



# AFYON KOCATEPE UNIVERSITY

## GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES

### DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING



## DOCTOR OF PHILOSOPHY (PhD) PROGRAM

### FIRST YEAR

FIRST SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
EEM-6501	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
EEM-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	
EEM-6502	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
EEM-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	



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#### SECOND YEAR

THIRD SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
EEM-6503	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
EEM-6603	THESIS PREPARATION	C	0	1	1	0	1	
EEM-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	
EEM-6504	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
EEM-6604	THESIS	C	0	1	1	0	21	
TOTAL			8	1	9	0	30	



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#### THIRD YEAR

FIFTH SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
EEM-6505	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
EEM-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	
EEM-6506	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
EEM-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	
EEM-6507	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
EEM-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	
EEM-6508	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
EEM-6608	THESIS	C	0	1	1	0	21	
TOTAL			8	1	9	0	30	



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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
EEM-6001	ELECTRICITY NETWORK LOSSES	E	3	0	3	3	5
EEM-6002	PROTECTION SYSTEMS IN ELECTRICAL FACILITIES	E	3	0	3	3	5
EEM-6003	LINEAR CONTROL SYSTEMS	E	3	0	3	3	5
EEM-6004	NONLINEAR CONTROL SYSTEMS	E	3	0	3	3	5
EEM-6005	ADVANCED ELECTROMAGNETIC THEORY – 1	E	3	0	3	3	5
EEM-6006	ADVANCED ELECTROMAGNETIC THEORY – 2	E	3	0	3	3	5
EEM-6007	SYSTEM DESIGN – 1 WITH FPGA	E	3	0	3	3	5
EEM-6008	SYSTEM DESIGN – 2 WITH FPGA	E	3	0	3	3	5
EEM-6009	SPECIAL LIGHTING SYSTEMS AND VIRTUAL APPLICATIONS	E	3	0	3	3	5
EEM-6010	ARTIFICIAL NEURAL NETWORK APPLICATIONS IN LIGHTING ENGINEERING	E	3	0	3	3	5
EEM-6011	OPTIMIZATION TECHNIQUES	E	3	0	3	3	5
EEM-6012	FUNDAMENTALS OF DETECTION AND ESTIMATION	E	3	0	3	3	5
EEM-6013	ADVANCED SIGNAL PROCESSING TECHNIQUES	E	3	0	3	3	5
EEM-6014	OPTIMIZATION OF RENEWABLE ENERGY SYSTEMS	E	3	0	3	3	5
EEM-6015	PHOTOVOLTAIC ENERGY SYSTEMS	E	3	0	3	3	5
EEM-6016	MODELING OF RENEWABLE ENERGY DATA	E	3	0	3	3	5
EEM-6017	EMBEDDED SYSTEM DESIGN	E	3	0	3	3	5
EEM-6018	POWER SYSTEMS INSPECTION	E	3	0	3	3	5
EEM-6019	INSPECTION OF ELECTRICAL MACHINES	E	3	0	3	3	5
EEM-6020	SMART GRIDS, MODELING AND APPLICATIONS	E	3	0	3	3	5
EEM-6021	ADVANCED IMAGE PROCESSING	E	3	0	3	3	5
EEM-6022	DIGITAL SIGNAL PROCESSING	E	3	0	3	3	5
EEM-6023	FUZZY LOGIC THEORY AND APPLICATIONS	E	3	0	3	3	5
EEM-6024	DIGITAL COMMUNICATION SYSTEMS AND APPLICATIONS	E	3	0	3	3	5
EEM-6025	ANALOG AND DIGITAL FILTER DESIGN	E	3	0	3	3	5
EEM-6026	PROGRAMMABLE CONTROLLERS	E	3	0	3	3	5
EEM-6027	ARTIFICIAL NEURAL NETWORKS AND DEEP LEARNING	E	3	0	3	3	5
EEM-6028	SMART GARMENT TECHNOLOGIES	E	3	0	3	3	5
EEM-6029	ADVANCED DIGITAL SIGNAL PROCESSING	E	3	0	3	3	5
EEM-6030	ENGINEERING APPLICATIONS WITH PYTHON	E	3	0	3	3	5
EEM-6031	SEMICONDUCTOR TECHNOLOGY	E	3	0	3	3	5



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EEM-6032	MEMS (MICRO-ELECTRO-MECHANICAL SYSTEMS)	E	3	0	3	3	5
EEM-6033	OPTOELECTRONICS	E	3	0	3	3	5
EEM-6034	INTRODUCTION TO MACHINE LEARNING	E	3	0	3	3	5
EEM-6035	SYSTEM MODELING WITH ARTIFICIAL NEURAL NETWORKS	E	3	0	3	3	5