

About the Institute

The National Institute of Engineering (NIE), established in the year 1946, today stands 196th place among top engineering colleges in the country that include IITs and NITs as per National Institution Ranking Framework (NIRF-2021) announced by Ministry of Human Resources Development (MHRD). It is ranked 18th among India's top Engineering Colleges, as per survey conducted by Times of India (June 2020). NIE is a Grant-in-Aid Institution and approved by the All India Council for Technical Education (AICTE), New Delhi. NIE got Autonomous status from Visvesvaraya Technological University, Belagavi in 2007. Six Undergraduate Programmes - Civil Engineering, Mechanical Engineering, Electronics & Communication Engineering, Computer Science & Engineering, Information Science and Engineering, Industrial & Production Engineering and three PG Programmes - Hydraulics, Structural Engineering and Machine Design have been accredited by the National Board of Accreditation, New Delhi, under Tier-I. It is one of the 14 colleges in Karnataka that has been recognized under MHRD-World Bank sponsored Technical Education Quality Improvement Programme (TEQIP) in all the three phases. To enrich research and consultancy activities, 15 Centres of Excellence have been set up in collaboration with Industries and Alumni. Many funded research projects of Central and State Governments, VTU and overseas Universities are presently ongoing.

ORGANIZING COMMITTEE

PATRONS

Dr. Ranganath M.S, President, NIE, Mysore.

Mr. S.B.Udayshankar, Hon. Secretary, NIE, Mysore.

Dr. R Dattakumar, Hon. Treasurer, NIE, Mysore.

Dr. Rohini Nagapadma, Principal, NIE, Mysore.

Dr. M. S. Ganeshprasad, Vice Principal, NIE, Mysore.

Dr. Suresha B., Professor & Head Department of Mechanical Engineering, NIE, Mysuru.

PROGRAMME COORDINATORS

Dr. Imran. M. Jamadar

Associate Professor

Department of Mechanical Engineering,
The National Institute of Engineering, Mysuru.

Mr. P. K. Samal

Assistant Professor Department of Mechanical Engineering,
The National Institute of Engineering, Mysuru.

ORGANIZING TEAM

Mr. Prithvi C

Asst. Professor, NIE,
Mysuru

Dr. Harshavardhan B

Asst. Professor, NIE,
Mysuru

Dr. Akhil V. M.

Asst. Professor, NIE,
Mysuru

Dr. Aravind S. L.

Asst. Professor, NIE,
Mysuru

Mr. Vaibhav Deshpande

Asst. Professor, NIE, Mysuru

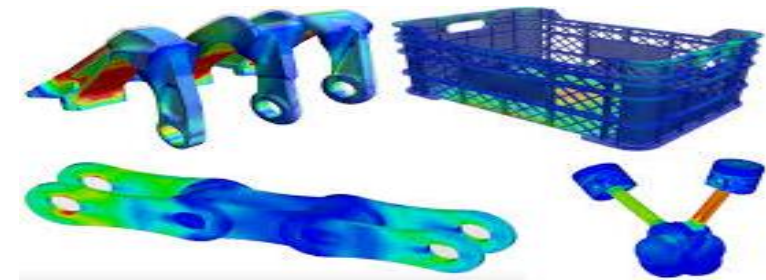


The National Institute of Engineering

(An Autonomous Institute under VTU Belagavi)

Mysuru-570008

ISTE Approved One Week Online Short Term Training Programon Finite Element Analysis (FEA) Using ABAQUS and MATLAB



(In Blended Mode)

27th June to 1st July, 2022

Organized by

Department of Mechanical Engineering

The National Institute of Engineering, Mysuru
(An Autonomous Institute under VTU Belagavi) **Mananthavadi**
Road, Vidyaranyapura, Mysuru, Karnataka - 570008

About the Department of Mechanical Engineering

In addition to the B.E. programme, the Department of Mechanical Engineering presently runs three M. Tech programmes under the Autonomous scheme, namely, Industrial Automation & Robotics, Machine Design and Nanotechnology. The department is recognized as "Research Centre" by VTU. The highly qualified faculty is actively engaged in research and consultancy works in the areas of Composite Materials, Automation Technology, Nanotechnology and Renewable Energy Technology. Thanks to their initiative and efforts, the department has secured funding from reputed funding agencies such as the Department of Science & Technology (DST), TEQIP, UGC, AICTE, KCTU, VTU etc., which has resulted in the establishment of several centers of excellence. Some of the notable ones are the Centre for Materials Research (CMR), Centre for Renewable Energy and Sustainable Technologies (CREST), Centre for Nanotechnology (CNT), Centre for Automation Technologies (CAT), CNC Training Centre, etc. NIE started M. Tech programme in "**Machine Design**", in the year 2014. The uniqueness of this programme lies in curriculum and pattern of education along with state-of-the-art facilities. The students undergo extensive training on major areas of Machine Design including Finite Element Analysis using MATLAB, ANSYS, ABAQUS, OPTISTRUCT, Experimental Modal Analysis using NIDAQ and LABVIEW. The Programme is recently accredited by NBA, New Delhi in 2022.



About the STTP

The one week Online Short Term Training Programme (STTP) on "**Finite Element Analysis Using ABAQUS and MATLAB**" is approved by Indian Society for Technical Education (ISTE) and is being organized by the Department of Mechanical Engineering, Machine Design (MMD), NIE, Mysuru. STTP provides a platform to understand the concept of finite element modeling, the structural analysis for trusses, beams etc. Participants are also expected to make use of 1D spar element, beam element, truss element using modern tools like MATLAB and ABAQUS.

Objectives of the STTP

- To make participants understand the concept of mathematical modeling using finite element method.
- To make participants acquaint the skills of FEA using ABAQUS and MATLAB programming related to mechanical, structural and allied problems.

Who can Participate

- Faculty members of the AICTE approved Institutions, Ph.D. Scholars, P.G. Scholars, Participants from Government, Industry (Bureaucrats/Technicians/Participants from Industry etc.) and staff of host Institution may attend the programme.

Topics to be Covered

- Mathematical Modeling using Finite element method.
- Finite Element Analysis using 1D Spar element.
- Finite Element Analysis using truss element.
- Finite Element Analysis using beam element
- Finite Element Analysis for dynamic problems
- Finite Element Analysis using 2D/3D elements

Resource Persons

- **Dr. Roshan Patil**, Asst. Professor, Mechanical Engineering, IIT Jammu.
- **Arun Kumar**, Scientist, ISRO, Trivendrum.
- **Mr.Pratik Deshpande**, Manager Technical, EDS Technology, Bangalore.
- **Mr. Sanjay Kokare**, Senior Project Manager, New Holland Tractors, Gurgaon.
- **Mr. Balaji N**, Research Scholar, NIT, Trichy
- **Mr.Puneeth M L**, Team Lead, Infosys Bangalore
- **Mr.P.K.Samal**, Assistant Professor, Mechanical Engineering, NIE, Mysuru
- **Dr. B. Harshavardhan**, Assistant Professor, Mechanical Engineering, NIE, Mysuru
- **Dr.I.M.Jamadar**, Associate Professor, Mechanical Engineering, NIE, Mysuru

Registration Details

The participants can register for the programme by making an online payment of **Rs. 472/- (400+18% GST)**. (Account Details: **Beneficiary Name: The National Institute of Engineering, Account No: 50100243056071, RTGS/NEFT IFSC: HDFC0002568, Account Branch: K R Mohalla - Mysuru**)

Please upload the details of fee paid and participant details in the following G-form: <https://forms.gle/obRhG6KVYHUsCoQ77>

Participants need to fill out the feedback form of all the sessions and complete the test on the last day to avail the certificate.

Important Dates

Last date for registration: 25th June , 2021

Programme Date: 27th June to 1st July, 2022

Contact Details

The participants can contact the Coordinators of the STTP for any queries regarding the programme.

Dr. I. M. Jamadar
+91-9860603195
imiamadar@nie.ac.in

Mr. P. K. Samal
+91-9535144563
prasanta@nie.ac.in



ISTE Approved One Week Online STTP on
**Finite Element Analysis (FEA) Using
ABAQUS and MATLAB**
27th June to 1st July 2022
Resource Persons & Topic

Session 1: 27/06/2022 [F/N]

**Introduction of
ABAQUS for Finite
Element Analysis**

Resource Person:

Mr. Pratik Desphande
EDS Technology, Bengaluru

Session 2: 27/06/2022 [A/N]

**Finite Element Analysis
Using 1D Spar & Truss
Element in MATLAB**

Resource Person:

Mr. Prasanta Kumar Samal
Assistant Professor, NIE Mysuru

Session 3: 28/06/2022 [F/N]

**FEA of Automotive &
Aerospace Applications
Using ABAQUS**

Resource Person:

Mr. Puneeth M L
Team Lead Infosys, Bengaluru

Session 4: 28/06/2022 [A/N]

**Modeling of Euler-Bernoulli
Beam and Dynamic
Problems using MATLAB**

Resource Person:

Dr. Imran Jamadar
Associate Professor, NIE Mysuru

Session 5: 29/06/2022 [F/N]

**Modeling Fracture &
Failure Analysis in
ABAQUS**

Resource Person:

Mr. Balaji N.
PhD Research Scholar, NIT, Trichy



**ISTE Approved One Week Online STTP on
Finite Element Analysis (FEA) Using
ABAQUS and MATLAB
27th June to 1st July 2022
Resource Persons & Topic**

Session 6: 29/06/2022 [A/N]

**FEA of Launch Vehicle
Structures Using
ABAQUS**

Resource Person:

Mr. Arun Kumar
Scientist, ISRO, Trivendrum

Session 7: 30/06/2022 [F/N]

**Finite Element Analysis
Using Truss Element in
ABAQUS**

Resource Person:

Dr. Harshavardhan B.
Assistant Professor, NIE Mysuru

Session 8: 30/06/2022 [A/N]

**Finite Element Analysis
Using Beam Element in
ABAQUS**

Resource Person:

Dr. Harshavardhan B.
Assistant Professor, NIE Mysuru

Session 9: 01/07/2022 [F/N]

**FEA of Structures using
2D Element in MATLAB**

Resource Person:

Dr. Roshan Patil
Assistant Professor, IIT Jammu

Session 10: 01/07/2022 [A/N]

**Finite Element Analysis of
Real Life Problems Using
ABAQUS**

Resource Person:

Sanjay Kokare
Senior Analyst, New Holland Tractors