECHNICAL ELECTIVE COURSE II	3	0	5																								
	TECHNICAL ELECTIVE COURSE III	3	0	5																								
	GENERAL ELECTIVE COURSE	2	0	4	4	4	4	3	5	4	3	4	3	5	3	2	5	2	1	1	1	2	1	0	0	0	2	
	3RD YEAR - 5TH SEMESTER TECHNICAL ELECTIVE COURSES																											
MAD3021	DRILLING AND BLASTING	3	0	5	4	3	4	4	4	3	2	0	3	2	2	1	5	4	3	5	5	5	3	3	0	5	3	
MAD3023	SURVEYING IN MINING	3	0	5	4	1	5	2	0	0	3	0	2	3	3	2	0	1	0	4	3	0	0	1	0	1	0	
MAD3025	SOIL MECHANICS	3	0	5	4	4	5	3	4	5	4	4	4	5	4	3	4	4	5	4	4	3	4	4	4	5	4	
MAD3027	INDUSTRIAL APPLICATIONS OF COMMUNITION	3	0	5	4	5	5	4	5	3	1	2	3	4	2	3	1	4	2	3	5	1	4	4	2	4	3	
MAD3029	SOLID LIQUID SEPERATION	3	0	5	2	3	4	4	4	3	2	5	5	4	2	4	5	4	0	3	4	1	3	3	3	4	2	
MAD3033	INFORMATION OF INTERNATIONAL MINING	3	0	5	5	4	4	5	4	4	5	4	4	3	4	4	5	4	4	5	4	4	4	4	5	4	4	
MAD3035	VOCATIONAL FOREIGN LANGUAGE	3	0	5	0	0	0	0	0	0	0	0	0	1	1	0	2	1	4	1	2	0	2	0	0	4	1	1
	3RD YEAR - 6TH SEMESTER TECHNICAL ELECTIVE COURSES																											
MAD3018	STRUCTURAL GEOLOGY	3	0	5	3	1	3	2	1	4	1	2	2	4	4	4	2	4	4	3	5	3	2	3	1	3	2	

MAD3020	SPECIAL DRILLING AND BLASTING APPLICATIONS	3	0	5	4	3	3	3	2	3	2	0	2	2	2	1	5	4	2	5	5	5	2	3	0	5	3
MAD3022	COAL PREPARATION AND TECHNOLOGY	3	0	5	3	4	4	3	3	2	2	2	3	4	2	1	2	4	2	3	5	1	3	3	2	1	2
MAD3024	RECLAMATION ON MINE SITES	3	0	5	5	4	4	4	5	3	4	4	4	5	4	4	4	5	4	4	4	4	4	4	4	4	4
MAD3026	DISPOSAL OF MINERAL PROCESSING TAILINGS	3	0	5	1	5	4	4	5	4	4	5	3	5	1	3	4	3	0	3	4	3	1	3	4	1	4
MAD3028	NATUREL STONE MINING	3	0	5	2	4	4	4	4	4	1	1	1	4	4	4	4	5	0	3	4	3	5	4	1	3	4
3RD YEAR - 6TH SEMESTER SOCIAL ELECTIVE COURSES																											
EEM3026	FOLK DANCES	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	2	0	0	2
EEM3028	LIFE LONG SPORT	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	1	0	0	1
EEM3030	NATURAL DISASTERS AND DISATER EDUCATION	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	1	0	0	2
EEM3038	PHOTOGRAPHY	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2	0	0	1
EEM3046	AKADEMIK YAZMA	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	4	5	0	2
EEM3048	AKADEMIC WRITING	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	4	5	0	2
EEM3050	COMMUNICATION	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3	4	0	2
EEM3052	GERMAN	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4	5	4	3	5	5	1	2
EEM3054	HISTORY OF ART	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	1
EEM3056	TRADITIONAL TURKISH HANDCRAFTS	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	1	0	0	2
EEM3064	INTRODUCTION TO SOCIOLOGY	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	1
EEM3070	HISTORY AND PHILOSOPHY OF SCIENCE	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	1

EEM3074	URBANIZATION PROBLEMS	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	1	
EEM3080	DEMOCRACY AND HUMAN RIGHTS	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	1	
EEM3086	FIRST AID	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	
EEM3088	CHINESE	2	0	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4	5	4	3	5	5	1	2		
EEM3090	RUSSIA	2	0	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4	5	4	3	5	5	1	2		
EEM3092	KAZAKH	2	0	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4	5	4	3	5	5	1	2		
4TH YEAR - 7TH SEMESTER TECHNICAL ELECTIVE COURSES																												
MAD4021	AGGREGATE PRODUCTION AND TECHNOLOGY	3	0	5	4	4	5	4	3	4	4	3	5	4	5	4	5	4	3	5	5	5	3	3	0	4	3	
MAD4025	RESERVE ESTIMATION IN MINING	3	0	5	5	5	5	4	4	4	4	0	1	3	4	4	2	4	0	2	4	1	4	4	1	1	3	
MAD4027	CALCITE AND TECHNOLOGY	3	0	5	3	4	4	4	4	2	3	3	3	3	5	5	5	5	0	3	5	2	3	4	2	5	2	
MAD4029	NATUREL STONE PROCESSING TECHNIQUES	3	0	5	2	4	4	4	4	4	1	1	1	4	4	4	4	5	0	3	4	3	5	4	1	3	4	
MAD4031	ROCK MECHANICS STANDARDS AND TESTS	3	0	5	4	4	5	4	3	4	4	3	5	4	5	4	5	4	3	5	4	5	3	3	0	4	3	
MAD4033	MINING LAW	3	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	1	3	5	2	2	4	4	4	
4TH YEAR - 7TH SEMESTER GENERAL ELECTIVE COURSES																												
MAD4035	ENGINEERING ETHICS	2	0	4	5	4	4	4	5	4	5	4	4	5	4	4	5	4	4	5	4	4	4	4	4	5	4	5
MAD4037	BUSINESS MANAGEMENT AND ENTERPRENEURSHIP	2	0	4	3	3	4	3	2	4	4	3	3	4	4	4	5	4	4	3	5	4	4	4	4	5	4	
MAD4041	ENGINEERING APPLICATIONS	2	0	4	4	3	5	3	3	2	2	1	1	5	3	4	4	5	3	3	4	4	3	5	2	5	3	
4TH YEAR - 8TH SEMESTER TECHNICAL ELECTIVE COURSES																												
MAD4020	TUNNELLING AND SHAFT SINKING	3	0	5	4	3	4	3	2	3	2	0	2	3	2	1	5	5	3	5	5	5	3	3	0	4	4	

MAD4024	BENEFICATION OF INDUSTRIAL RAW MATERIALS	3	0	5	4	3	4	3	5	4	2	1	2	4	2	2	1	4	2	3	4	0	3	4	3	4	1		
MAD4026	CEMENT RAW MATERIALS AND TECHNOLOGY	3	0	5	3	3	4	4	0	3	0	3	0	3	3	2	1	4	1	3	5	0	4	3	3	0	3		
MAD4028	MINING ECONOMY	3	0	5	5	4	4	4	5	4	4	3	4	4	5	4	4	4	3	5	4	4	4	5	4	4	4		
MAD4030	COMPUTER APPLICATIONS IN MINING	3	0	5	5	5	5	5	5	4	5	0	4	5	5	5	1	1	1	0	5	1	3	5	1	1	5		
MAD4032	EVALUATION OF MINERAL PROCESSING RESULTS	3	0	5	5	5	5	5	2	3	2	5	5	2	4	4	5	3	0	2	2	2	3	5	2	4	3		
4TH YEAR - 8TH SEMESTER GENERAL ELECTIVE COURSES																													
MAD4036	OCCUPTIONAL HEALTH AND SAFETY	2	0	4	2	2	2	3	3	5	2	0	4	4	5	5	4	4	0	3	4	5	5	3	5	3	3		
MAD4038	QUALITY ASSURANCE AND STANDARDIZATION	2	0	4	3	3	4	2	3	4	4	3	3	4	4	4	5	4	4	3	5	4	4	4	4	3	5	4	
MAD4040	PRODUCTIVITY METHODS IN MINING	2	0	4	4	4	4	2	4	4	3	0	2	1	3	4	3	5	0	1	3	3	3	4	1	3	4		
* Level of Contribution: 0-None, 1-Lowest, 2-Low, 3-Average, 4-High, 5-Highest																													