

Integrated Master of Technology in Construction Technology and Management

School of Civil Engineering

Programme Credit Structure		Credits	IENG101P	Technical English Communication Lab	0	0	2	1			
Foundation Core Courses		56	IENG102P	Technical Report Writing	0	0	2	1			
Basic Sciences and Mathematics		24	ISTS101P	Quantitative Skills Practice I	0	0	3	1.5			
Engineering Sciences		17	ISTS102P	Quantitative Skills Practice II	0	0	3	1.5			
Humanities, Social Sciences and Management (HSM)		15	ISTS201P	Qualitative Skills Practice I	0	0	3	1.5			
Discipline-linked Engineering Science Courses		10	ISTS202P	Qualitative Skills Practice II	0	0	3	1.5			
Discipline Core Courses		70	IFLE200L	Foreign Language	2	0	0	2			
Discipline Elective Courses		30	IHSM200L	HSM Elective	3	0	0	3			
Open Elective Courses		15	Discipline-linked Engineering Science Courses		10						
Project and Internship		35	XXXXXXXX	Construction Materials	2	0	0	2			
Total Graded Credit Requirement		216	MEEXXXX	Fluid Mechanics	3	0	0	3			
Non-Graded Credit Requirement		11	MEEXXXX	Fluid Mechanics Lab	0	0	2	1			
Basic Sciences and Mathematics		24	MEEXXXX	Mechanics of Solids	3	0	0	3			
		L T P C	MEEXXXX	Mechanics of Solids Lab	0	0	2	1			
IPHY101L	Engineering Physics	3	0	0	3	Discipline Core Courses					
IPHY101P	Engineering Physics Lab	0	0	2	1	70					
ICHY101L	Engineering Chemistry	3	0	0	3	XXXXXXXX	Surveying	3	0	0	3
ICHY101P	Engineering Chemistry Lab	0	0	2	1	XXXXXXXX	Surveying Lab	0	0	2	1
IMAT101L	Calculus	3	0	0	3	XXXXXXXX	Environmental Engineering	3	0	0	3
IMAT101P	Calculus Lab	0	0	2	1	XXXXXXXX	Environmental Engineering Lab	0	0	2	1
IMAT102L	Differential Equations and Transforms	3	1	0	4	XXXXXXXX	Engineering Geology	2	0	0	2
IMAT201L	Complex Variables and Linear Algebra	3	1	0	4	XXXXXXXX	Building Planning and Drawing	1	0	2	2
IMAT202L	Probability and Statistics	3	0	0	3	XXXXXXXX	Soil Mechanics	3	0	0	3
IMAT202P	Probability and Statistics Lab	0	0	2	1	XXXXXXXX	Soil Mechanics Lab	0	0	2	1
Engineering Sciences		17	XXXXXXXX	Structural Analysis	2	1	0	3			
IMEE102P	Engineering Design Visualisation Lab	0	0	4	2	XXXXXXXX	Concrete Technology	3	0	0	3
IEEE101L	Basic Electrical Engineering	2	0	0	2	XXXXXXXX	Concrete Technology Lab	0	0	2	1
IEEE101P	Basic Electrical Engineering Lab	0	0	2	1	XXXXXXXX	Hydraulics and Hydraulic Machines	3	0	0	3
IECE101L	Basic Electronics	2	0	0	2	XXXXXXXX	Hydraulics and Hydraulic Machines Lab	0	0	2	1
IECE101P	Basic Electronics Lab	0	0	2	1	XXXXXXXX	Foundation Engineering	2	1	0	3
IMEE201L	Engineering Mechanics	2	1	0	3	XXXXXXXX	Design of Reinforced Concrete Structures	3	0	0	3
ICSE101E	Computer Programming: Python	1	0	4	3	XXXXXXXX	Reinforced Concrete Structures Lab	0	0	2	1
ICSE103E	Computer Programming:Java	1	0	4	3	XXXXXXXX	Transportation Engineering	2	1	0	3
Humanities, Social Sciences and Management		15	XXXXXXXX	Water Resources Engineering	3	0	0	3			
IENG101N	Effective English Communication (NGC)	0	0	4	2	XXXXXXXX	Water Resources Engineering Lab	0	0	2	1
IENG101L	Technical English Communication	2	0	0	2	XXXXXXXX	Construction Practices and Management	3	0	0	3
			XXXXXXXX	Design of Steel Structures	3	0	0	3			
			XXXXXXXX	Steel Structures Lab	0	0	2	1			
			XXXXXXXX	Estimating and Costing	2	0	0	2			
			XXXXXXXX	Construction and Contract Management	3	0	0	3			

XXXXXXXXX	Construction Equipment Management	3	0	0	3	XXXXXXXXX	Construction Techniques of Deep Foundations	3	0	0	3	
XXXXXXXXX	Construction Planning and Scheduling	3	1	0	4	XXXXXXXXX	Flexible and Rigid Pavements	3	0	0	3	
XXXXXXXXX	Construction Economics and Finance	3	1	0	4	XXXXXXXXX	Repair and Rehabilitation of Structures	3	0	0	3	
XXXXXXXXX	Quality Control and Safety	3	0	0	3	XXXXXXXXX	Occupational Health and Industrial Safety	3	0	0	3	
XXXXXXXXX	Construction Project Management	3	0	0	3	XXXXXXXXX	Context-Aware Computing	3	0	0	3	
Discipline Elective Courses						30	XXXXXXXXX	Internet of Things (IoT) for Smart Cities	3	0	0	3
XXXXXXXXX	AI in Civil Engineering	3	0	0	3	XXXXXXXXX	Smart Infrastructure	3	0	0	3	
XXXXXXXXX	Environmental Impact Assessment	3	0	0	3	XXXXXXXXX	Internal and External Infrastructure Monitoring	3	0	0	3	
XXXXXXXXX	Industrial Waste Management	3	0	0	3	XXXXXXXXX	Technical Answers to Real Problems Project	3				
XXXXXXXXX	Air and Noise Pollution Control	3	0	0	3	XXXXXXXXX	Design Project	3				
XXXXXXXXX	Solid Waste Management	3	0	0	3	XXXXXXXXX	Laboratory Project	3				
XXXXXXXXX	Geotechnical Earthquake Engineering	3	0	0	3	XXXXXXXXX	Product Development Project	3				
XXXXXXXXX	Groundwater Engineering	3	0	0	3	XXXXXXXXX	Computer Project	3				
XXXXXXXXX	Rock Engineering	3	0	0	3	XXXXXXXXX	Reading Course	3				
XXXXXXXXX	Traffic Engineering	3	0	0	3	XXXXXXXXX	Special Project	3				
XXXXXXXXX	Urban Planning and Development	3	0	0	3	XXXXXXXXX	Simulation Project	3				
XXXXXXXXX	Pre-stressed Concrete and Industrial Structures	3	0	0	3	Open Elective Courses					15	
XXXXXXXXX	Open Channel Hydraulics	3	0	0	3	Engineering Disciplines Projects Sciences Humanities Social Sciences Liberal Arts Economics Finance Entrepreneurship Management Skills Reading						
XXXXXXXXX	Natural Disaster Mitigation and Management	3	0	0	3	Project and Internship					35	
XXXXXXXXX	Remote Sensing and GIS	2	0	2	3	XXXXXXXXX	Summer Industrial Internship	1				
XXXXXXXXX	Construction Personnel Management	3	0	0	3	XXXXXXXXX	Project I	14				
XXXXXXXXX	Lean Construction	3	0	0	3	XXXXXXXXX	Project II / Internship(one semester)	20				
XXXXXXXXX	Human Resources Management in Construction	3	0	0	3	Non-Graded Credit Requirement					11	
XXXXXXXXX	Project Formulation and Appraisal	3	0	0	3	ICLE101N	Introduction to Engineering	0	0	0	1	
XXXXXXXXX	Infrastructure development and BOT, BOOT Projects	3	0	0	3	ISSC101N	Essence of Traditional Knowledge	2	0	0	2	
XXXXXXXXX	Formwork for Concrete Structures	3	0	0	3	ISSC102N	Indian Constitution	2	0	0	2	
XXXXXXXXX	Prefabricated Techniques and Management	3	0	0	3	IEXC100N	Extracurricular Activities	0	0	4	2	
XXXXXXXXX	Construction Techniques of Steel and Concrete Composite Structures	3	0	0	3	ICHY102N	Environmental Sciences	2	0	0	2	
						IHUM101N	Ethics and Values	2	0	0	2	