Chief Patrons

Prof. V. Venkata Ramana
Vice Chancellor, RGUKT Basar

Prof. D. Ravinder
Vice Chancellor, Osmania University

Patrons

Prof. Satish Kumar Peddapelli
Director, RGUKT Basar

Prof. Sriram Venkatesh
Principal, UCE, OU

Asso. Coordinator

Mr. Anpat Rahul Machindra
HOD, MED

Organizing Committee

Mrs. A.V.V. Anupama Sridevi, Assistant Professor, MED
Mr. Jakirahemed.MD, Assistant Professor, MED
Mr. Sana Kumar, Assistant Professor, MED
Mrs. Lalitha P, Assistant Professor, MED
Mr. Abbadi Charan Reddy, Assistant Professor, MED
Mr. Maddela Narender, Assistant Professor, MED
Mr. Karthik Kasu, HOD, Electronics & Communication Engg.
Mr. V S S K R Naganjaneyulu G, Assistant Professor, ECE

About RGUKT Basar

The Rajiv Gandhi University of Knowledge Technologies Basar is a unique university which uses Information and Communication Technology (ICT) in teaching and it is the first of its kind in the country. It covers a total of 272 acres for its academic infrastructure, sports activities and for the accommodation of students and staff, etc. Once a student is admitted in the 6-year Integrated programme comprises of 2-year Pre University Course and 4-year B.Tech course in the departments of Chemical Engineering, Civil Engineering, Computer Science and Engineering, Electronics and Communications and Engineering, Electrical and Electronics Engineering, Mechanical Engineering and Metallurgical and Materials Eengineering. The University takes the full responsibility of the students all – round development viz. academic, technical and cognitive development as well and prepares them to meet the challenges of their future endeavours.

Department of Mechanical Engineering, RGUKT Basar

The Department of Mechanical Engineering was established in the year 2010. The department is enriched with well qualified and committed faculty members along with supportive and enthusiastic lab staff members dedicated to mold the students as industry ready. Department has well equipped laboratories contains very advanced equipment including Wire EDM, 3D printer, CMM, CNC, Robotic Arm, IC engines which enable the students to gain hands on experience of handling basic equipment to advance equipment. The department has well established Design and Simulation Laboratory with the software packages such as Auto CAD, CATIA, SOLIDWORKS, ANSYS, MATLAB, Deform 3D. The department of Mechanical Engineering offers an UG and PG programme.

Nearby visiting places

Gnana Saraswathi Temple and River Godavari

How to reach Basar:

By Train: Secunderabad (SC)-kamareddy-Nizambad-Basar (BSX)
By bus : Hyderabad-Secunderabad-Kamareddy-Nizamabad-Basar (IIIT Basar)

Centre for Product Design, Development and Additive Manufacturing, Osmania University

The Centre for Product Design, Development and Additive Manufacturing (CPDDAM) was established in the year 2019 under RUSA 2.0, MHRD Govt. of India. The Centre has the State-of-the art 3D Printing Technologies like SLS, Polyjet, FDM, SLM, SLA and 3D Scanner. The centre gives opportunities to Faculty, UG, PG students and research scholars to purse their research work apart from solving critical cases for hospitals. It also offers services to Industries, Defence labs and R&D organizations.

Address for Correspondence:

Coordinators

Dr. V. Chandra Sekhara Rao P
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Prof. L. Siva Rama Krishna
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For Further Details Contact:

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Address:
RGUKT – Basar, Nirmal (Dist.) Telangana State-504107, India

Rajiv Gandhi University of Knowledge Technologies-Basar

Basar, Nirmal (Dist), Telangana - 504107

A One-Week Faculty Development Programme (FDP) on

3D Printing and Design

(13th -17th February, 2023)

Coordinators

Dr. V. Chandra Sekhara Rao P
Dean (R&D), MED, RGUKT-Basar
&
Prof. L. Siva Rama Krishna
Joint Director, CPDDAM, OU

In Association with

Centre for Product Design, Development and Additive Manufacturing (CPDDAM), Osmania University, Hyd.

Organized by

Department of Mechanical Engineering,
Rajiv Gandhi University of Knowledge Technologies
Basar, Telangana - 504107

About the Programme

The FDP is aimed at imparting knowledge and training on the fundamentals of 3D printing, design and its applications in Bio-medical, Aerospace, Automobiles, etc. The main objective is to enable the participants to have hands on Experience on various types of 3Dprinting, modelling and Slicing software's. Expert lectures will be delivered by eminent resource persons from academia/industry. This programme may be beneficial to Faculty members & Research Scholars who intend to practice/begin research in field of 3D printing.

Overview

According to ISO/**ASTM** 52900:2015 **3D Printing** is defined as fabrication of 3 Dimensional objects through the deposition of a material using a print head, nozzle, or another **printer** technology. However, the term is often used synonymously with additive manufacturing (AM). Over the past three decades 3D Printing has progressively matured from a small number of university research programs and a handful of companies to diverse commercial applications. AM technologies are widely adopted across the globe. In particular, the past decade has witnessed an explosion in research and development, commercialization and industrial use of AM technologies across a broad range of sectors spanning aerospace, defense, automotive, biomedical, printing, electronics, industrial manufacturing, construction, education, jewelry, sculpture, and art, to name just a few. Globally, there is strong interest in AM, as it has the potential to transform and disrupt entire markets, and manufacturing process and supply chains. The input for any 3D Printing technology is the CAD Modelling and Design which plays a very important role in successfully obtaining a useful product. The aim of this FDP is to provide understanding on the state-of-the-art 3D Printing technologies to a broad spectrum of researchers, industry practitioners, executives, faculty and students.

Objectives of the Course

i. To update the participants with the state of the art 3D Printing Technologies.
ii. To enable the participants to have hands-on experience on various types of 3D Printing Modelling and slicing software's and demo on various 3D Printing Technologies.
iii. To enable participants to learn the applications of 3D Printing like Biomedical, Aerospace, Automobile etc.
iv. To enable the participants to develop course contents in their institutions and also research in the area of 3D Printing

Topics to be covered

- Prototypes to product: Technologies and case studies
- Innovative applications & sustainability aspects of 3D printing
- Modelling Sketching and part drawing
- Modelling assembly of the parts
- Practice session on modeling and slicing
- Post finishing of 3D printed complex internal and external features
- Demo of polyjet SLS and SLM AM Technologies
- Demo of FDM, SLA-DLP and 3D scanner
- Design for Additive manufacturing
- materials additive manufacturing
- Metal 3D printing for Defence applications
- 3D printing in Orthopedics in Hype-Reality
- Application of 3D printing Technology in facial Reconstruction

Resource Persons

Resource persons are from IITs, DMRL, Doctors from Reputed Hospitals, Osmania University, R&D Institutions and RGUKT-Basar Faculty who are in the 3D Printing practice will deliver lectures, hands-on and Demo Sessions

Eligibility (Targeted Audience)

i. The faculty members, Research scholars, PG Scholars, participants from Industry, R&D organizations and staff of host institutions.
ii. participants may be allowed to attend FDP on first cum first serve basis.

Details of Registration Process and Certification

The FDP program will be offered in offline mode and is limited to 50 participants. It is compulsory to attend all the sessions without fail to receive the certificate. **Last Date** for registration: **10th February 2023**

Category of Participants	Fee Details
Faculty Members (Internal)	Rs. 500/-
Faculty Members (External) & Scholars	Rs. 2000/-

Note: *Registration fee includes food and accommodation for external participants.*

Registration fee need to be remitted through On-line/NEFT payments to the Bank account given below.

Note: Keep the payment Reference ID and payment receipt for further needs.

Name of the Account	NAACRGUKTBASAR
Account Number	40481395842
Bank	SBI
Branch	IIIT CAMPUS BASAR
IFSC code	SBIN0014154

The registration for the FDP program is through online mode by filling the details in google form using the link or QR code appended.

Link for registration: **Click here to apply**

Scan QR code to register

Schedule of One-Week Faculty Development Programme on

3D Printing and Design

Organized by

Dept. of Mechanical Engineering, RGUKT-Basar in Collaboration with

& Centre for Product Design, Development and Additive Manufacturing (CPDDAM), OU

Dates	10.00 to 11:30 AM	11.30 to 11.45 AM	11.45 AM to 1.30 PM	1.30 to 2.30PM	2:30 to 4:00 PM
13-02-2023 (Monday)	Inaugural Function		Prototypes to Product: Technologies and Case Studies Prof. Sriram Venkatesh UCE, Osmania University, Hyd.		Innovative Applications and Sustainability aspects of 3D Printing Prof. L. Siva Rama Krishna UCE, Osmania Univ., Hyderabad
14-02-2023 (Tuesday)	Modelling-Sketching and Part drawing Mr. A. Charan Reddy, Assist. Prof., RGUKT-Basar		Modelling-Assembly of the Parts Mr. Anpat Rahul Machindra Assist. Prof., RGUKT-Basar		Practice Session – on Modelling and Slicing Mr. M. Narender & Dr. VCSRP Assist. Prof.'s, RGUKT-Basar
15-02-2023 (Wednesday)	Post Finishing of 3D Printed Complex Internal and External Features Dr. Mamilla Ravi Sankar Assoc. Prof., MED, IIT Tirupati		Demo of Polyjet, SLS and SLM AM Technologies Prof. Sriram Venkatesh UCE, Osmania University, Hyd		Demo of FDM, SLA-DLP and 3D Scanner Prof. L. Siva Rama Krishna UCE, Osmania Univ., Hyderabad.
16-02-2023 (Thursday)	Design for Additive Manufacturing Dr. Manmadha Chary IFHE University, Hyderabad		Materials for Additive Manufacturing Mr. K. Rakesh National Centre for Additive Manufacturing (NCAM), Hyderabad		Metal 3D Printing for Defence Applications Mr. S. Ramesh Kumar Scientist G, DMRL, Hyderabad
17-02-2023 (Friday)	3D Printing in Orthopaedics – Hype and Reality Prof. M.V. Reddy Director of DNB (ortho), Sunshine Hospitals, Hyderabad		Application of 3D Printing Technology in Facial Reconstruction Dr. Abhinanda Potturi SVS Institute of Medical and Dental Sciences, Mahbubnagar		Valedictory Function