AFYON KOCATEPE UNIVERSITY

GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES

DEPARTMENT OF ELECTRICAL ENGINEERING

DOCTOR OF PHILOSOPHY (PhD) PROGRAM

FIRST YEAR

FIRST SEMESTER							
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*				
			TH	AP	TO	CR	EC
MEL-6501	DIRECTED FIELD STUDIES	C	8	0	8	**0**	**9**
MEL-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**
T O P L A M			**20**	**1**	**21**	**12**	**30**

SECOND SEMESTER							
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*				
			TH	AP	TO	CR	EC
MEL-6502	DIRECTED FIELD STUDIES	C	8	0	8	**0**	**9**
MEL-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**
T O T A L			**20**	**1**	**21**	**12**	**30**

AFYON KOCATEPE UNIVERSITY

GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES

DEPARTMENT OF ELECTRICAL ENGINEERING

DOCTOR OF PHILOSOPHY (PhD) PROGRAM

SECOND YEAR

THIRD SEMESTER							
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*				
			TH	AP	TO	CR	EC
MEL-6503	DIRECTED FIELD STUDIES	C	8	0	8	**0**	**9**
MEL-6603	THESIS PREPARATION	C	0	1	1	**0**	**1**
MEL-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**
T O T A L			**17**	**3**	**20**	**9**	**30**

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

AFYON KOCATEPE UNIVERSITY

GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES

DEPARTMENT OF ELECTRICAL ENGINEERING

DOCTOR OF PHILOSOPHY (PhD) PROGRAM

THIRD YEAR

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

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

FOURTH YEAR

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

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

AFYON KOCATEPE UNIVERSITY

GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES

DEPARTMENT OF ELECTRICAL ENGINEERING

DOCTOR OF PHILOSOPHY (PhD) PROGRAM

ELECTIVE COURSES

COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*				
			TH	AP	TO	CR	EC
FBE-5001	SCIENTIFIC RESEARCH AND METHODS	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**
MEL-6001	ANALYSIS OF POWER SYSTEM DYNAMICS	E	3	0	3	**3**	**5**
MEL-6002	HARMONICS IN ELECTRICAL SYSTEMS	E	3	0	3	**3**	**5**
MEL-6003	DYNAMICS OF ELECTRICAL MACHINERIES	E	3	0	3	**3**	**5**
MEL-6004	OPTIMIZATION IN ELECTRICAL ENERGY SYSTEMS AND STATE ESTIMATION	E	3	0	3	**3**	**5**
MEL-6005	RELIABILITY OF ENERGY SYSTEMS	E	3	0	3	**3**	**5**
MEL-6006	SWITCHING TRANSIENTS IN POWER SYSTEMS	E	3	0	3	**3**	**5**
MEL-6007	ADVANCED HIGH VOLTAGE TECHNIQUES	E	3	0	3	**3**	**5**
MEL-6008	ISOLATION COORDINATION IN HIGH VOLTAGE	E	3	0	3	**3**	**5**
MEL-6009	CONTROL OF ELECTRICITY ENERGY SYSTEMS	E	3	0	3	**3**	**5**
MEL-6010	LINEAR CIRCUIT THEORY	E	3	0	3	**3**	**5**
MEL-6011	LINEAR BEHAVIOR NONLINEAR CIRCUITS	E	3	0	3	**3**	**5**
MEL-6012	OPTIMIZATION TECHNIQUES	E	3	0	3	**3**	**5**
MEL-6013	NONLINEAR DYNAMICS AND CHAOS	E	3	0	3	**3**	**5**
MEL-6014	NONLINEAR CONTROL	E	3	0	3	**3**	**5**
MEL-6015	LABVIEW GRAPHICAL PROGRAMMING LANGUAGE	E	3	0	3	**3**	**5**
MEL-6016	ELECTRICAL MACHINERY CONTROLLING	E	3	0	3	**3**	**5**
MEL-6017	POWER QUALITY IN ELECTRICAL SYSTEMS	E	3	0	3	**3**	**5**
MEL-6018	PHOTOVOLTAIC SYSTEM DESIGN	E	3	0	3	**3**	**5**
MEL-6019	ENERGY PRODUCTION SYSTEMS	E	3	0	3	**3**	**5**
MEL-6020	POWER SUPPLIES	E	3	0	3	**3**	**5**
MEL-6021	ACTIVE CIRCIUT SYNTHESIS	E	3	0	3	**3**	**5**
MEL-6022	TRANSITIONAL STATE ANALYSIS OF DC MACHINERIES	E	3	0	3	**3**	**5**
MEL-6023	DYNAMICS OF ELECTRICAL VEHICLES	E	3	0	3	**3**	**5**
MEL-6024	INDUSTRIAL HIGH VOLTAGE TECHNIQUES	E	3	0	3	**3**	**5**
MEL-6025	STOCHASTIC PROCESS ON POWER SYSTEMS	E	3	0	3	**3**	**5**
MEL-6026	SMART GRIDS, MODELLING AND APPLICATIONS	E	3	0	3	**3**	**5**

AFYON KOCATEPE UNIVERSITY

GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES

DEPARTMENT OF ELECTRICAL ENGINEERING

DOCTOR OF PHILOSOPHY (PhD) PROGRAM

ELECTIVE COURSES

COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*				
			TH	AP	TO	CR	EC
MEL-6027	ADVANCED POWER ELECTRONICS	E	3	0	3	**3**	**5**
MEL-6028	EFFECTS OF WIND TURBINES TO THE GRID	E	3	0	3	**3**	**5**
MEL-6029	SYSTEM IDENTIFICATION WITH ARTIFICIAL NEURAL NETWORKS	E	3	0	3	**3**	**5**
MEL-6030	ELECTRONICAL MEASUREMENT METHODS	E	3	0	3	**3**	**5**
MEL-6031	ADVANCED NUMERICAL ANALYSIS WITH MATLAB IMPLEMENTATIONS	E	3	0	3	**3**	**5**
MEL-6032	ENERGY STORAGE SYSTEM APPLICATIONS ON ELECTRICAL VEHICLES	E	3	0	3	**3**	**5**
MEL-6033	COMPUTATIONAL RELAYING FOR POWER SYSTEMS	E	3	0	3	**3**	**5**
MEL-6034	ELECTRICAL TRADING	E	3	0	3	**3**	**5**
MEL-6035	FINITE ELEMENT METHOD IN ELECTRICAL ENGINEERING	E	3	0	3	**3**	**5**