FACULTY DEVELOPMENT PROGRAMME

APPLICATIONS OF ARTIFICIAL INTELLIGENCE & MACHINE LEARNING IN CIVIL ENGINEERING
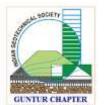
Jointly organized by

Department of Civil Engineering
R.V.R. & J.C. COLLEGE OF ENGINEERING, GUNTUR
&
IGS GUNTUR CHAPTER

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About college

R.V.R. & J.C. College of Engineering (Autonomous), Guntur established in 1985 is one of the premier engineering colleges in Andhra Pradesh in the self-financing category. Promoted by Nagarjuna Education Society, R.V.R. & J.C. College of Engineering is the most sought after college in the region. The institute offers 11 undergraduate programmes & 8 postgraduate programmes. The premier status of the institution is made possible by sticking to the core-principles of student-focus, Human Resource Development and emphasis on total quality which helps students for lifelong learning. To its credit, the institution has been accredited 6 times for all eligible courses by the National Board of Accreditation, AICTE in 1998, 2002, 2007, 2012, 2017, & 2021 and received NAAC - A+ Grade in 2021. The institute is under NIRF rank band 201 – 250 and ISO 9001:2015 certification from 2019.

About Department

The department of Civil Engineering, established in 1985, offers B. Tech programme in Civil Engineering and M. Tech programme in Structural Engineering. The department has well qualified and experienced teaching faculty and highly skilled and motivated technical staff to provide quality education. All the staff members are passionate and dedicated towards teaching and have the welfare and prospect of the students as their main interest. The UG course had been accredited by N.B.A. and awarded 'A' Grade for three years in 1999, 'A' Grade for five years in 2002, 'A' Grade for five years in 2007, and accredited for three years in March, 2022. The Department has well established and state-of- the-art laboratories to cater to the needs of the students. It offers consultancy services to various Government and Private Organizations. The department takes active role in conducting seminars, workshops etc. in all major disciplines of Civil Engineering.

About IGS Guntur Chapter

Inaugurated in the year 2003, Indian Geotechnical Society (IGS) Guntur Chapter has been one of the most vibrant chapters of the National professional body. The chapter, with more than 200 members, has organized several conferences, seminars and work-shops during the last ten years. Guntur chapter, in associating with R.V.R & J.C College of Engineering, successfully conducted prestigious National Conference, IGC-2009. The chapter has conducted more than 50 webinars during Corona virus pandemic period and received appreciation certificates twice from IGS National Body for its contributions.

Registration Link: https://forms.gle/ADWAJNqrygwpftNw8

Who can attend: Faculty, Industry persons, Research Scholars, and Students of Civil Engineering

About Faculty Development Programme

Artificial intelligence is a branch of computer science, involved in the research, design, and application of intelligent computer. Traditional methods for modeling and optimizing complex structure systems require huge amounts of computing resources. Artificial-intelligence-based solutions can often provide valuable alternatives for efficiently solving problems in Civil Engineering. The various disciplines of AI which play a vital role in solving complex Civil Engineering problems include Machine Learning, Deep Learning, Fuzzy Logic, Pattern Recognition, and Neural Networks. Some of the applications of AI in Civil Engineering are preventing cost overruns, better design of buildings through generative design, risk mitigation, project planning, maintenance of job sites to improve productivity, construction safety, addressing labor scheduling, off-site construction, addressing post construction issues. This FDP on "Applications of Artificial Intelligence and Machine Learning in Civil Engineering" is aimed at imparting knowledge on the fundamentals of Artificial Intelligence and Machine Learning and its applications in various specializations of Civil Engineering. Expert lectures will be delivered by eminent resource persons from academics & industry. This program will be beneficial to Faculty members, Research Scholars, Practicing Engineers and Students of Civil Engineering.

PROGRAMME SCHEDULE

1)"Applications of Artificial Intelligence in Civil Engineering"
Dr. Venkata Dilip Kumar Pasupuleti
Associate Professor and Head, Center for Sustainable Infrastructure and Systems (CSIS), Mahindra University, Hyderabad.
27.10.2022, THRUSDAY, 7PM

2)"Vision based damage monitoring of structures using deep learning"
Prof. Prafulla Kalapatapu
Head, Center for Sustainable Infrastructure and Systems (CSIS), Coordinator, Artificial Intelligence Ecole Centrale School of Engg, Mahindra University, Hyderabad.
28.10.2022, FRIDAY, 7PM

3)"Neural Network and Fuzzy Applications in Traffic Flow Modelling"
Dr. Ravi Shankar K.V.R.
Associate Professor and Head, Transportation Division, Department of Civil Engg, National Institute of Technology Warangal, Telangana, India
03.11.2022, THRUSDAY, 7PM

4) "Application of Artificial Intelligence, Machine Learning, and Deep Learning in Contaminated Site Remediation"
Dr. K V N S Ravi Teja
Assistant Professor, Civil Engineering, SRM University, AP

Dr. Krishna R. Reddy
Professor, Department of Civil, Materials, and Environmental Engineering, University of Illinois, Chicago, USA
04.11.2022, FRIDAY, 7PM

5)"Evolutionary Algorithms for Optimal Reservoir Operation"
Dr. D. Nagesh Kumar
Professor, Dept. of Civil Engineering
Indian Institute of Science, Bangalore.
10.11.2022, THRUSDAY, 7PM

6) "AI Enabled Remote Sensing and GIS Solutions to Civil Engineering Problems"
Mr. S. Mohammed Hasif Meera
Senior Developer - GIS,
Red leaf Technologies Pvt Ltd, Coimbatore
11.11.2022, FRIDAY, 7PM

7) "ML &AI: Future of Construction"
Dr Sachin Jain
Consultant in Robots and
Automation in Construction, Pune
17.11.2022, THRUSDAY, 7PM

8)"Applications of Machine Learning and AI to Building Information Management (BIM)"
M. Ranadheer Reddy
Project Engineer - Special Degree Programs
Asian Institute of Technology, Thailand
18.11.2022, FRIDAY, 7PM

9)"Applications of hybrid AI in Civil Engg"
Dr.Pijush Samui
Professor, Department of Civil Engineering, NIT Patna
24.11.2022, THRUSDAY, 7PM

10)"AI and ML in Geospatial Technology with few Water Resources Engg Applications"
Dr CJ Jagadeesha
Former Scientist ISRO- NRSC- RRSC- Bangalore South, India
25.11.2022, FRIDAY, 7PM

NOTE:

TO REGISTER Click Here

1. **Registration Fee: Rs 200/-. Last date to register: 26-10-2022**
2. **Fee Payment Details are provided in the registration form. Uploading the fee receipt through the registration form is compulsory.**
3. **Link for FDP will be sent to registered candidates through mail.**
4. **E-Certificate will be sent to all the registered active participants after receiving feedback form for individual lectures.**
5. **Course certificate will be issued to all the participants who have attended 75% of lectures and upon successful completion of assessment test.**