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#### **Registration Process:**

**Registration through the given Google form link** https://forms.gle/92ubBmSeAyJeB5oa6

#### **Registration Fee:**

No Registration Fee and it is absolutely at free of cost

Participation Certificates will be given to all the participants after successful Participation in FDP by maintaining 85% of minimum attendance, submitting feedbacks, attending FDP End exam and scoring at least 50% of Marks

#### Correspondence **Details:**

Dr A.H.L.Swaroop Co-ordinator M:9491678603

Mr M Durga Rao Co-coordinator M:8121230961

# **One** Week Online **Faculty Development Programme**

on

# **Applications of Artificial Intelligence & Machine Learning in Civil Engineering**

# 20th to 25th Feb, 2023



## ORGANISED BY

## **DEPARTMENT OF CIVIL ENGINEERING**

SESHADRI RAO GUDLAVALLERU ENGINEERING COLLEGE (An Autonomous Institute with Permanent Affiliation to JNTUK, Kakinada) (Sponsored by A.A.N.M & V.V.R.S.R Educational Society, Gudlavalleru) Seshadri Rao Knowledge village, GUDLAVALLERU Ph: 08674-273737 www.gecgudlavalleru.ac.in

### **About College**

The college is promoted by AANM & VVRSR Educational Society, Gudlavalleru and was established in 1998.The college is situated in Gudlavalleru, surrounded by lush green fields, providing serene atmosphere to learners. Present in the college offers B.Tech. programmes in Eight branches of Engineering, viz, CE, EEE, ME, ECE, CSE, IT, AI&DS, IoT. It also offers Six PG programmes Five in Engineering (M.Tech.) and One in Management (MBA). The college is permanently affiliated to JNTUK, Kakinada and obtained Autonomous status from U.G.C. in 2014. All eligible B.Tech engineering programs are accredited by NBA, New Delhi and the college is also accredited by NAAC, New Delhi.

The Institution is continuously striving for excellence by adopting changes as and when required to improve the systems, practices and performance.



### **About Civil Engineering Department**

The Department is offering a full time four year B.Tech. "Civil Engineering" Programme, and a two year M.Tech. Programme in "Structural Engineering". The department has been successful in working closely with other departments to promote interdisciplinary learning as well as Research & Development activities. The department focuses on conducting Research & Development activities in the fields of water and land resource inventory, mapping, monitoring and management of environment and ecosystems in the region and also Disaster Management. Further, the department is endowed with well-equipped laboratories, library, qualified & dedicated faculty and technically sound supporting staff. The department is offering consultancy services in designing, material / soil testing, surveying etc. It is continuously striving to impart quality education and enhancing competitive spirit amongst students for academic excellence in academics

## **About the Faculty Development Program**

Artificial intelligence is to develop the machine elements that analyze the human's thinking system and reflect the same to reality. In recent years, artificial intelligence applications have found a wide range of applications in civil engineering and the other engineering branches. The increase in artificial intelligence studies with great acceleration shows that the use of artificial intelligence in engineering branches will increase in the coming years. Especially hybrid artificial intelligence studies in the fields of structural engineering, construction management, hydrology, hydraulic engineering, geotechnical engineering, environmental engineering, transportation engineering, coastal and ocean engineering, and materials of construction form the basis for prevention of cost overruns, better design of buildings through generative design, risk mitigation, project planning and maintenance of job sites to improve productivity, construction safety. addressing labour scheduling, off-site construction and addressing post-construction issues.



## **Resource Persons and Topics**

#### 1. Prof S.T.G. Raghu Kanth

Professor of CE IITM, Chennai **Topic:**Machine Learning Applications in Earthquake Engineering

### 2. Dr. Kamatchi

Senior Principal Scientist & Head ASTRL, CSIR-SERC, Chennai **Topic:** Application of ANN for seismic analyses of framed buildings for site-specific earthquake

### 3. Er. Nandika Srinivas Rao

Assistant General Manager Ultratech Cement Ltd, Hyderabad **Topic:** Role of Digitalization & AI in Construction Industry.

#### 4. Prof K. Srinivas Raju

Professor of CE, BITS Hyderabad Topic: Machine Learning Algorithms for Flood Susceptibility Assessment

5.Dr Manali Pal AssistantProfessor of CE,

## NITW, Warangal

Topic: Applications of AI/ML in prediction of Hydroclimatic Events.

## 6 Prof. Rajib Maity

Professor of CE IIT, Kharagpur Topic: Machine Learning in Hydroclimatology and Water Resources Engineering