

Patrons

- **Dr Shiva Prasad**
Director General, IITRAM
- **Dr. A. U. Digraskar**
Director, IITRAM

Coordinators

- **Dr. Kamlesh Joshi**
Assistant Professor, Mechanical and Aerospace Engineering., IITRAM
- **Dr. Ajit Kumar Parwani**
Assistant Professor, Mechanical and Aerospace Engineering., IITRAM
- **Dr. Saurabh Kumar Yadav**
Assistant Professor, Mechanical and Aerospace Engineering., IITRAM
- **Dr. RamKumar PL.**
Assistant Professor, Mechanical and Aerospace Engineering., IITRAM

Contact details

kamleshjoshi@iitram.ac.in

Mo: +91-9167480121, Off.: +91-7967775487

ajitkumar.parwani@iitram.ac.in

Mo: +91-7069725966

pl.ramkumar@iitram.ac.in

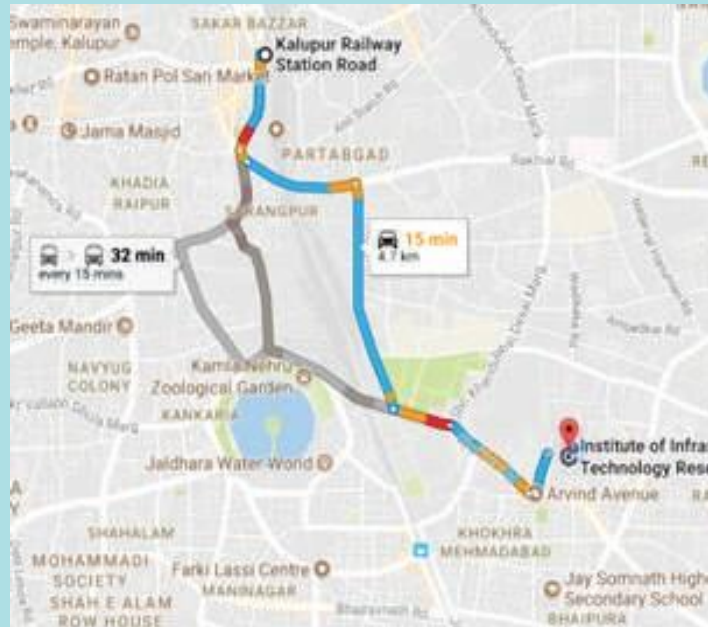
Mo: +91-9823256780

Key Dates:

Last date of Registration : 30th November, 2021

Registration and General Information

Participants willing to attend the online STTP are required to visit institute website for registration details. Registration will be confirmed only after submission of registration form and payment of registration fee. A registration confirmation email will be sent to all the participants.



Certificate will be awarded to the participants after successful completion of the course.

GUJCOST FUNDED ONLINE ONE WEEK

STTP ON

Theoretical and Practical approaches of product development using FEM/FVM

(13th to 18th December, 2021)



Organized by



Funded by



Department of Mechanical and Aero-space Engineering
Institute of Infrastructure Technology Research and Management

(An Autonomous University established by Government of Gujarat)

Near Khokhra Circle, Maninagar East,
Ahmedabad, Gujarat 380026

Tel.: 079-67775488 / 6777 5499

www.iitram.ac.in

About the ITRAM

Institute of Infrastructure Technology Research and Management (ITRAM) has been established by the Government of Gujarat as an Autonomous University and has been mandated to bring about significant change in Engineering Education with respect to Technical and Managerial knowledge in the area of Infrastructure. The objective of this Institute is to serve as a Center of excellence in Research and Teaching in all areas pertaining to Infrastructure, and the Institute has a vision of acquiring a status of National importance in Infrastructure and related areas.

About Department

The Department of Mechanical Engineering at IITRAM, Ahmedabad started right after one year of the inception of campus in 2014 and has been offering B.Tech. Mechanical Engineering, M. Tech. (Mechanical Infrastructure) and Doctoral Programs. Currently, the department has a team of 13 qualified and dedicated faculty members having specialization in various areas of thermal, manufacturing, materials and design engineering. The students of all tiers have access to both expert faculty members in the department and institute supported industry engagement opportunities. The department has extensive laboratory and infrastructural facilities for teaching, training, research and development.

About the program

New product development using Finite Element Method (FEM)/ Finite Volume Method (FVM) helps in coping up with the increasing competition in fast changing market. Designing, modelling, and simulation of product concept during the early stage of product embodiment helps faster deliveries, lower design/manufacturing cost along with enhanced product performance in terms of reliability, robustness, safety, and minimal environmental damage. Computer integrated design and manufacturing helps in integration of computer science techniques in engineering domain.

The main objective of this STTP is to introduce participants from various science and engineering background like mechanical, automobile, aeronautical, civil, environmental and so on with theoretical and practical aspects of computer integrated design and its virtual tools (like ANSYS, ABAQUS, etc.) to solve problems related to new product development for solving real world issues. At the same time, the participants will learn the numerical approaches and hands on training on various aspects and modules of design tools to solve problems related to new product development

Resource persons

The lectures will be delivered by experts from IITs, NITs, IITRAM, and industry.

Eligibility for participation

The STTP is open to the faculty members from various engineering institutes and universities, PG/PhD students, industry personnel, and practising engineers.

For practice purpose, participant can bring their own laptop pre-installed with MATLAB / ABAQUS / ANSYS.

Broad themes of STTP

1. Computer Integrated Design (CID) for advanced manufacturing applications
2. Computer Integrated Design (CID) for biomedical applications
3. Computer assisted detailed drawings and tolerances
4. Basics of Computer Aided Manufacturing (CAM)/ Computer Integrated Manufacturing (CIM)
5. Basics of FEM/FVM applied for product development

Content of STTP

1. Introduction to basics of new product development
2. Introduction to basics of CAD, Curve, Surface Solid evaluation using advanced concept of CAD
3. Introduction to various modules of NX .
4. Detailed hands on various modules of NX
5. Thermal Modelling and Simulation with Ansys
6. Application of FEM tools in live industrial problems

Registration Fees / Participant

1. Students/ Research scholars : INR 100
2. Faculty from academic institution: INR 100
3. Industry and R&D personnel: INR 100

Note: The workshop is free for participants from IITRAM