



College of Engineering
Department of Civil Engineering
Master in Civil Engineering

Course No.	Course Title	CH
CENG513	FINITE ELEMENT METHOD	3
CENG580	ADVANCED CONSTRUCTION PROJECT MANAGEMENT	3
CENG582	NUMERICAL METHODS FOR DIFFERENTIAL EQUATIONS	3
CENG599	THESIS	6
Structural Engineering (Core) 12 CH		
CENG501	ADVANCED MECHANICS OF MATERIALS	3
CENG511	PLATES AND SHELLS	3
CENG512	MATRIX STRUCTURAL ANALYSIS	3
CENG514	STRUCTURAL STABILITY	3
CENG516	STRUCTURAL DYNAMICS	3
CENG517	ADVANCED STEEL DESIGN	3
CENG518	PRE STRESSED CONCRETE	3
CENG538	SHALLOW AND DEEP FOUNDATIONS	3
CENG539	BRIDGE ENGINEERING	3
CENG590	ADVANCED REINFORCED CONCRETE DESIGN	3

Structural Engineering List 1 (Core) 3 CH		
CENG520	GROUND WATER RESOURCES ENGINEERING	3
CENG521	ADVANCED WASTE WATER TREATMENT	3
CENG522	HYDRAULICS OF CLOSED CONDUITS	3
CENG523	ADJUSTMENT COMPUTATION OF SPATIAL DATA	3
CENG524	GEOSPATIAL DATABASE MANAGEMENT	3
CENG525	REMOTE SENSING AND IMAGE INTERPRETATION	3
CENG526	GEOSPATIAL IMAGE PROCESSING	3
CENG527	DIGITAL PHOTOGRAMMETRY	3
CENG528	DIGITAL CARTOGRAPHY AND MAP PROJECTION	3
CENG529	GIS AND SPATIAL DATA ACQUISITION	3
CENG534	GEODESY AND SATELLITE POSITIONING	3
CENG537	CLOSE-RANGE PHOTOGRAMMETRY	3
CENG539	BRIDGE ENGINEERING	3
CENG540	PAVEMENT DESIGN	3
CENG541	ADVANCED TRAFFIC ENGINEERING	3
CENG542	TRANSPORTATION PLANNING AND MODELLING	3
CENG544	ENVIRONMENTAL APPRAISAL OF TRANSPORT ACTIVITIES AND ECONOMICS	3
CENG545	ROAD SAFETY AUDIT	3
CENG546	ADVANCED PAVEMENT MATERIAL	3
CENG547	PAVEMENT MAINTENANCE PROGRAM	3
CENG548	PUBLIC MASS TRANSPORTATION SYSTEMS	3
CENG549	TRANSPORTATION AND LAND USE FOR PLANNING	3

CENG580	ADVANCED CONSTRUCTION PROJECT MANAGEMENT	3
CENG582	NUMERICAL METHODS FOR DIFFERENTIAL EQUATIONS	3
CENG583	HAZARDOUS AND INDUSTRIAL WASTE MANAGEMENT	3
CENG584	WATER RESOURCES AND ENVIRONMENTAL SYSTEMS	3
CENG585	FREE SURFACE FLOW	3
CENG586	COASTAL ENGINEERING	3
CENG587	GROUND WATER CONTAMINATION AND POLLUTANT TRANSPORT	3
Transportation and Traffic Engineering (Core) 12 CH		
CENG539	BRIDGE ENGINEERING	3
CENG540	PAVEMENT DESIGN	3
CENG541	ADVANCED TRAFFIC ENGINEERING	3
CENG542	TRANSPORTATION PLANNING AND MODELLING	3
CENG544	ENVIRONMENTAL APPRAISAL OF TRANSPORT ACTIVITIES AND ECONOMICS	3
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Transportation and Traffic Engineering List 1 (Core) 3 CH		
CENG501	ADVANCED MECHANICS OF MATERIALS	3
CENG511	PLATES AND SHELLS	3
CENG512	MATRIX STRUCTURAL ANALYSIS	3
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CENG516	STRUCTURAL DYNAMICS	3
CENG517	ADVANCED STEEL DESIGN	3
CENG518	PRE STRESSED CONCRETE	3
CENG520	GROUND WATER RESOURCES ENGINEERING	3
CENG521	ADVANCED WASTE WATER TREATMENT	3
CENG522	HYDRAULICS OF CLOSED CONDUITS	3
CENG523	ADJUSTMENT COMPUTATION OF SPATIAL DATA	3
CENG524	GEOSPATIAL DATABASE MANAGEMENT	3
CENG525	REMOTE SENSING AND IMAGE INTERPRETATION	3
CENG526	GEOSPATIAL IMAGE PROCESSING	3
CENG527	DIGITAL PHOTOGRAMMETRY	3
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Water Resources and Environmental Engineering (Core) 12 CH		
CENG520	GROUND WATER RESOURCES ENGINEERING	3
CENG521	ADVANCED WASTE WATER TREATMENT	3
CENG522	HYDRAULICS OF CLOSED CONDUITS	3
CENG580	ADVANCED CONSTRUCTION PROJECT MANAGEMENT	3
CENG582	NUMERICAL METHODS FOR DIFFERENTIAL EQUATIONS	3
CENG583	HAZARDOUS AND INDUSTRIAL WASTE MANAGEMENT	3
CENG584	WATER RESOURCES AND ENVIRONMENTAL SYSTEMS	3
CENG585	FREE SURFACE FLOW	3
CENG586	COASTAL ENGINEERING	3
CENG587	GROUND WATER CONTAMINATION AND POLLUTANT TRANSPORT	3
Water Resources and Environmental List 1 (Core) 3 CH		
CENG501	ADVANCED MECHANICS OF MATERIALS	3
CENG511	PLATES AND SHELLS	3
CENG512	MATRIX STRUCTURAL ANALYSIS	3
CENG514	STRUCTURAL STABILITY	3
CENG516	STRUCTURAL DYNAMICS	3
CENG517	ADVANCED STEEL DESIGN	3
CENG518	PRE STRESSED CONCRETE	3
CENG523	ADJUSTMENT COMPUTATION OF SPATIAL DATA	3
CENG524	GEOSPATIAL DATABASE MANAGEMENT	3
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Geometrics Engineering (Core) 12 CH		
CENG523	ADJUSTMENT COMPUTATION OF SPATIAL DATA	3
CENG524	GEOSPATIAL DATABASE MANAGEMENT	3
CENG525	REMOTE SENSING AND IMAGE INTERPRETATION	3
CENG526	GEOSPATIAL IMAGE PROCESSING	3

CENG527	DIGITAL PHOTOGRAMMETRY	3
CENG528	DIGITAL CARTOGRAPHY AND MAP PROJECTION	3
CENG529	GIS AND SPATIAL DATA ACQUISITION	3
CENG534	GEODESY AND SATELLITE POSITIONING	3
CENG537	CLOSE-RANGE PHOTOGRAMMETRY	3
CENG542	TRANSPORTATION PLANNING AND MODELLING	3
Geometrics Engineering List1 (Core) 3 CH		
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Total Credits		33