

**Golden Jubilee Year of Siddhartha
Academy of General & Technical
Education, Vijayawada**



**One Week Faculty Development
Program on**

**Integrating AI and ML into Civil
Engineering Applications
(Hybrid Mode)**

28.04.25 to 03.05.25



**Organized by
Department of Civil Engineering
VR Siddhartha School of Engineering
SIDDHARTHA ACADEMY OF HIGHER
EDUCATION**

(Deemed to be University)

**In Collaboration with
Department of Civil Engineering
National Institute of Technology
Warangal, Telangana**

Chief Patrons

Sri KV Chowdary, IRS
Chancellor, SAHE

Prof. Bidyadhar Subudhi
Director-NIT Warangal

Patrons

Prof P Venkateswara Rao,
Vice Chancellor, SAHE

Prof A V Ratna Prasad,
Pro- Vice Chancellor, SAHE

Prof B Panduranga Rao
Director, Infrastructure & Consultancy

Prof D Venkat Rao, Dean, VRSSE

Convenor

Dr V Mallikarjuna,
HoD, CED, VRSSE, SAHE

Dr. K. Venkata Reddy,
Professor & HoD, CED, NIT-Warangal

Coordinators

Dr. S. R.R.Teja Prathipati,
Assistant Professor, CED, VRSSE, SAHE

Dr. K.Gopi Krishna,
Associate Professor, NIT Warangal

Dr. Anuja Charpe,
Assistant Professor, CED, VRSSE, SAHE

VRSEE & SAHE– an Overview

In 2024, VR Siddhartha Engineering College was declared as a deemed-to-be university under Section 3 of the UGC Act, 1956 by Ministry of Education, Government of India. With a legacy of educational excellence, the institution's UGC-granted autonomy, renewed through 2027-28, provides a strong foundation for its transformation. Established in 1977, we are the first self-financed engineering college in the combined state of Andhra Pradesh. Offering 9 UG and 7 PG programs, we have student strength of 1470. Accredited by NBA since 1998 and recognized for Outcome Based Education (Tier I) since 2013, we are ranked 141st in NIRF (2022). Only private institute in A.P. selected for MARGADARSHAN scheme by AICTE to share & Mentor institutions in the region for quality upgradation & accreditation of the programs. Only self-financing institution in A.P recognized as a Band-Excellent Institution under ARIIA (Atal Ranking of Institutions on Innovation Achievements) by MHRD. The college is also accredited by NAAC with 'A+' grade, and also certified by "ISO – 21001:2018. Ours is one of the TEQIP S.C.1.2 institutions in the country awarded with a World Bank Grant by MHRD, Govt. of India. Our students benefit from strong alumni support, international exposure, and state-of-the-art facilities, including solar power generation for sustainability.

NIT Warangal – an Overview

National Institute of Technology (NIT) Warangal is the oldest one in the bracket of first 17 NITs. It is the first regional engineering college whose foundation stone has been laid by the former prime minister, Pandit Jawaharlal Nehru in the year 1959. Over a period of more than six decades, NIT Warangal has emerged as one of the leading institutions in engineering and technology. Warangal is the second largest city of the state of Telangana, Hyderabad being the first one which has several places of interest to visit. Some of the cultural heritages worth seeing in Warangal are Ramappa Temple, Bhadrakali Temple and thousand pillar temples. NIT Warangal is poised to create an ambience for nurturing innovation, incubation, creativity and excellence within its faculty and students towards achieving the sustainable development goals. We emphasize on student centric education with interdisciplinary research and development for the benefit of Industry and Society. NIT Warangal becomes a preferred institution for top rankers in Joint Entrance Examination (Main) because of its excellent teaching learning process, infrastructure that a student needs for effective learning. Over the years the college has established itself as a premier Institute imparting technical education of a very high standard leading to the B.Tech degrees in various branches of engineering, M.Tech, and PhD programmes in various specializations. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

ABOUT THE DEPARTMENT

VRSSE & SAHE – One of the oldest departments of the college offers undergraduate and postgraduate program (Structural Engineering). Both programs are accredited by NBA. The department is privileged to be recognized as one of the best Civil Engineering departments in the country as we are awarded Best Industry Institute Linked Technical Institute. Funding for research helps the department to maintain and modernize our research infrastructure. The department has state of the art advanced laboratories to cater the needs of students, research and consultancy. The department has total faculty of 28, with 19 doctorates. The number of sanctioned students for B. Tech., and M. Tech. SE. are 120, and 18, respectively, per year. Currently, the department has 16 Ph.D. scholars. The department takes pride in its highly experienced faculty specialized in all major specializations of Civil Engineering. VCMTL lab has NABL Accreditation.

NIT Warangal – The Department of Civil Engineering is one of the oldest departments of the National Institute of Technology, Warangal (NITW). Established as one of the major departments of the Institute, since its inception in 1959, the Department of Civil Engineering has been actively engaged in teaching and research in diverse fields of Civil Engineering. With excellent faculty, the Department of Civil Engineering offers Under Graduate (B.Tech.) and Post Graduate (M.Tech) in Engineering Structures, Water Resource Engineering, Geotechnical Engineering, Transportation Engineering, Remote Sensing and Geographical Information Systems, Environmental Engineering, Construction Technology and Management, Waste Management and research (Ph.D) programmes. Vision of the department is to be a knowledge nerve centre in civil engineering education, research, entrepreneurship and industry outreach services for creating sustainable infrastructure and enhancing quality of life. Mission of the department is to generate a specialized cadre of civil engineers by imparting quality education and training.

ABOUT THE FDP

The Faculty Development Program on "Integrating AI and ML into Civil Engineering Applications" explores the emerging role of Artificial Intelligence and Machine Learning in revolutionizing core civil engineering domains. Participants gain foundational knowledge of AI/ML along with insights into their real-world applications in structural, geotechnical, transportation, water resource, and environmental engineering. The sessions feature case studies and expert insights on AI-powered infrastructure monitoring, geospatial analysis, and sustainable engineering solutions. With speakers from premier institutes like NITs, IITs, and leading industries, this FDP aims to equip faculty members with the technical skills and interdisciplinary perspective necessary to integrate intelligent systems into teaching, research, and practice. This FDP aims to equip faculty with the knowledge and skills to integrate these cutting-edge solutions into teaching and research.

TOPICS COVERED

- Introduction to core concepts, types, and applications in civil engineering.
- Neural networks for bridge assessment, AI in structural health monitoring.
- AI in soil behavior modeling, advanced geomaterial characterization, and sustainable ground engineering.
- Integration of AI/ML with Building Information Modeling for collaborative project management and monitoring.
- AI-driven solutions for water resource management, e-waste handling, and sustainable technologies.
- AI-enhanced GIS, spatial data analysis, and modeling of intelligent transportation systems.

ADDRESS FOR COMMUNICATION

Dr. S. R.R.Teja Prathipati,
Assistant Professor, CED, VRSSE, SAHE
Mail ID: teja@vrsiddhartha.ac.in
Mobile. No: 9959032163

ELIGIBILITY

All interested Faculty, Research Scholars, PG Students, and Industry Personnel

REGISTRATION DETAILS

Faculty, Research Scholars, PG Students, Industry Participants: Rs. 500/- (Inclusive of GST)
Last date for Registration: 28.04.2024

DETAILS FOR PAYMENT



(Please copy the payment transaction ID and place it in the registration link given below)

REGISTRATION LINK

Fill the registration link given below after the payment:

https://docs.google.com/forms/d/1wMvzJ-e9KLP9SPXfW-IdFY-sSyLihLCosBi3Q_P93uY

GUIDELINES TO THE PARTICIPANTS

- Accommodation, T.A and D.A will not be provided to the participants.
- Timing: 2:00 PM – 5:00 PM (28.04.25 to 03.05.25)
- The link for the different sessions will be emailed to the registered participants.
- An online test will be conducted at the end of the FDP.
- The certificate will be issued for those participants who have attended the program with minimum 80% attendance and scored minimum 60% marks in the test.