

# Three Days Faculty Development Programme

on

## Prestressed Concrete Structures

21<sup>st</sup> -23<sup>rd</sup> June 2017

**Convenor**

**Dr. P. MUTHUPRIYA**

**Coordinators**

**Ms. P. NANDHINI SRI**

**Mr. B. SENTHILNAATHAN**



**Organized by**

**Department of Civil Engineering  
Dr. N. G. P. Institute of Technology  
(Approved by AICTE, New Delhi,  
Affiliated to Anna University, Chennai and  
Accredited by NAAC)  
COIMBATORE - 641 048.**

**In association with**



**Indian Concrete Institute**

### ABOUT THE COURSE

This FDP aims to provide a thorough knowledge about the concepts in Prestressed Concrete Structures. This course will be extremely beneficial to the faculty members to update their knowledge in Prestressed Concrete Structures. Prestressed concrete structures is a Anna University core subject and one among the main subjects under other Universities. This FDP is planned for 3 three days consisting of 7 sessions covering the entire syllabus of Anna University and half a day Field visit.

### OBJECTIVE

This course aims to provide a platform for the faculty to understand the concepts of Prestressed Concrete Structures and also makes the faculty to deliver the contents effectively and the students to understand thoroughly.

### IMPORTANCE OF PRESTRESSED CONCRETE STRUCTURES

Prestressed concrete is used in a wide range of building and civil structures where its improved concrete performance can allow longer spans, reduced structural thicknesses, and material savings to be realized compared to reinforced concrete. Typical applications range through high-rise buildings, residential slabs, foundation systems, bridge and dam structures, silos and tanks, industrial pavements and nuclear containment structures. The live example is fly over which is in under construction at Gandhipuram, Coimbatore.

### DISCUSSION TOPICS

- Introduction – Theory And Behaviour
- Design for Flexure and Shear
- Design for Deflection
- Design of Anchorage Zone
- Analysis and design of composite beams
- Methods of achieving continuity in continuous beams
- Design of tension and compression members – Tanks, pipes and poles
- Partial prestressing, methods of achieving partial prestressing, merits and demerits of partial prestressing.

### **Chief Patron**

**Dr. Nalla G. Palaniswami**

Chairman, Dr. N.G.P. Institute of Technology

**Dr. Thavamani D. Palaniswami**

Secretary, Dr. N.G.P. Institute of Technology

### **Patron**

**Dr.O.T.Buvaneswaran**

Chief Executive Officer

Dr. N.G.P. Institute of Technology

### **President**

**Dr.K.Porkumaran**

Principal, Dr. N.G.P. Institute of Technology

### **Convenor**

**Dr.P.Muthupriya**

Professor & Head, Dept.of Civil Engineering

Dr. N.G.P. Institute of Technology

### **Co ordinators**

**Ms. P. Nandhini Sri, AP/Civil Engg**

**Mr. B. Senthilnaathan, AP/Civil Engg.**

Dr. N.G.P. Institute of Technology.

### TARGET AUDIENCE

This three days faculty development programme is deliberately designed for the professionals working as Academic Faculty Members and Research Professionals.

## RESOURCE PERSONS

### **Dr.N.Arunachalam**

Professor and Dean  
Department of Civil Engineering  
Bannari Amman Institute of Technology,  
Sathy.

### **Dr.V.G.Sri Shanthi**

Professor  
Department of Civil Engineering  
Coimbatore Institute of Technology  
Coimbatore.

### **Mr.T.Ramesh**

Assistant Professor  
Department of Civil Engineering  
PSG College of Technology  
Coimbatore.

### **Dr.P.Muthupriya**

Professor & Head,  
Department of Civil Engineering  
Dr. N.G.P. Institute of Technology,  
Coimbatore.

### **Ms.P.Nandhini Sri**

Assistant Professor  
Department of Civil Engineering  
Dr.N.G.P.Institute of Technology  
Coimbatore.

### **Mr.B.Senthilnaathan**

Assistant Professor  
Department of Civil Engineering  
Dr.N.G.P.Institute of Technology  
Coimbatore

## ABOUT Dr.N.G.P. INSTITUTE OF TECHNOLOGY

The essence of education lies in translating opportunities into experiences of empowerment, in transcending 'what is' to 'what can be' and transforming limitations into limitless learning. Welcome to an institution that recognizes the power of education to help Nurture, Grow and Progress. Dr.Nalla.G.Palaniswami - A name that is taken with great reverence by the medical fraternity and common public alike, for his pioneering efforts in providing quality healthcare. Since its inception in 1989, the Kovai Medical Center and Hospital or KMCH as we know it, has been redefining the corporate hospital set up, making healthcare accessible to all, catering to patients from all over the globe. Looking beyond its success and recognizing the need for competent technical education, Dr.N.G.P. initiated the establishment of Dr.N.G.P. Institute of Technology in 2007, and the N.G.P. Group of educational institutions. The College has been affiliated to Anna University, Chennai, approved by the All India Council for Technical Education (AICTE), New Delhi, recognized by UGC under section 2(f) and Accredited by NAAC.

## ABOUT THE DEPARTMENT

The Department of Civil Engineering has been in existence since 2011. The Department is grown into a fully fledged one with well equipped lab facilities and Infrastructure. The Department has well experienced Faculty members of various specializations. The activities in the Department are carried out to Consort the global innovations, inventions, alternate resource development upgraded in the civil world for the human mankind journey. The students are trained to upgrade themselves and the Department is striving to mould them in to a better engineer in this society.

## VISION

Enhance Technical knowledge to meet industrial expectation and lead the society towards sustainability

## MISSION

**MD1** -To organize practical oriented learning through novel teaching methods for the betterment of students

**MD2** - To stimulate the graduates to become technically skilled professionals, managers and employers in the field of civil engineering.

**MD3**- To emphasize the professional challenges and contribute to the growth of Science and Technology in partnership with industry.

**MD4**- To create centre of excellence by providing resourceful laboratory and Research facilities.

**MD5** -To develop the student community with social responsibility and moral values.

## REGISTRATION FEE

Registration fee in the form of DEMAND DRAFT for Rs.750/- (Seven hundred and fifty) is to be drawn in favor of **“THE PRINCIPAL, Dr. N.G.P INSTITUTE OF TECHNOLOGY, COIMBATORE-641048”** payable at Coimbatore. The application in the attached format is to be sent to the coordinator on or before June 15th, 2017. The fee structure of the course includes course kit, lunch and refreshments.

## IMPORTANT DATES

- Receipt of Application : 15.06.2017
- Intimation of Selection : 16.06.2017

## ELIGIBILITY AND SELECTION

Faculty from AICTE approved Institutions & Deemed Universities are eligible to participate in the programme. The total intake is restricted to 20 and selection will be based on first come first served basis.

**For more details log on to [www.drngpit.ac.in](http://www.drngpit.ac.in)  
Registration form along with DD to be sent to:**

**Ms. P. Nandhini Sri**

**Mr. B. Senthilnaathan**

Assistant Professor,

Department of Civil Engineering,

Dr. N.G.P Institute of Technology,

Coimbatore - 641 048

Mobile: +91 9944140221 & +91 9003372700

E-mail: [nandhinsri@drngpit.ac.in](mailto:nandhinsri@drngpit.ac.in) &

[senthilnaathan@drngpit.ac.in](mailto:senthilnaathan@drngpit.ac.in)