

ULUDAĞ UNIVERSITY
INSTITUTE OF SCIENCE
2015-2016 ACADEMIC YEAR COURSE PLAN



DE NT OF
DEPARTMENT / PROGRAM

ENVIRONMENTAL ENGINEERING
/ 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
	CEV5191	MA THESIS I	C	0	1	0	0	1	CEV5192	MS THESIS II	C	0	1	0	0	1
	CEV5301	ENVIRONMENTAL MOVEMENT OF CHEMICALS	C	3	0	0	3	6	CEV5172	SEMINAR (CLASS)	C	0	2	0	0	5
									CEV5302	STATISTICS FOR ENVIRONMENTAL ENGINEERS	C	3	0	0	3	6
									CEV5304	ADVANCED ENVIRONMENTAL ENGINEERING CHEMISTRY I	C	3	0	0	3	7
	CEV5181	ADVANCED TOPICS IN MS THESIS I	E	4	0	0	0	5	CEV5182	ADVANCED TOPICS IN MS THESIS II	E	4	0	0	0	5
	CEV5121	ENVIRONMENTAL MANAGEMENT	E	3	0	0	3		CEV5102	ENVIRONMENTAL INSTRUMENTAL ANALYSIS	E	2	0	2	3	6
	CEV5147	MICROBIAL QUALITY OF DRINKING WATER AND CONTROL OF DISINFECTION BY-PRODUCTS	E	3	0	0	3	6	CEV5122	WATER QUALITY MANAGEMENT	E	2	2	0	3	6
	CEV5243	INDUSTRIAL AIR POLLUTION	E	3	0	0	3	6	CEV5148	RECYCLE AND REUSE TECHNIQUES ON INDUSTRIAL WASTEWATERS	E	3	0	0	3	6
	CEV5247	BASICS OF ENVIRONMENTAL TECHNOLOGY	E	3	0	0	3	6	CEV5222	INDUSTRIAL WASTE MANAGEMENT	E	3	0	0	3	6
	CEV5249	DESIGN CRITERIA FOR WASTEWATER TREATMENT PLANTS	E	2	2	0	3	6	CEV5224	PRINCIPLES OF BIOLOGICAL TREATMENT	E	3	0	0	3	6
	CEV5251	STACK GAS MEASUREMENT AND ANALYSIS	E	2	0	2	3	6	CEV5226	WASTEWATER ENGINEERING	E	2	2	0	3	6
	CEV5253	MEASUREMENT AND MONITORING OF AMBIENT AIR	E	2	0	2	3	6	CEV5228	ION EXCHANGE AND ADSORPTION TECHNOLOGY IN WASTEWATER TREATMENT	E	2	2	0	3	6
	CEV5255	WETLAND SYSTEMS IN WASTEWATER TREATMENT	E	3	0	0	3	6	CEV5230	THE DESIGN OF LANDFILL AREAS	E	2	2	0	3	6
	CEV5257	ENVIRONMENTAL SAFETY FOR INDUSTRIES	E	3	0	0	3	6	CEV5232	AIR POLLUTION ENGINEERING	E	3	0	0	3	6
	CEV5263	RENEWABLE ENERGY AND ENVIRONMENT	E	3	0	0	3	6	CEV5234	ATMOSPHERIC TRANSPORT AND DEPOSITION	E	2	0	2	3	6
	CEV5265	CLEANER PRODUCTION PRINCIPLES	E	3	0	0	3	6	CEV5236	INSTRUMENTATION AND AUTOMATION OF WATER AND WASTEWATER TREATMENT PLANTS	E	2	2	0	3	6
	CEV5267	WATER AND WASTEWATER MICROBIOLOGY	E	3	0	0	3	6	CEV5238	BIOINDICATOR ORGANISMS IN DETERMINATION OF WATER QUALITY	E	3	0	0	3	6
	CEV5269	ANAEROBIC TREATMENT OF WASTES	E	3	0	0	3	6	CEV5242	DISINFECTION OF WATER AND WASTEWATER	E	3	0	0	3	6
	CEV5271	GREENHOUSE GASES CALCULATION METHODS AND CLIMATE CHANGE	E	2	2	0	3	6	CEV5244	MICROBIAL TECHNIQUES IN ENVIRONMENTAL ENGINEERING	E	3	0	0	3	6
	CEV5273	NANOTECHNOLOGY IN ENVIRONMENTAL ENGINEERING	E	3	0	0	3	6	CEV5246	ADVANCED ATMOSPHERIC CHEMISTRY	E	3	0	0	3	6
	CEV5275	INTEGRATED WASTE MANAGEMENT TECHNOLOGIES	E	3	0	0	3	6	CEV5248	ENVIRONMENTAL POLLUTION AND PUBLIC HEALTH	E	3	0	0	3	6
	CEV5277	WASTE DISPOSAL AND LEGAL FRAMEWORK	E	3	0	0	3	6	CEV5250	ON-SITE WASTEWATER TREATMENT	E	3	0	0	3	6
	CEV5279	FORMATION AND TREATMENT OF LANDFILL LEACHATE	E	3	0	0	3	6	CEV5306	ENERGY EFFICIENCY IN ENVIRONMENTAL POLLUTION AND CONTROL	E	3	0	0	3	6
	CEV5281	BIOLOGICAL TREATMENT OF INDUSTRIAL WASTEWATERS	E	3	0	0	3	6	CEV5308	ENVIRONMENTAL TOXICOLOGY	E	3	0	0	3	6
	CEV5303	COMPOSTING TECHNOLOGY	E	3	0	0	3	6	CEV5310	HYDROLOGY OF RIVER CATCHMENTS AND FLOOD-DROUGHT MODELLING	E	3	0	0	3	6
	CEV5305	PRODUCTION OF BIOFUELS	E	3	0	0	3	6	CEV5312	ADVANCED PHYSICO-CHEMICAL TREATMENT PROCESSES	E	3	0	0	3	6
	CEV5307	SEDIMENT POLLUTION AND TRANSPORT	E	3	0	0	3	6								

		Total Credits						12	30	Total Credits						9	30													
STAGE THESIS	III. TERM / FALL															IV. TERM / SPRING														
	CEV5173	SEMINAR (THESIS)	C	0	2	0	0	5	CEV5184	ADVANCED TOPICS IN MS THESIS IV	C	4	0	0	0	5														
	CEV5183	ADVANCED TOPICS IN MS THESIS III	C	4	0	0	0	5																						
	CEV5193	MA THESIS III	C	0	1	0	0	20	CEV5194	MA THESIS IV	C	0	1	0	0	25														
	Total Credits								0	30	Total Credits								0	30										
TOTAL CREDITS: 21 - TOTAL ECTS:120																														

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.



**ULUDAĞ UNIVERSITY
INSTITUTE OF SCIENCE
2015-2016 ACADEMIC YEAR COURSE PLAN**

**DEPARTMENT OF
DEPARTMENT / PROGRAM**

**ENVIRONMENTAL ENGINEERING
/ 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	
COURSE STAGE	CEV6191	PHD THESIS I	C	0	1	0	0	1	CEV6191	PHD THESIS II	C	0	1	0	0	1	
	FEN6001	RESEARCH METHODS	C	2	0	0	2	4	CEV6172	SEMINAR (CLASS)	C	0	2	0	0	4	
	CEV6301	ADVANCED ENVIRONMENTAL ENGINEERING CHEMISTRY II	C	3	0	0	3	5									
	CEV6181	ADVANCED TOPICS IN PHD THESIS I	E	4	0	0	0	5	CEV6182	ADVANCED TOPICS IN PHD THESIS II	E	4	0	0	0	5	
	CEV6101	WATER CHEMISTRY	E	2	0	2	3	5	CEV6124	SURFACE WATER QUALITY MODELLING	E	2	2	0	3	5	
	CEV6123	LAKE WATER QUALITY MODELLING	E	2	2	0	3	5	CEV6208	DISPOSAL TECHNIQUES OF DOMESTIC AND INDUSTRIAL SLUDGE	E	2	2	0	3	5	
	CEV6221	HAZARDOUS WASTES	E	2	2	0	3	5	CEV6224	TREATMENT AND DISPOSAL OF INDUSTRIAL WASTES	E	2	2	0	3	5	
	CEV6225	STABILIZATION AND SOLIDIFICATION OF HAZARDOUS WASTES	E	3	0	0	3	5	CEV6242	AIR POLLUTION METEOROLOGY	E	3	0	0	3	5	
	CEV6227	COMPUTER SUPPORTED MODEL APPROACHES IN ACTIVATED SLUDGE SYSTEMS	E	2	2	0	3	5	CEV6244	USE OF RESPIROMETRIC METHOD IN DESIGN AND OPERATION OF ACTIVATED SLUDGE PROCESS	E	2	0	2	3	5	
	CEV6229	BIOLOGICAL TREATMENT OF TOXIC ORGANIC COMPOUNDS	E	3	0	0	3	5	CEV6246	OPERATION OF TREATMENT PLANTS	E	2	0	2	3	5	
	CEV6231	ADVANCED TREATMENT TECHNIQUES	E	2	2	0	3	5	CEV6248	BIOKINETICS TECHNIQUES OF WASTEWATER TREATMENT PLANTS	E	3	0	0	3	5	
	CEV6233	LAND APPLICATION OF WASTEWATER SLUDGES	E	3	0	0	3	5	CEV6250	WATER AND WASTEWATER TREATMENT WITH ADVANCED OXIDATION AND MEMBRANE TECHNOLOGIES	E	3	0	0	3	5	
	CEV6303	BIOMASS ENERGY TECHNOLOGIES	E	3	0	0	3	5	CEV6252	WASTE AND WASTEWATER TREATMENT FOR BIOTECHNOLOGY PROCESSES	E	3	0	0	3	5	
								CEV6254	MODELLING OF ACTIVATED SLUDGE SYSTEMS	E	3	0	0	3	5		
							Toplam Kredi	14	30					Toplam Kredi	12	30	
STAGE THESIS	III. TERM / FALL								IV. TERM / SPRING								
	CEV6183	ADVANCED TOPICS IN PHD THESIS	C	4	0	0	0	5	CEV6174	SEMINAR (THESIS)	C	0	2	0	0	5	
	CEV6193	PHD THESIS III	C	0	1	0	0	15	CEV6184	ADVANCED TOPICS IN PHD THESIS IV	C	4	0	0	0	5	
	YET6177	PHD PROFICIENCY EXAMINATION III	C	0	0	0	0	10	CEV6194	PHD THESIS IV	C	0	1	0	0	20	
								Toplam Kredi	0	30					Toplam Kredi	0	30
	V. TERM / FALL								VI. TERM / SPRING								
	ENS6121**	DEVELOPMENT and LEARNING	C	3	0	0	0	5	ENS6122**	PLANNING and EVALUATION IN EDUCATION	C	3	2	0	0	5	
	CEV6185	ADVANCED TOPICS IN PHD THESIS V	C	4	0	0	0	5	CEV6186	ADVANCED TOPICS IN PHD THESIS VI	C	4	0	0	0	5	
	CEV6195	PHD THESIS V	C	0	1	0	0	20	CEV6196	PHD THESIS VI	C	0	1	0	0	20	
								Toplam Kredi	0	30					Toplam Kredi	0	30
VII. TERM / FALL								VIII. TERM / SPRING									
CEV6187	ADVANCED TOPICS IN PHD THESIS VII	C	4	0	0	0	5	CEV6188	ADVANCED TOPICS IN PHD THESIS VIII	C	4	0	0	0	5		
CEV6197	PHD THESIS VII	C	0	1	0	0	25	CEV6198	PHD THESIS VIII	C	0	1	0	0	25		
							Toplam Kredi	0	30					Toplam Kredi	0	30	

TOTAL CREDITS: 26 - TOTAL ECTS: 240

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.



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INSTITUTE OF SCIENCE
2015-2016 ACADEMIC YEAR COURSE PLAN**

DEPARTMENT OF	ENVIRONMENTAL ENGINEERING
DEPARTMENT / PROGRAM	/ Master's Degree Program (Without Thesis)

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
	CEV5301	ENVIRONMENTAL MOVEMENT OF CHEMICALS	C	3	0	0	3	6	CEV5302	STATISTICS FOR ENVIRONMENTAL ENGINEERS	C	3	0	0	3	6
									CEV5303	ADVANCED ENVIRONMENTAL ENGINEERING CHEMISTRY I	C	3	0	0	3	6
		ELECTIVE COURSE	E				3	6		ELECTIVE COURSE	E				3	6
		ELECTIVE COURSE	E				3	6		ELECTIVE COURSE	E				3	6
		ELECTIVE COURSE	E				3	6		ELECTIVE COURSE	E				3	6
		ELECTIVE COURSE	E				3	6								
		Total Credits					15	30		Total Credits					15	30
STAGE THESIS	III. TERM / FALL								IV. TERM / SPRING (*)							
	CEV5001	PROJECT COURSE	C	0	2	0	0	24								
		ELECTIVE COURSE	E				3	6								
		Total Credits					3	30		Total Credits						
TOTAL CREDITS: 33 - TOTAL ECTS: 90																

Not: The student is expected to take a total of credited (.....) elective courses every academic term.
The student have the option of choosing one selective course from another department with the endorsement of the supervisor.

(*)Students who couldn't complete the program in 3. term or who began the program in spring term, may take CEV 5000 project course and 2. term elective courses in 4. term

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2015-2016 ACADEMIC YEAR COURSE PLAN

DE	NT OF	ENVIRONMENTAL ENGINEERING													
DEPARTMENT / PROGRAM		/ Master's Degree Program (WithoutThesis)													
I.III TERM / FALL									II. TERM / SPRING						
Code	Course Title	Type	T	U	L	Credit	ECTS	Code	Course Title	Type	T	U	L	Credit	ECTS
CEV5121	ENVIRONMENTAL MANAGEMENT	E	3	0	0	3	6	CEV5102	ENVIRONMENTAL INSTRUMENTAL ANALYSIS	E	2	0	2	3	6
CEV5243	INDUSTRIAL AIR POLLUTION	E	3	0	0	3	6	CEV5122	WATER QUALITY MANAGEMENT	E	2	2	0	3	6
CEV5247	BASICS OF ENVIRONMENTAL TECHNOLOGY	E	3	0	0	3	6	CEV5148	RECYCLE AND REUSE TECHNIQUES ON INDUSTRIAL WASTEWATERS	E	3	0	0	3	6
CEV5249	DESIGN CRITERIA FOR WASTEWATER TREATMENT PLANTS	E	2	2	0	3	6	CEV5222	INDUSTRIAL WASTE MANAGEMENT	E	3	0	0	3	6
CEV5251	STACK GAS MEASUREMENT AND ANALYSIS	E	2	0	2	3	6	CEV5226	WASTEWATER ENGINEERING	E	2	2	0	3	6
CEV5253	MEASUREMENT AND MONITORING OF AMBIENT AIR	E	2	0	2	3	6	CEV5228	ION EXCHANGE AND ADSORPTION TECHNOLOGY IN WASTEWATER TREATMENT	E	2	2	0	3	6
CEV5255	WETLAND SYSTEMS IN WASTEWATER TREATMENT	E	3	0	0	3	6	CEV5230	THE DESIGN OF LANDFILL AREAS	E	2	2	0	3	6
CEV5257	ENVIRONMENTAL SAFETY FOR INDUSTRIES	E	3	0	0	3	6	CEV5232	AIR POLLUTION ENGINEERING	E	3	0	0	3	6
CEV5259	BASIC PROCESSES IN ENVIRONMENTAL ENGINEERING I	E	3	0	0	3	6	CEV5234	ATMOSPHERIC TRANSPORT AND DEPOSITION	E	2	0	2	3	6
CEV5261	ENVIRONMENTAL BIOTECHNOLOGY	E	3	0	0	3	6	CEV5236	INSTRUMENTATION AND AUTOMATION OF WATER AND WASTEWATER TREATMENT PLANTS	E	2	2	0	3	6
CEV5263	RENEWABLE ENERGY AND ENVIRONMENT	E	3	0	0	3	6	CEV5238	BIOINDICATOR ORGANISMS IN DETERMINATION OF WATER QUALITY	E	3	0	0	3	6
CEV5265	CLEANER PRODUCTION PRINCIPLES	E	3	0	0	3	6	CEV5240	BASIC PROCESSES IN ENVIRONMENTAL ENGINEERING II	E	3	0	0	3	6
CEV5269	ANAEROBIC TREATMENT OF WASTES	E	3	0	0	3	6	CEV5244	MICROBIAL TECHNIQUES IN ENVIRONMENTAL ENGINEERING	E	3	0	0	3	6
CEV5271	GREENHOUSE GASES CALCULATION METHODS AND CLIMATE CHANGE	E	2	2	0	3	6	CEV5246	ADVANCED ATMOSPHERIC CHEMISTRY	E	3	0	0	3	6
CEV5273	NANOTECHNOLOGY IN ENVIRONMENTAL ENGINEERING	E	3	0	0	3	6	CEV5248	ENVIRONMENTAL POLLUTION AND PUBLIC HEALTH	E	3	0	0	3	6
CEV5275	INTEGRATED WASTE MANAGEMENT TECHNOLOGIES	E	3	0	0	3	6	CEV5250	ON-SITE WASTEWATER TREATMENT	E	3	0	0	3	6
CEV5277	WASTE DISPOSAL AND LEGAL FRAMEWORK	E	3	0	0	3	6	CEV5306	ENERGY EFFICIENCY IN ENVIRONMENTAL POLLUTION AND CONTROL	E	3	0	0	3	6
CEV5279	FORMATION AND TREATMENT OF LANDFILL LEACHATE	E	3	0	0	3	6	CEV5308	ENVIRONMENTAL TOXICOLOGY	E	3	0	0	3	6
CEV5281	BIOLOGICAL TREATMENT OF INDUSTRIAL WASTEWATERS	E	3	0	0	3	6	CEV5310	HYDROLOGY OF RIVER CATCHMENTS AND FLOOD-DROUGHT MODELLING	E	3	0	0	3	6
CEV5303	COMPOSTING TECHNOLOGY	E	3	0	0	3	6	CEV5312	ADVANCED PHYSICO-CHEMICAL TREATMENT PROCESSES	E	3	0	0	3	6
CEV5305	PRODUCTION OF BIOFUELS	E	3	0	0	3	6								
CEV5307	SEDIMENT POLLUTION AND TRANSPORT	E	3	0	0	3	6								
Total Credits						12¹/₃	24¹/₆	Total Credits						9	18

TOTAL CREDITS: 33 - TOTAL ECTS: 90

Not: The student is expected to take a total of credited (.....)elective courses every academic term.
The student have the option of choosing one selective course from another department with the endorsement of the supervisor.