



**ULUDAĞ UNIVERSITY**  
**GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES**  
**2015-2016 ACADEMIC YEAR COURSE PLAN**

DEPARTMENT OF

ELECTRONIC ENGINEERING

DEPARTMENT / PROGRAM

/ MASTER'S DEGREE PROGRAM

COURSE STAGE	I. TERM / FALL								II. TERM / SPRING							
	Code	Course Title	Type	T	U	L	Credit	ECTS	Code	Course Title	Type	T	U	L	Credit	ECTS
	ELN5191	MA THESIS I	C	0	1	0	0	1	ELN5192	MATHESES II	C	0	1	0	0	1
	ELN5501	ADVANCED ENGINEERING MATHEMATICS I	C	3	0	0	3	6	ELN5502	ADVANCED ENGINEERING MATHEMATICS II	C	3	0	0	3	7
									ELN5172	SEMINAR (CLASS)	C	0	2	0	0	5
	ELN5181	SPECIAL TOPICS IN MSC THESIS I	E	4	0	0	0	5	ELN5182	SPECIAL TOPICS IN MSC THESIS II	E	4	0	0	0	5
	ELN5503	NUMERICAL COMPUTING AND PROGRAMMING	E	3	0	0	3	6	ELN5504	TRANSFORMS AND ENGINEERING APPLICATIONS	E	3	0	0	3	6
	ELN5101	ANALOG FILTERS	E	3	0	0	3	6	ELN5102	ADVANCED MICROPROCESSORS	E	3	0	0	3	6
	ELN5201	MICROWAVE TECHNIQUES	E	3	0	0	3	6	ELN5104	DIGITAL FILTERS	E	3	0	0	3	6
	ELN5203	ANALYSIS AND DESIGN OF RF CIRCUITS AND SYSTEMS	E	3	0	0	3	6	ELN5202	MICROWAVE CIRCUITS	E	3	0	0	3	6
	ELN5205	HIGH FREQUENCY METHODS IN ELECTROMAGNETIC I	E	3	0	0	3	6	ELN5204	MICROWAVE SYSTEMS ENGINEERING	E	3	0	0	3	6
	ELN5207	PRINCIPLES OF ELECTROMAGNETIC THEORY	E	3	0	0	3	6	ELN5206	RADAR SYSTEMS	E	3	0	0	3	6
	ELN5209	ADVANCED ANTENNA THEORY	E	3	0	0	3	6	ELN5208	HIGH FREQUENCY METHODS IN ELECTROMAGNETIC II	E	3	0	0	3	6
	ELN5211	BOUNDARY VALUE PROBLEMS I	E	3	0	0	3	6	ELN5210	SPECIAL FUNCTIONS	E	3	0	0	3	6
	ELN5213	BIOELECTROMAGNETISM	E	3	0	0	3	6	ELN5212	BOUNDARY VALUE PROBLEMS II	E	3	0	0	3	6
	ELN5301	OPTOELECTRONIC CIRCUITS	E	3	0	0	3	6	ELN5214	QUASI-OPTIC ELECTROMAGNETIC DIFFRACTION	E	3	0	0	3	6
	ELN5401	ADVANCED SIGNAL PROCESSING	E	3	0	0	3	6	ELN5302	OPTOELECTRONIC CONVERTERS	E	3	0	0	3	6
	ELN5403	MOBILE COMMUNICATION SYSTEMS	E	3	0	0	3	6	ELN5402	RANDOM SIGNAL ANALYSIS	E	3	0	0	3	6
	ELN5405	DIGITAL COMMUNICATION SYSTEMS	E	3	0	0	3	6	ELN5404	INFORMATION THEORY	E	3	0	0	3	6
	ELN5407	FIBER OPTIC SENSORS	E	3	0	0	3	6	ELN5406	RADIO COMMUNICATION SYSTEMS	E	3	0	0	3	6
	ELN5409	OPTICAL FIBER COMMUNICATION SYSTEMS	E	3	0	0	3	6	ELN5408	DIGITAL TELEVISION TECHNOLOGY AND STANDARDS	E	3	0	0	3	6
	ELN5411	LOCAL AND METROPOLITAN AREA NETWORK	E	3	0	0	3	6	ELN5410	HIGH SPEED OPTICAL FIBER COMMUNICATION SYSTEMS	E	3	0	0	3	6
	ELN5413	DESIGN AND MANAGEMENT OF COMMUNICATION NETWORKS	O	3	0	0	3	6	ELN5412	STADE-SPACEAND LINEAR SYSTEM THEORY	E	3	0	0	3	6





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**DEPARTMENT OF** ELECTRONICS ENGINEERING

**DEPARTMENT / PROGRAM** / DOCTORAL PROGRAM

COURSE STAGE	I. TERM / FALL								II. TERM / SPRING							
	Code	Course Title	Type	T	U	L	Credit	ECTS	Code	Course Title	Type	T	U	L	Credit	ECTS
	ELN6191	PHD THESIS I	C	0	1	0	0	1	ELN6192	PHD THESIS II	C	0	1	0	0	1
	ELN6501	ADVANCED ENGINEERING MATHEMATICS III	C	3	0	0	3	5	ELN6172	SEMINAR (CLASS)	C	0	2	0	0	4
	FEN6001	RESEARCH METHODS	C	2	0	0	2	4								
	ELN6181	ADVANCED TOPICS IN PHD THESIS I	E	4	0	0	0	5	ELN6182	ADVANCED TOPICS IN PHD THESIS II	E	4	0	0	0	5
	ELN6101	WAVELET TRANSFORMS AND THEIR APPLICATIONS	E	3	0	0	3	5	ELN6102	FUZZY LOGIC	E	3	0	0	3	5
	ELN6201	ADVANCED MICROWAVE TECHNIC	E	3	0	0	3	5	ELN6202	ADVANCED RADAR TECHNICS	E	3	0	0	3	5
	ELN6203	APPLICATIONS OF WIENER-HOPF TECHNIQUE IN DIFFRACTION THEORY	E	3	0	0	3	5	ELN6204	INTEGRAL EQUATION METHODS FOR ELECTROMAGNETICS	E	3	0	0	3	5
	ELN6205	RADAR CROSS SECTION PREDICTION AND REDUCTION TECHNIQUES	E	3	0	0	3	5	ELN6206	RADIOWAVE PROPAGATION OVER GROUND	E	3	0	0	3	5
	ELN6207	ANALYTICAL METHODS FOR ELECTROMAGNETICS	E	3	0	0	3	5	ELN6208	NUMERICAL METHODS FOR ELECTROMAGNETICS	E	3	0	0	3	5
	ELN6209	ADVANCED ELECTROMAGNETIC SCATTERING	E	3	0	0	3	5	ELN6302	LASER BASED SYSTEMS	E	3	0	0	3	5
	ELN6301	OPTOELECTRONIC SYSTEMS	E	3	0	0	3	5	ELN6402	SPECTRUM ESTIMATION	E	3	0	0	3	5
	ELN6401	ESTIMATION THEORY	E	3	0	0	3	5	ELN6404	DIGITAL MODULATION AND CODING	E	3	0	0	3	5
	ELN6403	COMMUNICATION THEORY	E	3	0	0	3	5	ELN6406	APPLICATIONS OF NONLINEAR FIBER OPTICS	E	3	0	0	3	5
	ELN6405	NONLINEAR EFFECTS IN OPTICAL FIBERS	E	3	0	0	3	5	ELN6408	TELE-TRAFFIC ENGINEERING	E	3	0	0	3	5
	ELN6407	ANALYSIS AND SYNTHESIS OF SPEECH SIGNALS	E	3	0	0	3	5	ELN6410	DETECTION THEORY	E	3	0	0	3	5
	ELN6409	ADVANCED SWITCHING SYSTEMS	E	3	0	0	3	5	ELN6412	OPTICAL SWITCHING NETWORKS	E	3	0	0	3	5
	ELN6413	CHAOS THEORY AND NONLINEAR SIGNAL PROCESSING	E	3	0	0	3	5	ELN6414	ADVANCED COMPUTER VISION METHODS	E	3	0	0	3	5
	ELN6415	STATICAL PATTERN ANALYSIS AND CLASSIFICATION	E	3	0	0	3	5								

		Toplam Kredi		12	30			Toplam Kredi		12	30					
<b>STAGE THESIS</b>	<b>III. TERM / FALL</b>						<b>IV. TERM / SPRING</b>									
	ELN6183	ADVANCED TOPICS IN PHD THESIS III	C	4	0	0	0	5	ELN6174	SEMINAR (THESIS)	C	0	2	0	0	5
	ELN6193	PHD THESIS III	C	0	1	0	0	20	ELN6184	ADVANCED TOPICS IN PHD THESIS IV	C	4	0	0	0	5
	YET6177	PHD PROFICIENCY	C	0	0	0	0	5	ELN6194	PHD THESIS IV	C	0	1	0	0	20
	<b>Toplam Kredi</b>						<b>0</b>	<b>30</b>	<b>Toplam Kredi</b>						<b>0</b>	<b>30</b>
	<b>V. TERM / FALL</b>						<b>VI. TERM / SPRING</b>									
	ENS6121	DEVELOPMENT AND LEARNING	C	3	0	0	0	5	ENS6122	PLANING AND EVALUATION IN EDUCATION	C	3	2	0	0	5
	ELN6185	ADVANCED TOPICS IN PHD THESIS V	C	4	0	0	0	5	ELN6186	ADVANCED TOPICS IN PHD THESIS VI	C	4	0	0	0	5
	ELN6195	PHD THESIS V	C	0	1	0	0	20	ELN6196	PHD THESIS VI	C	0	1	0	0	20
	<b>Toplam Kredi</b>						<b>0</b>	<b>30</b>	<b>Toplam Kredi</b>						<b>0</b>	<b>30</b>
	<b>VII. TERM / FALL</b>						<b>VIII. TERM / SPRING</b>									
	ELN6187	ADVANCED TOPICS IN PHD THESIS VII	C	4	0	0	0	5	ELN6188	ADVANCED TOPICS IN PHD THESIS VIII	C	4	0	0	0	5
	ELN6197	PHD THESIS VII	C	0	1	0	0	25	ELN6198	PHD THESIS VIII	C	0	1	0	0	25
	<b>Toplam Kredi</b>						<b>0</b>	<b>30</b>	<b>Toplam Kredi</b>						<b>0</b>	<b>30</b>
	<b>TOTAL CREDITS: - TOTAL ECTS:</b>															

**Not:** The student is expected to take a total of .....credited.....selective courses every academic term.

The student has the option of choosing one selective course from another department with the endorsement of the supervisor. \*Success in Ph.D. qualifying exam is a prerequisite.