

**TOTAL COURSE – PROGRAMME OUTCOMES RELATIONSHIP**

COURSE INFORMATION					PROGRAMME OUTCOMES										
Code	Name	T	P	ECTES	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
<b>FALL SEMESTER</b>															
EEM7001	Advanced Engineering Mathematics	3	0	8	0	3	0	3	3	0	0	0	0	0	0
INS7003	Theory of Vibration	3	0	8	4	4	5	2	3	1	3	3	4	4	3
INS7005	Computer Aided Engineering Mechanics	3	0	8	3	4	2	4	4	3	4	0	0	5	4
MUH5001	Scientific Research Methods	2	0	6	4	3	4	3	5	5	4	2	3	3	5
INS5003	Special Topics-I	5	0	10	5	5	5	5	5	5	5	5	5	5	5
INS5005	Thesis Research	0	1	20	5	5	5	5	5	5	5	5	5	5	5
INS5007	Seminar	0	2	6	5	5	5	5	5	5	5	5	5	5	5
INS5101	Geotechnical Design by means of In-situ Tests	2	0	6	3	3	2	3	4	2	3	1	2	3	2
INS5103	Quality Control of Concrete	2	0	6	3	3	2	5	3	2	4	2	2	3	3
INS5105	Concrete Technology	2	0	6	4	3	3	3	3	3	4	2	3	3	3
INS5107	Earthquake Engineering	2	0	6	4	4	5	2	3	1	3	3	4	4	3
INS5109	Stone Deterioration in Historic Buildings	2	0	6	3	3	3	4	4	2	3	2	3	1	2
INS5111	Airport Engineering	2	0	6	4	3	3	2	2	2	3	3	2	3	4
INS5113	Advanced Foundation Engineering	2	0	6	3	4	3	5	4	2	3	1	3	3	3
INS5115	Applications of Artificial Intelligence	2	0	6	2	3	3	4	3	3	2	2	3	3	2
INS5117	Viscoelasticity	2	0	6	4	4	3	3	3	2	2	1	1	2	1
INS5119	Mathematical Models and Programming Techiques	2	0	6	4	0	0	0	5	0	3	0	0	5	0
INS5121	Matrix Methods in Structural Analysis	2	0	6	3	4	3	5	5	3	4	0	0	4	4

INS5123	Advanced Structural Analysis	2	0	6	3	3	2	4	5	2	2	1	1	3	1
INS5125	Ultimate State Design Methods in Reinforced Concrete	3	0	8	3	4	3	5	5	3	4	0	0	4	4
INS5129	Introduction to Cement Engineering	3	0	8	3	4	3	3	3	3	4	2	3	3	4
INS5131	Sediment Transportation in Flows with Mobile Beds	3	0	8	3	3	2	3	4	3	3	1	3	2	3
INS5133	Repair and Retrofitting of Damaged Structures	3	0	8	3	3	2	4	3	2	2	1	3	1	2
INS5135	Advanced Fluid Mechanics	3	0	8	4	0	0	0	5	0	3	0	0	5	0
INS5137	Special Cements	3	0	8	3	4	3	5	2	3	3	3	2	3	3
INS5139	Prefabricated Reinforced Concrete Elements	3	0	8	3	3	3	5	3	3	2	2	3	3	3
INS5141	Theory of Stability	3	0	8	2	3	3	4	2	2	3	2	3	3	1
INS5143	Construction Project Planning	3	0	8	3	4	3	3	3	4	4	2	3	3	4
INS5145	Control of Structures	3	0	8	4	4	5	2	3	1	3	3	4	4	3
INS5147	Engineering Properties of Soils	3	0	8	3	3	3	4	3	2	3	1	3	2	2
INS5149	Soil-Structure Interaction	3	0	8	3	3	2	3	4	2	2	3	2	3	1
INS5151	Advanced Pavement Technology	3	0	8	4	3	3	3	4	1	3	1	4	3	1
INS6001	Seminar	0	2	6	5	5	5	5	5	5	5	5	5	5	5
INS6003	Specialized Field Course-I	5	0	10	5	5	5	5	5	5	5	5	5	5	5
INS6005	Thesis Research	0	1	20	5	5	5	5	5	5	5	5	5	5	5
INS6007	Doctoral Qualification	0	0	30	5	5	5	5	5	5	5	5	5	5	5
INS6101	Laboratory Experiments in Concrete Technology	3	0	10	4	4	4	4	4	4	4	3	3	4	4
INS6103	Granular Materials in Highway Engineering	3	0	10	4	3	3	2	2	2	3	3	2	3	4
INS6105	Material Selection in Architectural Design	3	0	10	4	4	3	3	1	2	3	3	2	2	3

INS6107	Numerical Hydraulics	3	0	10	4	5	0	3	4	0	0	0	0	3	0
INS6109	Special Concretes	3	0	10	2	3	3	4	2	2	5	2	3	3	3
<b>SPRING SEMESTER</b>															
INS7002	Advanced Numerical Analysis	3	0	8	3	2	2	3	4	2	2	2	1	3	1
INS7004	Finite Element Method	3	0	8	3	4	3	5	5	3	4	0	0	4	4
INS5004	Special Topics-II	5	0	10	5	5	5	5	5	5	5	5	5	5	5
INS5006	Thesis Research	0	1	20	5	5	5	5	5	5	5	5	5	5	5
INS5008	Seminar	0	2	6	5	5	5	5	5	5	5	5	5	5	5
INS5102	Design Fundamentals of Earthquake Resistant Structures	2	0	6	3	3	2	5	3	3	3	2	3	3	3
INS5104	Computer Aided Engineering Mechanics	2	0	6	3	4	2	4	4	3	4	0	0	5	4
INS5106	Evaluation of the Solid Waste as Construction Materials	2	0	6	3	2	3	4	3	3	3	3	4	3	3
INS5108	Composite Materials	2	0	6	3	2	3	3	2	4	4	2	3	2	2
INS5110	Transportation Planning	2	0	6	4	3	3	2	2	2	3	3	2	3	4
INS5112	Fire Safe Building Design	2	0	6	3	2	2	4	2	2	4	1	1	2	3
INS5114	Stability of Structures	2	0	6	4	4	5	2	3	1	3	3	4	4	3
INS5116	Structural Lightweight Concrete	2	0	6	3	3	3	3	3	3	3	2	3	3	4
INS5118	Groundwater Hydraulics	2	0	6	4	0	0	0	5	0	3	0	0	5	0
INS5120	Stabilization and Improvement of Soils	2	0	6	4	4	3	3	3	3	3	2	3	2	3
INS5122	Engineering Seismology	3	0	8	4	4	5	2	3	1	3	3	4	4	3
INS5124	Analytical Techniques in Concrete Technology	3	0	8	2	3	3	5	2	3	3	2	3	2	2
INS5126	Polymers in Concrete Technology	3	0	8	3	3	3	2	4	2	5	2	3	2	3
INS5128	Variable Flow Hydraulics	3	0	8	3	3	3	3	4	3	3	1	3	2	2

INS5130	Experimental Soil Mechanics	3	0	8	3	3	3	2	3	2	2	2	3	2	2
INS5132	Ferrocements	3	0	8	2	3	3	5	3	2	3	3	3	3	3
INS5134	Bituminous Materials	2	0	6	4	3	3	3	3	1	3	1	4	3	1
INS5136	Advanced Structural Dynamics	3	0	8	3	3	4	2	4	4	3	2	2	3	4
INS5138	Prestressed Concrete Structures	3	0	8	2	2	3	3	3	3	3	3	3	3	3
INS5140	Fracture Theory of Concrete	2	0	6	4	4	3	3	3	2	2	1	1	2	1
INS5142	Operations Research in Transportation	3	0	8	4	3	3	2	2	2	3	3	2	3	4
INS5144	Construction Project Management	3	0	8	3	3	3	3	3	4	4	2	3	3	4
INS5146	Damage Detection and Safety Control in Structures	3	0	8	3	2	2	3	4	2	3	1	1	5	3
INS6002	Seminar	0	2	6	5	5	5	5	5	5	5	5	5	5	5
INS6004	Specialized Field Course-II	5	0	10	5	5	5	5	5	5	5	5	5	5	5
INS6006	Thesis Research	0	1	20	5	5	5	5	5	5	5	5	5	5	5
INS6008	Doctoral Qualification	0	0	30	5	5	5	5	5	5	5	5	5	5	5
INS6102	Concrete Admixtures	3	0	10	3	3	3	4	3	3	3	2	3	3	3
INS6104	Thearmal and Water Insulation in Buildings	3	0	10	4	4	2	2	1	1	3	2	2	2	2
INS6106	Advanced Hydraulics	3	0	10	4	5	0	3	4	0	0	0	0	3	0
INS6108	Concrete in Corrosive Environments	3	0	10	3	2	3	2	2	3	4	2	5	3	5
INS6110	Plates and Shells	3	0	10	3	3	3	3	3	2	2	3	3	3	3
INS6112	Boundary Element Method	3	0	10	3	3	3	3	4	2	2	2	2	1	2
INS6114	Optimization Methods in Structural Design	3	0	10	4	4	5	2	3	1	3	3	4	4	3
INS6116	Pavement Management Systems	3	0	10	4	3	3	2	2	2	3	3	2	3	4
INS6118	Geotechnical Earthquake Engineering	3	0	10	4	4	3	3	3	2	3	2	3	3	2