



**Faculty Development Programme
(Sponsored by AICTE, New Delhi)**

on

**“3D Printing for Industrial & Biomedical
Applications”**

03rd – 15th June, 2019

(Two Weeks)

Registration Form

Full Name: _____

Designation: _____

Qualification: _____

Specialization: _____

Organization: _____

Affiliation & Address: _____

Registration Category: Industry Professional/ Faculty

Mobile: _____

Email: _____

Govt. Id/Aadhaar Card No. _____

Accommodation Required: YES / NO

Date: _____ Signature of the Applicant

The application is hereby recommended & permitted to attend the above FDP for the notified duration, if selected.

Signature and Seal of Head of Organization

PATRON

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Dr. Rupesh Shelke

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Dr. Vibha Bora

Co-Coordinator:

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ADDRESS FOR CORRESPONDENCE

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Organized by

**Department of Mechanical Engineering
&**

**Biomedical Engineering and Technology
incubation Centre (BETiC), Nagpur**

G. H. Raisoni College of Engineering, Nagpur

(An Autonomous Institute affiliated to RTM Nagpur University,
NAAC “A+” Grade, NBA (WA) & Ranked 111th by NIRF 2019 in Engg.)

INSTITUTE

VISION

To achieve excellent standards of quality education by keeping pace with rapidly changing technologies and to create technical manpower of global standards with capabilities of accepting new challenges.

ABOUT

G.H. Raison College of Engineering (GHRCE) Nagpur, established in 1996, is an autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University. It is ranked 111th PAN India in Engineering Discipline as declared by National Institutional Ranking Framework (NIRF) 2019, MHRD, Government of India. It is ranked 5th in patent filing and platinum status in AICTE-CII survey. Institute is also ranked 69th PAN India by India Today MDRA Survey 2018. The institute is shortlisted among top 100 institutions by ARIIA 2019, Government of India. Institute received NIDHI-TBI from NSTEDB, DST, Government of India.

DEPARTMENT:

Established in 1996, Department of Mechanical Engineering is approved research centre for Ph.D. & ME by Research of Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur. It offers two PG courses in 'Heat Power Engineering', 'CAD/CAM' and UG course in Mechanical Engineering. All the eligible courses of the department are accredited by NBA. The Department has received grants under RPS & MODROBS from AICTE, Student's projects grant from IEI Kolkata and IEDC from DST. The Department has recently conducted the Staff Development Programme on Computational Fluid Dynamics by faculty of IIT Bombay under CDEEP, MHRD Scheme of Govt. of India. Department has excellent research facilities in CAD/CAM, 3D printing Thermal Engineering and Design area. Biomedical Engineering and Technology (incubation) was started in collaboration with BETiC, IIT Bombay on 2nd October 2018 with the vision to improve and transform Healthcare through innovations in prevention, diagnosis and treatment of diseases and improving quality of life of the people through research & innovations in the field of Biomedical Engineering & Technology. Currently the center has MoU's with BETiC, IITB and N K P Salve Institute of Medical Science & Lata Mangeshkar Hospital, Nagpur.

Overview of the Course:

3D Printing or Additive Manufacturing refers to the process of producing a 3D part from a computer-aided design model by adding materials successively, usually in a layer by layer fashion. In addition, 3D Printing possess the ability to produce parts with complex configurations and the flexibility to accommodate changes conveniently, to meet rapid changing industrial demands without incurring additional tooling costs. Typically, parts can be produced within a few hours to a week, and manufacturing does not require high volume production to break even. As such, RP is ideal for addressing dynamic technological trends and industrial demands. 3D printing finds application in Industry and Biomedical sectors. The course is designed to introduce basic and advance topics of the cutting edge technology and also address the issues related to it.

Objectives of the Course:

- 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 introduce the participants to the amazing world of 3D Printing and its fascinating applications in Industries and Medical field.
- To promote quality teaching and research in 3D Printing and product design & development.
- To enable participants to learn the industrial, real life and pedagogical applications of 3D printing.

Key Topics of the interest:

- 3D Printing basics to advance
- Design for 3D printing
- STL file generation and repairing of “.stl” files
- Modelling of Medical Implants
- 3D Printing Software & Processes
- Case Studies on – 3D Printing
- Medical imaging (CT,MRI,CBCT,X-Ray)
- 3D Printing Applications: Automobile, Aerospace, Casting, Medical/Dental, etc.

Resource Persons:

Faculty from IIT/NIT and reputed institutions /organizations/industries/hospitals who are in the 3D printing practice will deliver theory and hands-on sessions.

Eligibility:

Faculty members from AICTE approved technical degree institutions and Industry professionals are eligible for participation in the program.

Registration:

Free registration for first 40 selected participants. **TA/DA** will be provided to eligible candidates as per AICTE norms.

Accommodation:

Accommodation will be provided free of cost in college hostels on prior request as per the availability.

Important dates:

Registration before	18 th May, 2019
Communication of acceptance	21 st May, 2019
FDP dates	03 rd -15 th June, 2019

Note:

1. The application duly filled and signed by recommending authority must reach on or before 18th May, 2019. Please send the scanned copy of application by email to: rnd_ghrce@raisoni.net
2. Confirmation to selected candidates will be informed on or before 21st May 2019 by email.

The City of Nagpur

Popularly known as Orange City, Nagpur is located at the geographical centre of India. In fact the Zero Mile Stone of India is in the city. Nagpur is the second capital of Maharashtra State and is well connected by air, rail and national highways with major cities of the country. Nagpur has a large number of central and state government offices, educational institutions, and up-coming software companies and is surrounded by a number of large and reputed industrial estates, and several tourist spots such as Ramtek, Sevagram and the Pench & Tadoba tiger forest reserves. The airport and the railway station are just 10 km away from the Institute.