Registration Form

One-week Workshop on

"Introduction & **Applications of Ansys EM**"

Duration: 02 - 06 September, 2019

Organized by **Department of Electrical Engineering Rajkiya Engineering College Banda** Atarra, Banda, (U. P.) - 210201 Sponsored By

TEOIP - III

Full Name:	
(in Block Letters as desired on certificate)	
Sex(M/F):	Date of Birth:
Designation:	
Department:	
Highest Qualification:	
Experience (if any): Teaching:	
Industry:	
Email Address:	
Correspondence Address:	
-	

Mobile number :

Accommodation[#] Required (Yes/No) :

Date:

Place:

Signature of Applicant

[#] In-campus Hostel Accommodation may be provided free of cost, but it will depend on the availability. Participants will have to pay for accommodation provided outside the campus. -----

CHIEF PATRON

Prof. Vinay Kumar Pathak Hon'ble Vice Chancellor. Dr. A. P. J. Abdul Kalam Technical University, Lucknow (U.P.).

PATRON

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Prof. G. Ravi Principal, National Institute of Engineering, Mysuru

CONVENER

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Dr. H Pradeepa Assistant Professor & Head, EEE, NIE, Mysuru

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TEQIP - III Sponsored One-week Workshop

On

"Introduction & **Applications of Ansys EM**"

Duration: 02-06 September, 2019 **Under Twinning with**



The National Institute of Engineering Manandavadi Road, Mysuru- 570008

Organized by



Department of Electrical Engineering

Rajkiya Engineering College Banda Atarra, Banda, (U.P.) - 210201 Website : http://recbanda.ac.in

RajkiyaEngineering College Banda

Rajkiya Engineering College Banda was established by the Government of Uttar Pradesh in the year 2010 with three branches, Electrical Engineering, Mechanical Engineering and Information Technology with an annual intake of Sixty (60) in each branch. The college is also a constituent institute of Dr. A. P. J. Abdul Kalam Technical University, Lucknow (Formerly Uttar Pradesh Technical University, Lucknow). The college has moved to its own fully residential campus located at Atarra, Banda in July 2015 and all academic activities from the session 2015-16 are being carried out at its campus.

Department of Electrical Engineering

The Department of Electrical Engineering at Rajkiya Engineering College Banda offers a vibrant environment for undergraduate education in Electrical Engineering. The department has well established laboratories for Power System, Electrical Machines, Power Electronics & Drives, Digital Electronics, Communication System, Control System, Instrumentation and Microprocessor. The Department has well qualified faculty, most of them have their Masters and Ph.D. degree from IITs, NITs, Central& State Technical Universities.

The National Institute of Engineering

The National Institute of Engineering (NIE), established in the year 1946, today stands at 178th place among the top engineering college in the country that include IITs and NITs per NIRF-2019 announced by MHRD. NIE is a grant-in-aid institution and approved by the AICTE, New Delhi. NIE got autonomous status from Visvesvaraya Technological University, Belagavi

in 2007. Five UG programmes – Civil Engineering, Mechanical Engineering, Electronics & Communication Engineering, Electrical & **Electronics Engineering and Industrial & Production Engineering and two PG Programmes – Hydraulics** and Production Engineering & System Technology have been accredited by the NBA, under Tier-I. It is one of the 14 colleges in Karnataka that has been recognized under MHRD-World bank sponsored TEQIP. All the Department of NIE are recognized Research Centre under VTU and AICTE for QIP. Currently, NIE offers 7 UG, 12 PG Programmes and has 15 Centres of Excellence. Many funded research projects of Central and State Governments, VTU and overseas universities are presently being carried out at NIE

Course Outline

ANSYS Maxwell is the premier electromagnetic field simulation software for engineers tasked with designing and analyzing 3-D and 2-D electromagnetic and electromechanical devices, including motors, actuators, transformers, sensors and coils. Maxwell uses the accurate finite element method to solve static, frequency-domain, and time-varying electromagnetic and electric fields.

Course Contents

Some of the important tentative lectures will be on the topics:

- Basics of simulation of electromagnetic fields [Theoretical foundations (Maxwell's equation), Introduction to FEM, Potential formulation and field sizes, Typical applications and operating principles]
- > Introduction to the magnetostatic field simulation [User interface, geometry creation,

Material handling constraints, network design, simulation, analysis, Parametric Simulation: target, approach, evaluation Example: force-displacement characteristic of a solenoid]

- Design and Analysis Three-Phase Transformer [Inductance calculation using Maxwell, Force on coil calculations using Maxwell, Optimetric variation on transformer]
- Design and Analysis of Three-Phase Induction Motor with Direct-Torque Control Drive using Ansys EM [Design details of Three-Phase Induction Motor, Rmxprt Designing of Three-phase induction motor, Design of Direct Torque Control Circuit using Simplorer, Transient Analysis of Drive]
- Design and analysis of Wind Synchronous Generator using Ansys [Calculation of open circuit voltage, analysis of plot densities of Generator, Transient analysis of PMSG]

Eligible Participants

Faculty members/ Research scholars/ PG & UG students from academic institutes approved by the AICTE/ UGC/ MHRD and Scientists/ Engineers working in Private/ Public/ Govt. Organizations/ Industries etc. can attend the course.

How to Apply

Please send a scanned copy of the Registration form in the prescribed format on or before 27-08-2019. Participants can also register online using the link:



Scan me

https://forms.gle/hrR7LreMeR573xzQA