FIRAT UNIVERSITY INSTITUTE OF SCIENCE Master of Civil Engineering Technologies Program

Course	Course Name	Theory	Application	Credit	ECTS
Code INS501	MC Cominen		2		6
INS501 INS503	MSc. Seminar Theoretical Fundamentals of Urbanization	- 3	2 0	- 3	6
INS503 INS504	Architecture-City Planning-Environment	3	0	3	6
INS504 INS505	· · ·	3	0	3	6
INS505 INS506	Binder and Technology Aggregate Analysis and Technology	3	0	3	6
INS507	Analysis of Concrete Behaviors	3	0	3	6
INS507 INS508	New Products and Technologies in Construction Materials	3	0	3	6
INS508 INS509		3	0	3	6
INS510	Computer Aided Statistical Analysis	3	0	3	6
	Advanced Highway Techniques	3	0	3	•
INS511	Concrete Construction Elements		0	3	6
INS512	Special Concretes	3	0	3	6 6
INS513	Calculation Methods of Concrete Composition		-		
INS514	Advanced Building Constructor's Supply Shed Planning and Techniques	3	0	3	6
INS515	Analysis of Concrete Construction Elements	3	0	3	6
INS516	Sound Control and Noise in The Building	2	2	3	6
INS517	Hydraulic Structures	3	0	3	6
INS518	Water Insulation at Buildings	3	0	3	6
INS519	Experimental Methods in Buildings	3	0	3	6
INS520	Advanced Topography	2	2	3	6
INS521	Construction Chemicals	2	0	2	4
INS522	Plasticity Analysis of Steel Constructions	3	0	3	6
INS523	Advanced Construction Materials Science	2	2	3	6
INS524	Basement Mechanics and Analysis in Buildings	2	2	3	6
INS525	Construction Biology	2	2	3	6
INS526	Scientific Research Methods (FBE610 Recommended)	3	0	3	6
INS527	Structural Damages	3	0	3	6
INS528	Advanced Wooden Construction Technique-I	3	0	3	6
INS529	Advanced Wooden Construction Technique-II	2	2	3	6
INS530	Using of Prefabrication Elements in Construction Elements	2	2	3	6
INS531	Computer Aided Analysis of Construction Elements	2	2	3	6
INS532		3	0	3	6
INS533	Pre and Post Stressed Concrete Applications	2	2	3	6
INS534	Security Control at Building	2	2	3	6
INS535	Pozzalanic Materials	2	0	2	4
INS536	Housing Construction Systems-I	3	0	3	6
INS537	Housing Construction Systems-II	3	0	3	6
INS538	Glass And Ceramics Construction Materials	2	0	2	4
INS539	Cost Of Poor Quality at Construction	3	0	3	6
INS540	Reinforcement Corrosion in Structure	3	0	3	6
INS541	Rules of Reinforce of Reinforced Concrete	2	0	2	4
INS542	Solar Radiation and Building Design	2	0	2	4
INS543	Orientation of Urban and Buildings	3	0	3	6
INS544	Basics of Advanced Building Physics	3	0	3	6
INS545	Material Defects in Structural Damages and Repairing Principals	3	0	3	6

INS547	Fiber Concrete and General Characteristics	3	0	3	6
INS548	Destructive and Non-Destructive Concrete Experiments	2	2	3	6
	and Evaluation				
INS549	Persistence in Reinforced Concrete Structures	3	0	3	6
INS550	Cement Chemistry	3	0	3	6
INS551	Concrete Morphology	3	0	3	6
INS552	Usage of Industrial Wastes in Concrete	3	0	3	6
INS553	Excel Applications in Civil Engineering	2	2	3	6
INS554	Loose Boundary Hydraulics	3	0	3	6
INS555	Hydraulic Models and Measurements	3	0	3	6
INS556	Flood Control	3	0	3	6
INS557	Hydrology of Droughts and Floods	3	0	3	6
INS558	Hydrologic Modelling with Remote Sensing and GIS	3	0	3	6
INS559	Water Resources Systems	3	0	3	6
INS560	Water Law and Policy	3	0	3	6
INS561	Hydrological Models	3	0	3	6
INS562	Applied Statistical Methods in Civil Engineering	3	0	3	6
INS563	Urban Drainage	3	0	3	6
INS564	Fuzzy Logic Modeling in Engineering	3	0	3	6
INS565	Basin Hydrology	3	0	3	6
INS566	Hydroclimatology	3	0	3	6
INS567	Hillslope Hydrology	3	0	3	6
INS568	Experimental Methods in Geotechnics	2	2	3	6
INS569	Geotechnical Modelling	3	0	3	6
INS570	Ground Behaviour	3	0	3	6
INS571	Bearing Capacity Theory in Geotechnic	3	0	3	6
INS572	Computer Applications in Civil Engineering	3	0	3	6
INS573	Experimental Methods in Earthquake Engineering	3	0	3	6
INS574	Seismic Isolation Methods in Buildings	3	0	3	6
INS575	Active and Passive Control Methods in Constructions	3	0	3	6
INS576	Transportation Systems Analysis	3	0	3	6
INS577	Introduction to Transportation Engineering and Planning	3	0	3	6
INS578	Safety in Highway Design	3	0	3	6
INS579	Occupational Safety and Health in Construction Industry	3	0	3	6
INS580	Soil Mechanics for Transportation Engineers	3	0	3	6
INS581	Basic Occupational Safety Precautions, Equipment and Hardware	3	0	3	6
INS582	Reinforced Concrete Slabs	3	0	3	6
INS583	Reinforced Concrete Structural Systems	3	0	3	6
INS584	Performance-Based Structural Analysis	3	0	3	6
INS585	Measurement and Certification Systems of Buildings	3	0	3	6
INS599	Master Thesis	-	-	-	24
INS601	Specialization Field Course	6	-	-	6