

**Chairperson:**

Dr. Ch. Hanumantha Rao, Prof & HOD, CE

**Organising Committee (CTM):**

Dr. Marimuthu K, Asso.Prof, CE

Dr. Ashwin Raut, Asso.Prof, CE

Mr. Kone Venkatesh, Asst.Prof, CE

Mrs. B. S. S. Ratnamala Reddy, Asst.Prof, CE

**Advisory Committee:**

Dr. K Subba Rao, Principal, COE

Dr. N. Venkatram, Dean (Academics)

Dr. A. V Rao, Prof., CE

Dr. B. Kameshwara Rao, Prof., CE

Dr. A. Aravindan, Prof., CE

**Assisting Committee:**

Dr. Veerendrakumar C Khed, Asso.Prof., CE

Dr. Sanjeet Kumar, Asso.Prof., CE

Dr. Umesh Kumar Singh, Asso.Prof., CE

Dr. Naga Chaitanya K, Asst.Prof., CE

Dr. Syed Hamim Jeelani, Asst.Prof., CE

Mr. J.D. Chaitanya Kumar, Asst.Prof., CE

Mr. K. Shyam Chamberlin, Asst.Prof., CE

Mr. K. Hemanth Raja, Deputy HoD, CE

Mr. Yerramsetty Himath Kumar, Asst.Prof., CE

Mr. Bodapati Gnana Rahul, Asst.Prof., CE

Mr. Tadanki Venkat Das, Asst.Prof., CE

Mr. Siva Kishore Ikkurthi, Asst.Prof., CE

Mrs. Velpula Sree Lakshmi, Asst.Prof., CE

Mr. K. Jyothishya Brahma Chari, Asst.Prof., CE

Mr. Gangisetty Sri Harsha, Asst.Prof., CE

Mr. Lingeshwaran, Asst.Prof., CE

Mr. Sunny Agarwal, Asst.Prof., CE

Mr. Namburu Sandeep Kumar, Asst.Prof., CE

Mr. Mangalampalli Anil Kumar, Asst.Prof., CE

Mr. Yadlapalli Vinod, Asst.Prof., CE

Mr. Achyutha Kumar Reddy, Asst.Prof., CE

Mrs. Ch. Mallika Chowdary, Asst.Prof., CE

**Resource Persons:**

Dr. Rahul V. Ralegaonkar, Professor, VNIT, Nagpur

Dr. V. Balakumar, Sr Consultant at Simplex Infra Ltd

Mr. G. Boopathi, Director (Uniqcore Const. India Pvt Ltd)

Ar. K. Sundararaman, Asso. Prof. (RSA), Scholar (IITM)

Mr. E. Vetriselvan, Manager-Projects (EPMCR)

Ms. S. Manna Simon, Doctoral Research Scholar (IITM)

Ms. Sreelakshmi S, Doctoral Research Scholar (IITM)

Mr. Vinay Mathews, Chartered Engineer (Ind. Consultant)

Mr. Manu K Poulouse, Doctoral Research Scholar (IITM)

Dr. B. Sudheer Kumar Reddy, Asst. Prof (Sreenidhi)

Mr. Balasubramani Mahesh, Asst. Prof. (NICMAR-H)

Mr. P. Mohan Chandra, Doctoral Research Scholar (IITM)

Mr. Rakshith Komalan H K, Engineer (NCBS-TIFR,Bengaluru)

Mr. Srinath P, Doctoral Research Scholar (IITM)

Dr. Karthik Dasari, Research Assistant (Freelancer)

Mr. Santhosh L, Research Associate (L&T), Scholar (IITM)

Mr. S. Shriram, Asst. Prof. (Amrita College of Engg- Chennai)

Mr. Varun Kumar Reja, Doctoral Research Scholar (IITM)

Mr. S. Shanmugaraj, Project Officer (IITM)

Mr. Pavankumar Tadepalli, MS Scholar (IITM)

For more Details Contact:

**Dr. Marimuthu K**

Associate Professor, Civil Engineering Department, KLEF.

E-Mail: marimuthukan@kluniversity.in | Mobile: 91502 47641

One Week Online FDP on  
**CONSTRUCTION  
TECHNOLOGY** and  
**MANAGEMENT**

A Bird's-Eye View

24<sup>th</sup>-29<sup>th</sup>, August, 2020



**KL**  
(DEEMED TO BE UNIVERSITY)

Department of  
**Civil Engineering**

### About KL Deemed to be University:

Koneru Lakshmaiah Education Foundation was established in 1980-81, as K.L. College of Engineering, which was upgraded to K.L. College of Engineering Autonomous in 2006 by UGC, and was declared as a Deemed to be University in 2009 by UGC, MHRD Govt. of India. In 2012 as a Deemed to be University, the institution was accredited by NAAC with A Grade and later in 2018, was re-accredited by NAAC with A++ grade. In 2019 UGC, MHRD declared this institute as Category I Institution.

### About the Civil Engineering Department:

The Department of Civil Engineering was established in the year 1980 with an intake of 60 students and 5 Faculty as part of K. L. College of Engineering. The department has been successful in producing excellent and well-trained graduates. Today we have 590 Students (UG & PG) and 45 faculty members drawn from premium institutes throughout India, out of whom 5 Professors, 10 Associate Professors and 30 Assistant Professors. The Department is offering Courses for Undergraduate program in Civil Engineering, Post graduate Programs in Structural Engineering, Construction Technology and Management, Energy and Environmental Technologies, Geo-Informatics and Geotechnical Engineering. The department offers Ph. D in different specialization of Civil Engineering. The department is actively involved in research and consultancy with more than 500 Scopus Indexed Publications in the last 5 years.

### About the FDP:

Construction Technology management refers to the discipline of overall planning, coordination, and control of projects from beginning to completion. This gives the students scientific principles involved in construction, an understanding of the behaviour of various knowledge management areas, such as scope, schedule, cost, quality, safety, resources, sustainability etc., Construction technologists should have good knowledge about various concepts, like Lean Construction, Building Information Modeling (BIM), Robotics and Automation, and Construction methods and technologies to ensure meeting the customer value. The latter technologies are in the nascent stage of adoption in India and world-wide. Yet to understand the multifarious applications of construction technologies to improve the construction management functions. To fill this gap, the Department of Civil Engineering, K L Deemed to be University organising this FDP along with industry experts, academicians, scholars, and consultants to address the gap. Practicing Engineers, construction consultants, faculty, research scholars, PG and UG students can attend the program.

**Registration Link:** <http://tiny.cc/n63osz>

**FDP Link (MS Teams):** <http://tiny.cc/h63osz>



### Course Content:

#### Theme 1: BIM and Lean

Lean in Construction (Introduction, Lean concepts, RepairCo Game, Challenges in Adoption); Technology adoption in Construction Industry (Theory in construction management); BIM - An overview (BIM, BEP, advantages/uses, challenges)

### Theme 2: Finance and Contracts

Relationship between Contractor and Sub-contractor (Questionnaire survey; SPSS); Project risks and flexible contracts (Uncertainty, Flexibility, Real Options Analysis); Megaproject management

### Theme 3: Sustainability

Sustainable construction - Primer (Overview of sustainable construction, Three pillars with focus on Environment in construction industry, Measurement); Sustainable construction - Global perspective (Global perspective, Indicators, SuRE, Intelligent sustainable design, and PPP for sustainability); Sustainable construction materials, technologies and product performances

### Theme 4: Planning and Scheduling

Construction Project Scheduling: Best Practices, Tools and Techniques (Project Controls, Critical Path Method (CPM), Precedence Diagram Method (PDM), Construction Project Schedule, Baseline); Construction Labour Productivity (Measurement Techniques at various levels, Benchmarking, Schedule Management); Workforce management challenges in Indian construction projects (Socio-economic background of Indian construction workforce, Issues with respect to skills and productivity, Ways forward for effective management of workforce)

### Theme 5: Safety & Building Science (incl. robotics & automation)

Building and its influence on occupants; Modern Solutions for Construction Safety Management (Construction Safety, IoT Applications, VR-Based Safety Training); Construction Site Accidents - A critical appraisal; Automation in Construction (Trends in Robotics and Automation in construction)

### Theme 6: Quality (incl. methods)

Total Quality Management (Overview and Industry level examples of TQM, QA & QC implementation); Quality audit in construction (Third party quality audit in residential projects); Challenges in Underground Metro construction; Construction methods and technologies for low cost housing (Low cost housing, alternative technologies of construction, overview of these technologies)



Day / Timing	9:30 AM – 10:30 AM	10:30 AM – 11:30 AM	11:30 AM – 12:30 PM	12:30 PM – 1:30 PM	1:30 PM – 2:30 PM	2:30 PM – 3:30 PM	3:30 PM – 4:30 PM
<b>Aug 24 MON</b>	Lean in Construction - Introduction & Concepts <b>SMS</b>		Construction Site Accidents - a Critical appraisal <b>BV</b>	Total Quality Management <b>SSM</b>	<b>LUNCH BREAK</b>	Megaproject Management <b>BM</b>	
<b>Aug 25 TUE</b>	Sustainable Construction – Primer <b>MC</b>		Technology adoption in Construction Industry <b>VM</b>			Sustainable Construction Materials, Technologies, and Product Performances <b>RVR</b>	
<b>Aug 26 WED</b>	Building Information Modeling - An overview <b>SS</b>		Relationship between Contractor and Sub-contractor <b>SKR</b>			Automation in Construction <b>KSR</b>	
<b>Aug 27 THU</b>	Building and its Influence on occupants <b>SSR</b>		Project Risks and Flexible Contracts <b>MKP</b>			Challenges in Underground Metro Construction <b>BG</b>	
<b>Aug 28 FRI</b>	Quality Audit in Construction <b>VE</b>	Modern Solutions for Construction Safety Management <b>VKR</b>	Sustainable Construction - Global perspective <b>RKHK</b>			Construction Methods and Technologies for Low Cost Housing <b>PT</b>	
<b>Aug 29 SAT</b>	Construction Project Scheduling: Best Practices, Tools and Techniques <b>PS</b>		Construction Labour Productivity <b>DKD</b>			Workforce Management Challenges in Indian Construction Projects <b>SL</b>	

Certificate will be provided on the successful completion and submission of theme-wise mind-map

**SMS: Ms. S. Manna Simon**

**SS: Ms. Sreelakshmi S**

**VM: Mr. Vinay Mathews**

**MKP: Mr. Manu K Poulose**

**SKR: Dr. B Sudheer Kumar Reddy**

**BM: Mr. Balasubramani Mahesh**

**MC: Mr. P. Mohan Chandra**

**RKHK: Mr. Rakshith Komalan H K**

**RVR: Dr. Rahul V. Ralegaonkar**

**PS: Mr. Purushothaman Srinath**

**DKD: Dr. Karthik Dasari**

**SL: Mr. Santhosh Loganathan**

**SSR: Mr. S Shriram**

**VKR: Mr. Varun Kumar Reja**

**BV: Dr. Balakumar Venkatraman**

**KSR: Ar. K. Sundararaman**

**SSM: Mr. S Shanmugaraj**

**VE: Mr. Vetriselvan Elangovan**

**BG: Mr. Boopathi Gnanavelu**

**PT: Mr. Pavankumar Tadepalli**