ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON
Soft Computing Techniques in Geotechnical Engineering
with Emphasis on Pile Foundations
(14th March – 26th March 2022)
Organised by
Electronics & ICT Academy, NIT WARANGAL
(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI
in association with
Department of Civil Engineering, Vardhaman College of Engineering, Hyderabad

Preamble:
"Electronics & ICT Academy" was set up at NIT Warangal with financial assistance from MeitY, GOI. The jurisdiction of this academy is Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry and Andaman & Nicobar Islands. This academy's role is to offer Faculty Development Programmes in standardized courses and emerging areas of Electronics, Information Communication Technologies, training & consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

About the FDP:
Soft computing helps users to solve real-world problems by providing approximate results that conventional and analytical models cannot solve. The modern-day geotechnical engineers have a huge responsibility to design infrastructure that are to be constructed on soils having low bearing capacity. Dealing with very large design loads and a poor soil at shallow depth, or site constraints like property lines, a deep foundation is likely to be the optimum solution. Deep foundations are usually subjected to different types of loads namely seismic, cyclic, axial, lateral, and uplift loads. Hence design of these deep foundations for different applications is complex in nature. This workshop focuses on the advanced design of deep foundations for seismic, high-rise, and bridge structures. It covers all the aspects related to design and application of various techniques available for design of deep foundations. This workshop also provides hands on experience for participants in the softwares such as PLAXIS 3D, ANSYS and ABAQUS.

Major Course Contents:
1. Overview on soft computing techniques in geotechnical engineering.
2. An overview on Pile Foundations
3. Analysis and design of Axially Loaded piles
4. Numerical modelling of actively and passively laterally loaded piles
5. Pile groups in sloping ground
6. Pile foundations subjected to seismic forces
7. Soil-Pile interaction studies
8. Performance based design of pile supported structures
9. Hands on experience sessions for PLAXIS 3D, ANSYS and ABAQUS

Faculty conducting this programme:
The programme will be conducted by the faculty members from NIT Warangal; Academicians in the concerned field from IITs/NITs and other premier institutions are invited to deliver lectures in the programme. Speakers from industries are also expected to deliver as part of the course.

Registration fee:

| Faculty and Research Scholars | Rs. 500/- |
| Industry Participants         | Rs. 1500/- |

Participants need to pay the Registration Fee Online using the following details:

Online Transfer Details
Account Name: Electronics & ICT Academy NITW
Account No: 62423775910
IFSC: SBIN0020149
Bank and Branch: State Bank of India, NIT Warangal

How to apply:
Participants are required to fill the online registration form by clicking on the following link:
https://forms.gle/pYaRzJ3E3Zm7eRD9

Selection Criteria:
Selection will be done based on first-come-first-serve basis to a maximum number of 60 (sixty). Additionally, 10 participants from industry are allowed to participate. The list of selected participants will be intimated through e-mail. Candidates will be issued satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

Important Dates:

| Last date (Application & DD) | 12.03.2022 |
| Selection List by E-mail     | 13.03.2022 |
| Duration                      | 14.03.2022 to 26.03.2022 |

About NIT Warangal:
National Institute of Technology, Warangal is the first among 17 RECs setup as joint venture of the Government of India and the state government. 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 Ph.D programmes in various specializations. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

About Vardhaman College of Engineering:
Vardhaman College of Engineering (VCE), established in 1999, is an autonomous college affiliated to Jawaharlal Nehru Technological University (JNTU), Hyderabad. The college is approved by the All-India Council for Technical Education (AICTE), ranked 141 of top 200 in NIRF and accredited by NAAC with Grade ‘A++’. In addition, six of the UG programs are accredited by NBA under Tier-I. Salient features of the college: Well-disciplined conducive academic environment and serene green ambience, strong industry – academia interface, emphasize on outcome based education, experiential education (through project based learning), constant change in the pedagogy and instructional approaches to match industrial requirements and student needs, blend of academic, cultural and sports events to promote holistic growth, learner centric approach with personalized attention/mentoring to the student, emphasis on continuous evaluation, blended learning, usage of ICT and MOOCS. The college is well connected by Air, Rail and Road, strategically located, 15 minutes’ drive from RGI Airport, Hyderabad.
SPONSORSHIP CERTIFICATE

Dr. /Mr. /Ms. …………………………………... is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on “Soft Computing Techniques in Geotechnical Engineering with Emphasis on Pile Foundations”, sponsored by Electronics & ICT Academy, NIT Warangal during 14th March – 26th March 2022.

Signature of Head of Institution (with seal)

Coordinators:

1. Dr. P. Venkata Koteswara Rao,
   Associate Professor
   Department of Civil Engineering,
   Vardhaman College of Engineering,
   Hyderabad - 501 218
   Email: pvkr.ce@vardhaman.org
   Ph. No: +91 94418 98968

2. Dr. G Kalyan Kumar
   Assistant Professor
   Department of Civil Engineering
   National Institute of Technology Warangal – 506 004
   Email: kalyan@nitw.ac.in
   Ph. No: +91 83329 69265

For more details about Electronics & ICT Academy, NIT, Warangal, please visit: https://nitw.ac.in/eict

Declaration

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP and shall attend the course for the entire duration. I also undertake the responsibility to inform the Coordinator in case, I am unable to attend the course.

Date

Signature of the Applicant