

Koneru Lakshmaiah Education Foundation (Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

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Department of Civil Engineering

Program: M.Tech-Construction Technology and Management

Academic Year: 2018-2019

Course Code	Course Name	Description of Course Outcome	
		Understanding the concept of green buildings and practices	
18CE5117	Green Buildings	Understanding the Cover De 'II' On the 'I' I By Cover 18	
		Understanding the Green Building Opportunities and Benefits and Gr	een Building Design
		Understanding the concept of optimal air conditioning	
		Understanding the concept of Material Conservation and Indoor Envi	ronment Quality and
		Occupational Health:	
18CE5118	Construction Materials & Concrete Technology	Understanding and knowing about the different construction materials	s properties
		Knowing about the special concretes	
		Knowing about the Tests on Concrete	
		Understanding the concept of Precast Concrete structures	
		Site visit and preparation of report	
18CE 5119	Construction Planning Scheduling and Control	Understand the Project Management, Project manager, organization s	tructures organizing and
		staffing the project office and team	ductures, organizing and
		Understand the Management functions, Directing, controlling, project	outhority intomos.
		influences, barriers, team building, communication, time management	t, conflicts
		Understand and explain Construction Planning milestone schedules, V	VBS, Network Techniques
1		CPM, PERT and Prima Vera, Resources leveling and smoothing.	, and a commence,
-		Understand Cost Control, operating cycles, cost account codes, Job co	ost report Projected Cost
		Estimates, status reporting, variance and earned value and Project Mar	nagement System MIS
		reporting, Daily, Weekly and monthly reporting, Actual vs. Planned of	Post reports Planning &
		Cost control document, Quality & Safety	cost reports, 1 familing &
The State State	** - ** ** ** ** ** ** ** ** ** ** ** **	Understanding the concept of One Dimensional Random Variable	
The Committee of the Co	Statistical Methods for	Understanding the Estimation Theory and Testing of Hypothesis	
	Management	Design of Experiments	D-DNOML RA
		Understanding the Queueing Models	HEAR)

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1 Tools and 162	in the staff was one a	Understanding the Standard types of Equipment
18CE 5221	Mechanized Construction and Machinery	Knowing the Earthmoving Equipment-I
		Knowing the Earthmoving Equipment- II
		Knowing the Pumping Equipments
		Preparation of report on Different equipment types and their usage
e ×	Project Formulation Appraisal	To study elements of project formulation and appraisal
10CE 5000		Gain knowledge on project costing and appraisal
18CE 5222		To understand the financial aspects of projects.
		To study the scope and applications of private sector participation in construction projects
		Understanding the Construction Contracts
	Construction Laws and	Understanding the Tenders
18CE 5223	Regulations	Understanding the concept of Arbitration
		Understanding the Legal Requirements and Labour Regulations
1		Understand concepts of quality management, system requirements and documentation.
140	Quality Management and	Understand quality planning and programs in construction industry.
18CE 5224	Safety Management	Understand objectives, techniques for testing and analysis and application of tools for
	Systems in Construction	improvement of quality
12		Understand the fundamentals of safety management systems in construction industry
		Demonstrate procedures and quality assurance systems and safety management systems in
		construction projects.
		Introduction to High Performing Buildings
		Understanding the High-Performance Building Concepts and Practices
18CE 5111	High Performance Buildings	Understanding the High-Performance Building Design and Air Conditioning
		Understanding the Material Conservation and Indoor Environment Quality and Occupational
		Health
	Precast Concrete Structure	Introduction to Precast Concrete Structures
100E 5470		Knowing about the Prefabricated components
18CE 51I2		Understanding the Design Principles
		Understanding the Joint in Structural Members and Design for abnormal loads
10	Special Concrete	Understand the manufacturing process and additional ingredients of concrete
18CE 51I3		Recognize different types of special concretes
		Calculate the different mix designs of concrete
		Thoroughly know the mechanical properties and durability of concrete
18CE 51I4	Structural Health	Understanding the Static Field Testing
		Dynamic Field Testing
		Understanding the Periodic and Continuous Monitoring of structures Dr.
		Understanding the different types Structural Cracks
	5 T F T F T T T T T T T T T T T T T T T	Understanding about Manpower Planning Department of Civil Engin
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	Construction Personnel	Understanding about the Organisation
18CE 51J1	Management	Understanding about Human Relations and Organizational Behaviour
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Understanding the Welfare Measures, Management and Development Methods
F-1		Understanding the Water Supply and Electric Services
18CE 51J2	Building Services, Maintenance Management	Understanding the Drainage and Solid Waste Disposal methods
		Understanding the Fire Fighting Services, Plumbing and Firefighting Layout of simple building
		Understanding the Illumination and lighting design
	Infrastructure Valuation	Understand the fundamentals of Value, worth and value engineering and also understand the
		general techniques in infraction valuation.
18CE 51J3		Gain knowledge on the various special techniques in infrastructure valuation.
		Understand the different numeric analysis techniques in value engineering and study life cycle
		cost.
		Recognize the applications of value engineering
		Understanding the Construction accounting
	Construction Economics &	Understanding the Benefit-cost analysis
18CE 51J4	Finance	Understanding the Turnkey activities
		Understanding the International finance
	Environmental Impact Assessment on built Environment	To acquire the Knowledge of Environmental Technology.
		To attain Strong base of knowledge of EIA
18CE 52K1		To obtain the Knowledge of EIA Methodologies
3		To know the Risks to Environment and Human, Health to solve societal problems
	Deep Excavations and ground water control methods	Understanding about the Deep Excavation
		Understanding about the Roads, Tunnels and Dewatering
18CE 52K2		Understanding about the Grouting Methods
		Understanding about the Piling & Coffer dams and Caisson
18CE 52K4	Form Work for Construction Structures	Understanding about Planning, site equipment and plant for form work
		Understanding about Materials accessories proprietary products and pressures
		Understanding the Design of forms and shores
		Understanding the building and erecting the form work methods and forms for domes and
		tunnels, slip forms and scaffoldings
18CE 52L1	Emerging construction Technologies	Knowing and understanding about the emerging construction technologies
		Knowing and understanding about the Modular FRP Composite Bridge Deck construction
		procedures
		Understanding the Post-Tensioned Steel Structure construction procedure
		Understanding the behaviour of Low Temperature Concrete Admixture

Dr. P. POLU RAJU
HEAD
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18CE 52L2	Building Envelopes	Understanding the Building envelop systems
		Understanding about foundation construction
		Understanding about wall construction and roof construction
		Understanding about window, door installation and ventilation system; building envelope best practices
18CE 52L3	Construction and fire safety	Understanding about the Classification of fire
		Understanding about the Site planning and housekeeping
		Understanding about the Safety in scaffolding
		Understanding about the Road work and pilling operation
18CE 52L4	Resource Management and Control in Construction	Understanding about the Resource Planning
		Understanding about the Labour Management
		Understanding about the Materials and Equipment
		Understanding about the Time Management, Resource Allocation and Leveling
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Dr. P. HODURAJU
HEAD
Department of Civil Engineering
Oneru Lakshmalah Educational Foundation (Deemed to be University)
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