



Malaviya National Institute of Technology Jaipur मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर

announces

Five days Short Term Course on

Sponsored by TEQIP (Phase-III)

Software tools for scientific research: Mathematica and LaTeX

on

January 09-13, 2018

Organized by

Departments of Mathematics and Mechanical Engineering

Malaviya National Institute of Technology Jaipur

J. L. N. Marg, Jaipur -302017 (Rajasthan)

Website: <http://mnit.ac.in>

About MNIT

Malaviya National Institute of Technology (MNIT), Jaipur is one of the NITs established by Ministry of Human Resource Development, Government of India. The Institute, earlier known as MREC, was established in 1963 as a joint venture of the State and Central Governments. Later in 2002, the college was given the status of National Institute of Technology and on August 15, 2007, proclaimed *Institute of National Importance* through Act of Parliament. MNIT campus spreads over 325 acres of lush green area in the prime location of Jaipur city. The Institute has completed its Golden Jubilee year 2012-13. At present, in addition to research, consultancy and developmental activities, the Institute offers UG and PG (M. Tech./M.Sc. & Ph.D.) level courses to about 5000 students in almost all leading fields of engineering, technology, management and sciences.

About Mechanical Engineering Department

The Department of Mechanical Engineering was established along with the establishment of the College in MNIT Jaipur. At present, it offers academic programmes namely B.Tech., M.Tech. and Ph.D. degrees. An extremely dynamic and large faculty (current strength of about 25), and a well experienced support staff, give the Department a breadth of research focus and wide range of technical expertise. Our experienced faculty members have a passion for teaching and an avowed commitment to research and development. Apart from teaching, the faculty is engaged in diverse consultancy and R&D Projects. They publish their work in highly reputed journals and present their work at prestigious national and international conferences.

About Mathematics Department

The Department of Mathematics was established along with the establishment of the College in MNIT Jaipur. The department is well known for research at the national and international levels. Department has organized various National, International Conferences and Short Term Course in Mathematics. A large number of research articles in national and international journals have been published by faculty members and research scholars. In addition to the regular Mathematics courses offered for B.Tech., B.Arch., M.Tech., M.Arch., M.B.A. programmes, the department offers M.Sc. and Ph.D. Programmes in Mathematics. The Major research areas of the Department are: *Fluid Dynamics, Topology, Functional Analysis, Special Functions, Integral Transform, Fractional Calculus, Geometric function theory and complex analysis*. There is a wide spread interaction between mathematics department and various engineering departments in the field of teaching and research.

Objectives of the Workshop

This workshop aims to provide a comprehensive theoretical and hands on practical experience on Mathematica and LaTeX to the beginners.

LaTeX is open source typesetting software widely used in academia preferably for technical/scientific papers writing for journals by researchers, engineers and mathematicians at large. LaTeX can be used as a standalone document preparation system, or as an intermediate format. The typesetting system offers programmable desktop publishing features and extensive facilities for automating most aspects of typesetting and desktop publishing, including numbering and cross-referencing of tables and figures, chapter and section headings, the inclusion of graphics, page layout, indexing and bibliographies.

Mathematica is a powerful software tool for solving research level problems involving mathematical equations, generating graphs and much more. Mathematica can be used for creating dynamic models and visualization, cloud deployment, Functional Programming Machine Learning, optimization, solving problems of calculus, DEs and PDEs, data visualization, parallel computing, image processing, signal processing and much more.

Important Dates

Last date of registration with fees: **31 December 2017**
Confirmation of registration: **02 January 2018**

Registration Fees

Person willing to participate should register themselves by submitting the duly filled hard copy or scanned copy of the registration form, along with registration fee of Rs. 2000.00 only. The fee should be submitted, along with the filled registration form through Bank Draft drawn in favour of "**Registrar, MNIT Jaipur**" payable at Jaipur, and may be sent so us to reach by **31 December 2017** to **Dr. Ritu Agarwal**, Department of Mathematics, Malaviya National Institute of Technology, Jaipur 302017.

Registration fee for participants include resource material, registration kit, working lunch and tea. Accommodation for outstation participants may be arranged (self payable) in the Institute hostels and guest house (if available) on request and if informed well in advance and mentioned in the registration form itself. Travelling expenses are to be borne by the participants/sponsoring agency. Since there are limited number of seats, registration will be done on **first come first serve basis**.

Organizing Committee

Prof. Udaykumar R Yaragatti (Director, MNIT Jaipur)
Prof. G. S. Dangayach (HOD, Mechanical Engineering)
Dr. Vatsala Mathur (HOD, Mathematics)

Dr. Ritu Agarwal, Coordinator
Department of Mathematics
(M): +91-9549654376, Email: ragarwal.maths@mnit.ac.in

Dr. Mukesh Kumar, Coordinator
Department of Mechanical Engineering
(M): +91-9549654506, Email: mukeshyys@gmail.com

Prof. Rashmi Jain, Coordinator
Department of Mathematics
(M): +91-9549654373, Email: rashmiramessh1@gmail.com

How to reach MNIT Jaipur

MNIT Jaipur is well connected by road, rail and air services. The Institute is situated on Jawaharlal Nehru (JLN) Marg, Malaviya Nagar and is about 9 km from Jaipur junction (Main- railway station) as well as Central Bus Stand (Sindhi Camp). Airport (located at Sanganer) is about 6 km away from the Institute.