

## About NIT Trichy

The National Institute of Technology (formerly known as Regional Engineering College) Tiruchirappalli, situated in the heart of Tamil Nadu on the banks of river Cauvery, was started as a joint and co-operative venture of the Government of India and the Government of Tamil Nadu in 1964 with a view to catering to the needs of man-power in technology for the country. The college has been conferred with autonomy in financial and administrative matters to achieve rapid development. Because of this rich experience, this institution was granted Deemed University Status with the approval of the UGC/AICTE and Govt. of India in the year 2003 and renamed as National Institute of Technology.

The institution offers Under Graduate Courses in ten branches and Post Graduate Courses in twenty one disciplines of Science, Engineering & Technology besides Ph.D. and M.S. (by research) in all the departments. The college is an example of cultural unity with students drawn from most of the states in the country. NITT is witnessing an exponential growth in R&D activities. Apart from a large consultancy work undertaken by our engineering departments, academic research gains its momentum day by day. Nearly 200 research scholars are undergoing their Ph.D in various fields in all the departments. NITT has signed MOUs with industries and institutions in and abroad to promote collaborative research and consultancies.

## Department of Mechanical Engineering

One among the first three departments to be established in 1964 in the institute, the Mechanical Engineering Department of NITT has had the reputation of being among the finest in the country and is dedicated towards the advancement of technology and science. Keeping itself up to date with the latest developments and trends in the field and with

a dedicated faculty of highly qualified and experienced members in all streams of mechanical engineering, the department consistently strives to provide world class facilities for education and research. An interactive relationship is maintained between the students and staff which enable the students to develop a sound foundation in the stream in a conducive environment. This is also reflected in our campus placement which has been 100% year after year with our students getting placed in the top industrial houses of the country.

The department has an excellent industrial interaction and contributes to the industry by offering consultancy services. Some of them are: Heavy Alloy Penetrator Project (HAPP), Oil and Natural Gas Corporation (ONGC), Indira Gandhi Centre for Atomic Research (IGCAR), Neyveli Lignite Corporation (NLC) and Bharat Heavy Electricals Limited (BHEL) and its ancillaries.



### Important Dates

Last date for receiving applications

15 Dec 2016

Intimation to selection

16 Dec 2016

Mode of Intimation

Email only

## TEQIP II Sponsored Workshop on Design and Analysis of Mechanical Systems (DAMS)

19.12.2016 — 24.12.2016

Sponsored by  
Technical Education Quality Improvement  
Programme (TEQIP—II)

Workshop Coordinators

Dr. T. Ramesh  
Dr. N. Siva Shanmugam  
Dr. K. Sankaranarayanan



Organized by

Department of Mechanical Engineering  
National Institute of Technology, Tiruchirappalli  
Tiruchirappalli — 620 015, Tamil Nadu  
<http://www.nitt.edu/home/academics/departments/mech/>

## Workshop Objectives

The engineering design process is a methodical series of steps that engineers use in creating functional products and processes. This process is highly iterative - parts of the process often need to be repeated many times before another can be entered - though the part (s) that get iterated and the number of such cycles in any given project may vary. It is a decision making process (often iterative) in which the basic sciences, mathematics, and engineering sciences are applied to convert resources optimally to meet a stated objective. The fundamental elements of the design process are the establishment of objectives and criteria, synthesis, analysis, construction, testing and evaluation. Design & Analysis is a fast-growing part of mechanical Engineering where the role of Design Engineers are highly solicited in industrial and academic research fields.

## Workshop Contents

The following research topics will be addressed during the workshop:

- Review of static failure mechanisms in the context of machine design
- Finite Element Analysis of Mechanical Components using MATLAB, ANSYS and COMSOL software
- MATLAB for Mechanical Engineers
- Steady state and transient thermal analysis.
- Design optimization
- Optimum topological and topographical solution
- Identify structural natural frequencies
- Impact and shock loading

## Resource Persons

Sessions will be handled by Experts from IITs, NITs, IIITs, ANSYS India, MATLAB, COMSOL India, ProSIM and R & D organizations.

## Registration Details

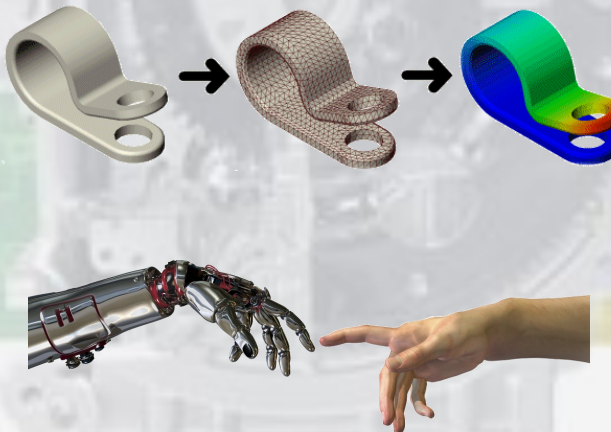
The participants are requested to fill in the registration form (downloadable from the institute website, [www.nitt.edu](http://www.nitt.edu)), approved by the concern authorities and send it to the Workshop Coordinators along with the Demand Draft for **Rs. 660/- per participant** drawn in favor of "The Director, NIT Trichy", so as to reach us on or before **15.12.2016**. The number of participants is restricted to 40 and the registration is based on first come first serve basis.

The participants are also requested to confirm their participation in the workshop by sending an e-mail to any of the coordinators before **17.12.2016**.

The participants will be provided free boarding and lodging. Accommodation will be arranged in the NIT Hostels.

## Eligibility of Participants

Research scholars, academicians, field engineers, corporate and executives can participate in the workshop.



## Registration Form

### TEQIP II Sponsored Workshop on **Design and Analysis of Mechanical Systems**

**19.12.2016 — 24.12.2016**

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

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

Name & Address of Organization  
\_\_\_\_\_

Phone no: (O) \_\_\_\_\_ (R) \_\_\_\_\_

Mobile: \_\_\_\_\_

Email: \_\_\_\_\_

Educational Qualification: \_\_\_\_\_

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

Cheque / DD No. \_\_\_\_\_ Dated \_\_\_\_\_

for Rs. \_\_\_\_\_ Drawn in favor of "The Director, NIT Trichy".

Date: \_\_\_\_\_

Place: \_\_\_\_\_ Signature: \_\_\_\_\_

The Cheque /DD together with registration form should be sent to

**Dr. T. Ramesh & Dr. N. Siva Shanmugam**

Workshop Coordinators

Department of Mechanical Engineering

National Institute of Technology

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