



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



**DOCTOR OF PHILOSOPHY (PhD) PROGRAM**

**FIRST YEAR**

FIRST SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
INS-6501	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
INS-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	
<b>TOPLAM</b>			<b>20</b>	<b>1</b>	<b>21</b>	<b>12</b>	<b>30</b>	

SECOND SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
INS-6502	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
INS-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	
<b>TOTAL</b>			<b>20</b>	<b>1</b>	<b>21</b>	<b>12</b>	<b>30</b>	



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**SECOND YEAR**

THIRD SEMESTER								
COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*					
			TH	AP	TO	CR	EC	
INS-6503	DIRECTED FIELD STUDIES	C	8	0	8	0	9	
INS-6603	THESIS PREPARATION	C	0	1	1	0	1	
INS-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	
<b>TOTAL</b>			<b>17</b>	<b>3</b>	<b>20</b>	<b>9</b>	<b>30</b>	

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



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**THIRD YEAR**

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

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

**FOURTH YEAR**

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

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



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**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
INS-5002	ADVANCED CONCRETE TECHNOLOGY	E	3	0	3	3	5
INS-5003	COMPOSITE MATERIALS IN CONSTRUCTION	E	3	0	3	3	5
INS-5004	DURABILITY OF REINFORCED CONCRETE STRUCTURES	E	3	0	3	3	5
INS-5005	METALLIC BUILDING MATERIALS	E	3	0	3	3	5
INS-5006	EARTHQUAKE ENGINEERING	E	3	0	3	3	5
INS-5007	PRESTRESSED CONCRETE STRUCTURES	E	3	0	3	3	5
INS-5008	TERMS OF SEISMIC EVALUATION OF EXISTING STRUCTURES	E	3	0	3	3	5
INS-5009	HUMAN FACTOR IN PRODUCTION	E	3	0	3	3	5
INS-5010	BITUMINOUS MIXTURES	E	3	0	3	3	5
INS-5011	LOW VOLUME ROADS	E	3	0	3	3	5
INS-5012	PAVEMENT MANAGEMENT	E	3	0	3	3	5
INS-5013	ROAD ENGINEERING AND APPLICATIONS OF GEOTECHNICAL	E	3	0	3	3	5
INS-5014	USE OF INDUSTRIAL WASTE CONCRETE	E	3	0	3	3	5
INS-5015	BINDING MATERIALS	E	3	0	3	3	5
INS-5016	BUILDINGS ENERGY CONSERVATION	E	3	0	3	3	5
INS-5017	INTERNAL STRUCTURE AND PROPERTIES OF BUILDING MATERIALS	E	3	0	3	3	5
INS-5018	ECOLOGICAL MATERIALS	E	3	0	3	3	5
INS-5019	ADVANCED BUILDING PHYSICS	E	3	0	3	3	5
INS-5020	ADVANCED FLUID MECHANICS	E	3	0	3	3	5
INS-5021	FLOOD CONTROL	E	3	0	3	3	5
INS-5022	ENGINEERING PROPERTIES OF SOİLS	E	3	0	3	3	5
INS-5023	EXPERIMENTAL SOIL MECHANICS	E	3	0	3	3	5
INS-5024	SOIL IMPROVEMENT	E	3	0	3	3	5
INS-5025	FOUNDATION ENGINEERING	E	3	0	3	3	5
INS-5026	THEORY OF ELASTICITY	E	3	0	3	3	5
INS-5027	DATA ANALYSIS	E	3	0	3	3	5
INS-5028	SYSTEM ANALYSIS	E	3	0	3	3	5
INS-5029	CONCRETE ROADS AND DESIGN PRINCIPLES	E	3	0	3	3	5
INS-5030	TRAFFIC ENGINEERING AND APPLICATIONS	E	3	0	3	3	5
INS-5031	TRANSPORTATION PLANNING	E	3	0	3	3	5



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COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*				
			TH	AP	TO	CR	EC
INS-5032	CONCRETE ADDITIVES	E	3	0	3	3	5
INS-5033	REINFORCEMENT CORROSION IN REINFORCED CONCRETE STRUCTURES	E	3	0	3	3	5
INS-5034	CUSTOM DESIGN OF CONCRETE AND DURABILITY	E	3	0	3	3	5
INS-5035	HIGHWAY SAFETY DESIGN PRINCIPLES	E	3	0	3	3	5
INS-5036	ENVIRONMENTAL IMPACTS OF TRANSPORT	E	3	0	3	3	5
INS-5037	PREVENTIVE MAINTENANCE ASPHALT PAVEMENTS	E	3	0	3	3	5
INS-5038	RAIL SYSTEMS	E	3	0	3	3	5
INS-5039	IMAGE PROCESSING ENGINEERING	E	3	0	3	3	5
INS-5040	REINFORCED CONCRETE CARRYING CAPACITY ANALYSIS METHODS	E	3	0	3	3	5
INS-5041	EARTHQUAKE RESISTANT DESIGN	E	3	0	3	3	5
INS-5042	STRUCTURAL DAMAGES AND SOLUTIONS	E	3	0	3	3	5
INS-5043	ADVANCED STRUCTURAL ANALYSIS	E	3	0	3	3	5
INS-5044	ORGANIZATION OF REINFORCED CONCRETE STRUCTURAL SYSTEMS	E	3	0	3	3	5
INS-5045	USE OF REINFORCED CONCRETE AND STEEL BUILDING PROGRAM	E	3	0	3	3	5
INS-5046	INSULATION APPLICATION	E	3	0	3	3	5
INS-5047	CONSTRUCTION WASTE RECYCLING	E	3	0	3	3	5
INS-5048	CONSTRUCTION RAW MATERIALS	E	3	0	3	3	5
INS-5049	HYDRODYNAMIC	E	3	0	3	3	5
INS-5050	VISCOELASTICITY	E	3	0	3	3	5
INS-5051	FRACTURE STRAIN RELATIONS	E	3	0	3	3	5
INS-5052	STOCHASTIC HYDROLOGY	E	3	0	3	3	5
INS-5053	EXPERIMENT DESIGN AND ANALYSIS	E	3	0	3	3	5
INS-5054	CONCRETE BEHAVIOR	E	3	0	3	3	5
INS-5055	GROUNDWATER HYDRAULICS	E	3	0	3	3	5
INS-5056	HYDRAULIC DESIGN OF DAMS	E	3	0	3	3	5
INS-5057	EXPERIMENT DESIGN AND ANALYSIS	E	3	0	3	3	5
INS-5058	CONCRETE BEHAVIOR	E	3	0	3	3	5
INS-5059	GEOMETRICAL DESIGN OF RAILWAYS	E	3	0	3	3	5
INS-5060	GEOMETRICAL DESIGN OF HIGHWAYS	E	3	0	3	3	5



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COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*				
			TH	AP	TO	CR	EC
INS-5061	SUSTAINABILITY IN TRANSPORTATION SYSTEM	E	3	0	3	3	5
INS-5062	PAVEMENT DESIGN	E	3	0	3	3	5
INS-5063	FIRE RESISTANCE OF STRUCTURES	E	3	0	3	3	5
INS-5064	DESIGN OF TIMBER STRUCTURES ACCORDING TO EUROCODE 5	E	3	0	3	3	5
INS-5065	QUALITY CONTROL SYSTEMS AND CE CODE IN CIVIL ENGINEERING	E	3	0	3	3	5
INS-5066	ELASTIC STABILITY THEORY	E	3	0	3	3	5
INS-5067	RISK ANALYSIS WITH THE OCCUPATIONAL SAFETY AND HEALTH IN CONSTRUCTION	E	3	0	3	3	5
INS-5068	ADVANCED STRENGTH OF STRUCTURES	E	3	0	3	3	5
INS-5069	TRADITIONAL BUILDING MATERIALS	E	3	0	3	3	5
INS-5070	COMPUTER AIDED MODELING OF GROUNDWATER	E	3	0	3	3	5
INS-5071	ARTIFICIAL NEURAL NETWORKS AND CIVIL ENGINEERING APPLICATIONS	E	3	0	3	3	5
INS-5072	FLOOD HYDROLOGY	E	3	0	3	3	5
INS-5073	DROUGHT HYDROLOGY	E	3	0	3	3	5
INS-5074	POLYMER MATERIALS IN CONSTRUCTION	E	3	0	3	3	5
INS-5075	THEORY OF PLATES	E	3	0	3	3	5
INS-5076	THEORY OF SHELL	E	3	0	3	3	5
INS-5077	PLASTIC ANALYSIS OF STRUCTURES	E	3	0	3	3	5
INS-5078	FIBER CEMENT-BASED COMPOSITES	E	3	0	3	3	5
INS-5079	FINITE ELEMENT METHOD	E	3	0	3	3	5
INS-5080	LIGHTWEIGHT CONCRETE TECHNOLOGY	E	3	0	3	3	5
INS-5081	FUZZY LOGIC AND CIVIL ENGINEERING APPLICATIONS	E	3	0	3	3	5
INS-6001	COMPOSITE MATERIALS IN CONSTRUCTION	E	3	0	3	3	5
INS-6002	EARTHQUAKE ENGINEERING	E	3	0	3	3	5
INS-6003	PRESTRESSED CONCRETE STRUCTURES	E	3	0	3	3	5
INS-6004	HOT BITUMINOUS MIXTURES	E	3	0	3	3	5
INS-6005	ROAD PAVEMENT ENGINEERING AND PERFORMANCE	E	3	0	3	3	5
INS-6006	BUILDINGS ENERGY CONSERVATION	E	3	0	3	3	5
INS-6007	ECOLOGICAL MATERIALS	E	3	0	3	3	5
INS-6008	ADVANCED BUILDING PHYSICS	E	3	0	3	3	5



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COURSE CODE	COURSE NAME	C/E	COURSE CREDIT*				
			TH	AP	TO	CR	EC
INS-6009	FLOOD CONTROL	E	3	0	3	3	5
INS-6010	SOIL IMPROVEMENT	E	3	0	3	3	5
INS-6011	THEORY OF ELASTICITY	E	3	0	3	3	5
INS-6012	TRAFFIC ENGINEERING AND APPLICATIONS	E	3	0	3	3	5
INS-6013	TRANSPORTATION PLANNING	E	3	0	3	3	5
INS-6014	REINFORCEMENT CORROSION IN REINFORCED CONCRETE STRUCTURES	E	3	0	3	3	5
INS-6015	PREVENTIVE MAINTENANCE ASPHALT PAVEMENTS	E	3	0	3	3	5
INS-6016	RAIL SYSTEMS	E	3	0	3	3	5
INS-6017	ADVANCED STRUCTURAL ANALYSIS	E	3	0	3	3	5
INS-6018	USE OF REINFORCED CONCRETE AND STEEL BUILDING PROGRAM	E	3	0	3	3	5
INS-6019	HYDRODYNAMIC	E	3	0	3	3	5
INS-6020	VISCOELASTICITY	E	3	0	3	3	5
INS-6021	FRACTURE STRAIN RELATIONS	E	3	0	3	3	5
INS-6022	STOCHASTIC HYDROLOGY	E	3	0	3	3	5
INS-6023	COMPUTER DATA ANALYSIS	E	3	0	3	3	5
INS-6024	ENERGY EFFICIENT BUILDING SYSTEMS	E	3	0	3	3	5
INS-6025	HEAT INSULATION MATERIALS	E	3	0	3	3	5
INS-6026	ADVANCED STRUCTURAL DYNAMICS	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