



AFYON KOCATEPE UNIVERSITY
GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
DEPARTMENT OF MINING ENGINEERING



DOCTOR OF PHILOSOPHY (PhD) PROGRAM

FIRST YEAR

FIRST SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
MAD-6501	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
MAD-6601	THESIS PREPARATION	C	0	1	1	0	1	
	ELECTIVE COURSE	E	3	0	3	3	5	
	ELECTIVE COURSE	E	3	0	3	3	5	
	ELECTIVE COURSE	E	3	0	3	3	5	
	ELECTIVE COURSE	E	3	0	3	3	5	
TOPLAM			20	1	21	12	30	

SECOND SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
MAD-6502	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
MAD-6602	THESIS PREPARATION	C	0	1	1	0	1	
	ELECTIVE COURSE	E	3	0	3	3	5	
	ELECTIVE COURSE	E	3	0	3	3	5	
	ELECTIVE COURSE	E	3	0	3	3	5	
	ELECTIVE COURSE	E	3	0	3	3	5	
TOTAL			20	1	21	12	30	



AFYON KOCATEPE UNIVERSITY
GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
DEPARTMENT OF MINING ENGINEERING



DOCTOR OF PHILOSOPHY (PhD) PROGRAM

SECOND YEAR

THIRD SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
MAD-6503	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
MAD-6603	THESIS PREPARATION	C	0	1	1	0	1	
MAD-6701	SEMINAR	C	0	2	2	0	5	
	ELECTIVE COURSE	E	3	0	3	3	5	
	ELECTIVE COURSE	E	3	0	3	3	5	
	ELECTIVE COURSE	E	3	0	3	3	5	
TOTAL			17	3	20	9	30	

FOURTH SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
MAD-6504	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
MAD-6604	THESIS	C	0	1	1	0	21	
TOTAL			8	1	9	0	30	



AFYON KOCATEPE UNIVERSITY
GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
DEPARTMENT OF MINING ENGINEERING



DOCTOR OF PHILOSOPHY (PhD) PROGRAM

THIRD YEAR

FIFTH SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
MAD-6505	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
MAD-6605	THESIS	C	0	1	1	0	21	
TOTAL			8	1	9	0	30	

SIXTH SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
MAD-6506	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
MAD-6606	THESIS	C	0	1	1	0	21	
TOTAL			8	1	9	0	30	

FOURTH YEAR

SEVENTH SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
MAD-6507	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
MAD-6607	THESIS	C	0	1	1	0	21	
TOTAL			8	1	9	0	30	

EIGHTH SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
MAD-6508	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
MAD-6608	THESIS	C	0	1	1	0	21	
TOTAL			8	1	9	0	30	

ELECTIVE COURSES



AFYON KOCATEPE UNIVERSITY
GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
DEPARTMENT OF MINING ENGINEERING



DOCTOR OF PHILOSOPHY (PhD) PROGRAM

COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*				
			TH	AP	TO	CR	EC
FBE-5001	SCIENTIFIC RESEARCH AND METHODS	C	3	0	3	3	5
MAD-6001	DESIGN AND PRODUCTIVITY IN UNDERGROUND COAL MINING	E	3	0	3	3	5
MAD-6002	ADVANCED FLOTATION TECHNIQUES	E	3	0	3	3	5
MAD-6003	SLOPE STABILITY AND ANALYSIS IN OPEN PIT OPERATION	E	3	0	3	3	5
MAD-6004	GRINDABILITY CHARACTERISTICS OF SOLID MATERIALS AND KINETICS OF COMMINUTION	E	3	0	3	3	5
MAD-6005	ROCK FRAGMENTATION BY EXPLOSIVES AND APPLICATIONS IN MINING	E	3	0	3	3	5
MAD-6006	ENGINEERING DATA ANALYSIS	E	3	0	3	3	5
MAD-6007	MINE FIRES, GAZ OUTBURSTS AND EXPLOSIONS	E	3	0	3	3	5
MAD-6009	HYDROMETALLURGCAL PROCESSES AND APLICATIONS	E	3	0	3	3	5
MAD-6010	ADVANCED AGGLOMERATION TECHNIQUES	E	3	0	3	3	5
MAD-6012	COMPUTER APPLICATIONS IN ROCK MECHANICS	E	3	0	3	3	5
MAD-6013	DETAILED TENOR AND RESERVE ACCOUNTS	E	3	0	3	3	5
MAD-6014	GEOSTATISTICS IN MINING	E	3	0	3	3	5
MAD-6015	ROCK MASS CLASSIFICATION SYSTEMS AND FORTIFICATIONS DESIGN	E	3	0	3	3	5
MAD-6017	THE ANALYSIS OF MINE VENTILATION AND GRIDS	E	3	0	3	3	5
MAD-6020	ADVANCED DRILLING TECHNIQUES	E	3	0	3	3	5
MAD-6021	MARBLE AND NATURAL STONE PRODUCTION TECHNOLOGY	E	3	0	3	3	5
MAD-6024	STRUCTURAL GEOLOGY IN MARBLE AND NATURAL STONE PRODUCTION	E	3	0	3	3	5
MAD-6025	SURFACE PROCESSING TECHNIQUES IN MARBLE AND NATURAL STONES	E	3	0	3	3	5
MAD-6026	COMPUTER CONTROLLED MARBLE MACHINES	E	3	0	3	3	5
MAD-6027	FEASIBILITY STUDIES IN MINING	E	2	2	4	3	5
MAD-6030	WORLD NATURAL STONE MARKET, PROJECTIONS AND STRATEGIES	E	3	0	3	3	5
MAD-6032	SURFACE PROPERTIES OF MINERALS	E	3	0	3	3	5
MAD-6033	LATEST TECHNOLOGIES AND APPLICATIONS IN SIZE REDUCTION	E	3	0	3	3	5
MAD-6034	FUZZY LOGIC APPLICATIONS IN MINING	E	3	0	3	3	5
MAD-6035	OPTIMIZATION APPLICATIONS IN MINING	E	3	0	3	3	5
MAD-6036	OHS APPLICATIONS AND RISK ANALYSIS IN MARBLE QUARRIES AND FACTORIES	E	3	0	3	3	5
MAD-6037	STATISTICAL QUALITY CONTROL IN NATURAL STONE FACTORY	E	3	0	3	3	5
MAD-6038	DISCONTINUITY ANALYSIS IN ROCK MECHANICS	E	3	0	3	3	5
MAD-6039	ADVANCED RISK ASSESSMENT METHODS	E	3	0	3	3	5
MAD-6040	OCCUPATIONAL HEALTH AND SAFETY LEGISLATION	E	3	0	3	3	5
MAD-6041	CONTROL OF GAS, DUST AND NOISE IN UNDERGROUND MINING	E	3	0	3	3	5



AFYON KOCATEPE UNIVERSITY
GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
DEPARTMENT OF MINING ENGINEERING



DOCTOR OF PHILOSOPHY (PhD) PROGRAM

MAD-6042	DESIGN OF UNDERGROUND MINE STRUCTURES	E	3	0	3	3	5
MAD-6043	MINING EFFICENCY ANALYSIS	E	3	0	3	3	5
MAD-6044	SPACE AND DEEP SEA/OCEAN MINING	E	3	0	3	3	5
MAD-6045	AUGMENTED-VIRTUAL REALITY IN MINING	E	3	0	3	3	5
MAD-6047	DATA MINING APPLICATIONS IN MINING	E	3	0	3	3	5
EGT-6001	DEVELOPMENT AND LEARNING	E	3	0	3	3	5
EGT-6002	INSTRUCTIONAL PLANNING AND EVALUATION	E	3	0	3	3	5