

## A Five Day Faculty Development Program

on

### “3D PRINTING TECHNOLOGY WITH HANDS ON TRAINING”

During

22<sup>nd</sup> – 27<sup>th</sup> November - 2018

#### REGISTRATION FORM

Name: \_\_\_\_\_

Designation: \_ \_\_\_\_\_

Mobile No.: \_\_\_\_\_

College Name: \_\_\_\_\_

E-Mail: \_\_\_\_\_

Experience: \_\_\_\_\_

Area of Research: \_\_\_\_\_

Accommodation required: Yes/No

#### DECLARATION

The information provided above is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP.

Signature of the Applicant

Date:

Place:

**Note: Registration is limited to 50 members only on first-cum-first serve basis. Registration fee: Rs 500/-. Lunch and snacks will be provided. Send the scan copy of Registration forms to [mechhod@nrtec.ac.in](mailto:mechhod@nrtec.ac.in)**

**Any queries contact: +91-9692464540**

#### ABOUT THE COLLEGE

The Narasaraopeta Engineering College was established in the year 1998 by Gayatri Educational Development Society, Narasaraopet, under the leadership of Sri M.V.Koteswara Rao, who has a vision of developing this college as an autonomous institution of higher learning & knowledge in the heart of Palnadu region. The college is approved by AICTE, permanently affiliated to JNTUK Kakinada, Accredited ‘A’ Grade by NAAC, Accredited twice by NBA and ISO 9001: 2008 certified. NEC is announced as ‘AUTONOMOUS’ in the year 2016. The college has launched Incubation Centre where the students can implement their ideas. The college management has an MOU with Oracle University (USA). NEC is the first Engineering College in A.P. to sign MOU with a Foreign University. The college has AP CM Excellence centre, AI&ML centre and MSME centre. The college offers six M.Tech programmes, Two PG courses of MCA, MBA and five courses at B.Tech level in the branches EEE, CSE, ECE, ME and CIVIL. The college has well equipped laboratories including 1000 computers with a bandwidth of 100 MBPS internet. Microsoft Innovation Centre was established in the college.

In order to build a vibrant entrepreneurship ecosystem, Venture Development Centre (VDC) is established in association with i2E North Eastern University, USA and APSSDC. Also, the college has Indo-European skilling Centre for Mechatronics and Industrial Robotics in collaboration with APSSDC and ARC (Applied Robot Control), Germany. AP CM’s Skill Excellence Center is also established to provide students access to the most advanced courses by industry giants. The college has MOU with New Mexico State University, USA, which enables student and faculty exchange programs.

Narasaraopet is known as the gateway of Palnadu. Narasaraopet is a town in Guntur district and is on the railway line of Guntur to Guntakal. Narasaraopet is 50 Km from Guntur and 25 Km from Chilakaluripet (NH5) by road. Narasaraopet is 120 Km away from Vijayawada airport. Kotappakonda is the site of major religious pilgrim place of Lord Siva which is located 5 Km from NEC.

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Organized

By

## Department of Mechanical Engineering



Kotappakonda Road, Yellamanda (P.O)  
Narasaraopet – 522601, Guntur District, A.P.  
Approved by AICTE, Permanently Affiliated to JNTUK, Kakinada,  
Accredited ‘A’ Grade by NAAC, Accredited Twice by NBA,  
Recognized R&D center by JNTUK,  
ISO 9001: 2008 Certified.

Phone : 08647-239923

FAX : 08647-239902

E-Mail : [mechhod@nrtec.ac.in](mailto:mechhod@nrtec.ac.in)

## ABOUT THE DEPARTMENT

The Department of Mechanical Engineering was established in the year 2002 with an intake of 60 students and in course of time it has increased to 180. The department offers UG and PG programs. PG programs are being offered in specialization of Machine Design and Thermal Engineering. The UG program of the department is accredited twice by AICTE-NBA. The department is recognized as research and development center by JNTUK, Kakinada. The department has excellent infrastructure like E class rooms, AC seminar hall and is well equipped with modern laboratories. Department has equipment beyond curriculum like stir casting machine, 3D printer, Fatigue testing machine, Five gas analyzer, Ultrasonicator, Tool makers microscope, magnetic particle tester etc., The department has highly qualified, experienced, dedicated faculty with industry and research background. The department has received funding from different agencies like UGC, AICTE towards MODOROBs, FDP etc. Department has RTA, Government of AP approved pollution test centre. Department frequently organizes guest lectures, industrial visits, workshops, training programs and provide internships for betterment of students.

## OBJECTIVES OF WORKSHOP

- To update the participants with the state of the art technologies in 3D Printing.
- To enable the participants to have experiential learning in 3D modeling, build-setup preparation and 3D printing through hands-on sessions.
- To enable participants to learn the industrial, real life and pedagogical applications of 3D printing.
- To empower the participants to offer a course on 3D printing technology at their respective institutions.

- To facilitate the participants to develop low- cost 3D printers to teach engineering concepts.
- To empower the participants to offer a course on 3D printing technology at their respective institutions.

## COURSE CONTENT

- Global Perspective of 3D Printing Technology
- Hands-on Solid Modelling & 3D Printing File Formats
- Hands-on STL Files Generation and Correction
- Modelling of Medical Implants
- 3D Printing Software & Processes
- Hands-on 3D Printing Build-setup Preparation
- 3D Printing Processes I: Vat Photo polymerization, Material & Binder Jetting
- 3D Printing Processes II: Material Extrusion, Sheet Lamination
- 3D Printing Processes III: Powder Bed Fusion & Directed Energy Deposition
- Demonstration on 3D Printer
- 3D Printing in Rapid Casting Applications
- 3D Printing in Medical Applications
- Role of 3D Printing in Engineering Education

## WHOM TO ATTEND

- Research scholars/PG in Engineering and Applied Sciences.
- Faculty who is in search of Ph.D problem in 3D printing can definitely get advantage by attending this program.
- Any faculty/student in thrust of knowledge.

## RESOURCE PERSON

Dr. Y. Ravi Kumar, Associate Professor, Department of mechanical Engineering, NIT-Warangal and his team.

Dr. Ravi Kumar is a renowned person in the field of 3D printing and he has established sophisticated 3d printing lab at NIT Warangal and he has good number of publication on the same field.

## Chief Patron

**Sri M.S. Chakravarthi**

B.Tech, MS (USA), Exec-MBA (ISB)

Vice - Chairman, NEC Group

## Patrons

**Sri M.V. Koteswara Rao**

B.Sc.,  
Chairman, NEC Group

**Sri M. Ramesh Babu**

Secretary, NEC Group

## Co-Patron

**Dr. M. Sreenivasa Kumar**

M.Tech, Ph.D (UK), M.I.S.T.E, FIE(I)

Principal

## Conveners

**Dr. D. Suneel**

Professor, Dean (Academics) &  
HOD, Dept. of Mech.

**Dr. S. B. Venkata Siva**

Professor, Dept. of Mech.

## ORGANIZING COMMITTEE

Dr. D. Jagadish	Mr.B.Saida Rao
Mr. P.Suresh Babu	Ms.K.Ruthu Rani
Mr. M. Venkanna Babu	Mr.T.Ashok Kumar
Mr.M.Venkaiiah	Mr.B.Rajiv Kumar
Mr. P.Srinivasarao	Ms.K. Sadana
Mr.Ch.Sekhar	Mr. J. Pavan Sai
Mr. K.Kiran chand	Mr. S. Sivanjaneyulu
Mr. N.Siva Naga Raju	Mr. P. Krishna Sudhakar
Mr. N. Vijaya Sekhar	Mr. K. John Babu
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Mr. J Yesudasu	Mr.P.Rajanna