

## ORGANISING COMMITTEE

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QR Code for Registration



## Online Faculty Development Programme on **SHALLOW AND DEEP FOUNDATIONS** (January 25- February 5, 2021)

Under AQIS

Sponsored by



**All India Council for Technical Education**  
**New Delhi**



**Andhra University**

**Organized by**

Department of Civil Engineering  
College of Engineering (Autonomous)  
Andhra University, Visakhapatnam – 530 003  
Andhra Pradesh., India

## **FACULTY DEVELOPMENT PROGRAMME (FDP)**

Two-week Faculty Development Programme (FDP) on “Shallow and Deep Foundations” under the AICTE Quality Improvement Scheme (AQIS) is sanctioned to the Department of Civil Engineering, Andhra University College of Engineering, Visakhapatnam. In view of the prevailing COVID-19 Pandemic Situation, as per the direction of AICTE, two FDPs are being organised for facilitating and benefiting the participants across the country. The first Faculty development programme on the sanctioned Topic is being organised from January 25- February 5, 2020.

## **COLLEGE OF ENGINEERING (A), ANDHRA UNIVERSITY**

Andhra University is a premier institution of higher learning and well known world over for its academic and research contributions. It has sprawling campus in 422 acres and is in the heart of Visakhapatnam city. Andhra University College of Engineering is established in the year 1955 with four departments and has grown into 15 departments. It offers 17 UG and 35 PG programmes in various disciplines of Engineering. The institute is widely recognised for its quality education, research and consultancy services. The institute is accredited by NAAC and NBA. It has been rated at first position among the state-owned technical institutions in the country (Star News). Andhra University College of engineering is 5th ranked in Top 70 Public State Universities in India 2020 as per Outlook magazine survey. In the NIRF Rankings of 2020, Andhra University is ranked 16 in the Universities category while Andhra University college of Engineering is ranked at 69.

## **DETAILS OF FDP**

The faculty development programme is intended to refresh the knowledge of academicians, research scholars and practicing engineers on shallow and deep foundations and to expose them to the recent developments in foundation engineering particularly suiting the weak foundation soils and deep foundations. The topics for the programme are chosen so as to provide complete coverage of the topics of shallow and deep foundations with emphasis on importance of subsoil explorations with proper field testing. The topics of the workshop are given below.

### **Topics:**

- ❖ Subsoil Exploration
- ❖ Design criteria of foundations. Types of foundations, design loads
- ❖ Basic Definitions, Terzaghi’s Bearing Capacity theory
- ❖ Meyerhof, Vesic, Hansen and Skempton Bearing Capacity theories and IS code method
- ❖ Bearing capacity of Footings in sloping ground and layered soils
- ❖ Allowable Bearing capacity from Field Tests

- ❖ Settlement Analysis of footings in clay and sand
- ❖ Raft foundation: Types, Bearing capacity, Floating raft
- ❖ Proportioning of Combined footings
- ❖ Pile foundations: Classification and load capacity
- ❖ Load capacity from Static formula and Dynamic Formulae;
- ❖ Static and Dynamic Pile Load tests, NDT testing of Piles
- ❖ Pile Groups: Efficiency, Load capacity and settlement
- ❖ Negative skin friction effect on Single Pile and Pile Groups
- ❖ Under Reamed pile
- ❖ Caissons: Types, Construction, Bearing capacity and Depth of Foundation
- ❖ Tilts and shifts: Precautionary and Remedial methods for Rectification
- ❖ Design of components of caissons; lateral stability of caissons
- ❖ Foundations in Expansive soils

**Resource Persons:** The Resource persons for the faculty development programme are drawn from premier institutions with rich experience in academics and professional practice. The topics of lectures of FDP will be covered by the following resource persons.

1. Prof. M.R. Madhav, Visiting Professor, IIT Hyderabad &JNTU, Hyderabad
2. Prof. G.V. Rao, Emeritus Professor, IIT Gandhinagar
3. Prof. B.V.S. Viswanadham, IIT Bombay, Mumbai
4. Prof. C.N.V. Satyanarayana Reddy, Andhra University, Visakhapatnam
5. Prof. K. S. Beena, CUSAT, Kochi
6. Prof. V Ramana Murthy, NIT Warangal
7. Prof. Muthukkumaran, NIT Trichy
8. Sri. Ravikiran Vaidya, Geo Dynamics, Vadodara

## **DATE AND TIMINGS**

The FDP will be organized from January 25 – February 5, 2021 in online mode through Google Meet Platform. 2 lectures per day will be organized in the Programme with lecture timings as 8.30a.m to 10.00a.m and 3.30p.m to 5p.m. At the end of the training programme, a test will be conducted to the participants and the successful participants will be given the certificates.

## **REGISTRATION**

There is no registration fee for attending the programme. However, pre-registration is mandatory for attending the FDP. **Registration for attending FDP shall be done on or before 22-01-2020** using the link given below or QR code provided in the Brochure.

**Link for Registration:** <https://forms.gle/fBHMabfY3pwPPAbg7>