About Electronics & ICT Academy at PDPM IIITDM Jabalpur

The Ministry of Electronics and Information Technology, Government of India has instituted seven Electronics and ICT Academies with one academy at PDPM IIITDM Jabalpur. The primary objective of the Academy is to prepare manpower for two important missions - 'Digital India' and 'Make in India'. The Academy aims at scalable training programmes in niche areas of Electronics and ICT for the development of required knowledge base, skills and tools to unleash the talent of Indian population. In addition to the faculty development programmes on fundamental and advanced topics, the Academy conducts customized training programmes for corporate sector and research promotion workshops in emerging areas. The Academy is envisioned to become a central hub of activities on training, research, consultancy work and entrepreneurship programmes.

About PDPM IIITDM Jabalpur

PDPM IIITDM Jabalpur was established in 2005 with a focus on education and research in IT enabled Design and Manufacturing. Since its inception, PDPM IIITDM Jabalpur has been playing a vital role in producing quality human resources for contribution in India's mission of inclusive and sustainable growth. The Institute offers undergraduate, post graduate and PhD programmes in Computer Science and Engineering, Electronics and Communication Engineering, Mechanical Engineering, Design and PhD programmes in Mathematics, Physics and Literature. Under IIIT act, the Institute has been declared as an Institute of National Importance in January 2015. The Institute campus is being developed on 250 acres of land close to Dumna Airport, Jabalpur. The Institute is 10 kms from the main railway station and 5.5 kms from Dumna Airport, Jabalpur.

Faculty Development Programme High Frequency and Low Frequency Electromagnetic Analysis using HFSS

Who can attend: Programme is open to faculty from all the colleges and universities preferably from the states of M.P., Chhattisgarh, and Maharashtra. Industry personnel working in the concerned/allied discipline may also apply. *Limited seats are available for research scholars.*

How to apply :

Online: The participants may log on to the website ict.iiitdmj.ac.in and fill up the application form selecting the name of the course.

You may also send scanned copy of your completed application form to academyiiitdmj@gmail.com. Application format may be downloaded from the website (Also given in this brochure). Print out of the filled in application form duly endorsed by the forwarding authority and a demand draft of applicable amount (as given below) in favour of 'Electronics and ICT Academy, IIITDMJ' payable at Jabalpur may be sent to the address given below. No Travelling Allowance will be paid by the Academy.

Important Dates:

Last Date of Online Registration:March 18, 2018 Spot Registration also available if seats are available. Course Dates: Marc 19-23, 2018

Registration Fee :

Academic: Rs. 1000/- (Gen/OBC) Rs. 500/- (SC/ST) Industry: Rs. 5000/-(includes lunch + tea)

Accommodation charges (if needed):

Rs. 1000/- (includes breakfast + dinner)

Contact us

Electronics and ICT Academy PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, Dumna Airport Road, Jabalpur 482005

Email: academyiiitdmj@gmail.com Website: ict.iiitdmj.ac.in

Faculty Development Programme

High Frequency and Low Frequency Electromagnetic Analysis using HFSS

March 19-23, 2018



Electronics and ICT Academy An Initiative of Ministry of Electronics and Information Technology, Government of India

PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, Dumna Airport Road, Jabalpur 482005

Building Human Resources For Digital India E6/ICT Academy IITTDMJ

Finite Element Practice using ANSYS March 19-23, 2018

Course objectives:

This course is designed to provide training on basics of Finite Element Method (FEM) and its implementation using ANSYS HFSS. HFSS and Maxwell software is used in variety of engineering fields to model structures, electronics and system simulation. In this hands-on course, participants will learn how to perform engineering simulations using a powerful tool from ANSYS, Inc. This is a problem-based course where participants will learn by doing. Participants will practice using a common approach to problems involving different physics.

Aim of the course is to enable the participants understand how to apply the HFSS/Maxwell in obtaining approximate solutions to the boundary value problems using ANSYS. The course is purely hands-on training on ANSYS HFSS and Maxwell software.

Resource Person

Mr. Pavan Kumar Nanduri Application Engineer (ANSYS) ARK INFOSOLUTIONS PVT. LTD 18th Floor, Lotus Nilkamal Business Park, New Link Road, Opp. Fun Republic Cinema, Andheri (W), Mumbai-400053

Course contents

Introduction to ANSYS HFSS: Meshing and Mesh Operations, ANSYS Electronics Desktop, 3D Design Set up, 3D Modeler, Adaptive Meshing, Introduction to Adaptive meshing, number of passes, Convergence criteria, Max Δ S value,

Boundary Condition and Excitation: Perfect E Boundary, Radiation Boundary (ABC), Perfectly Matched Layers (PML), HFSS Solution Types, Excitations: Wave surfaces Ports, Lumped Ports

Post Processing and Results: Post Processing Quantities, Formats, Creating Reports & Report Editor, Field Overlays, Radiation Computation, Animating Field Quantities Parametric Analysis & Optimetrics

Introduction to ANSYS Maxwell: Maxwell Solution Method, Error Evaluation, Maxwell Design Types, RMxrpt, Maxwell 2D, 3D, GUI, Solvers, File Structure, Directories, Libraries, Maxwell Geometry, Parametrization, 2D and 3D Geometry Transfer, Simulation Region, CAD Integration

Electrical Machines- Analysis and Circuit Design: Maxwell – Mesh Operation, Maxwell Post Processing, Solution Data, Field Demonstration Overlaps, Report Plots, Fields Calculator, Output Variables, Static Electric & Magnetic Solvers, Transient Solvers,

Course Coordinators

- Dr. Biswajeet Mukherjee (9425805501) Email: <u>biswajeet.26@gmail.com</u>
 - Dr. Ravi Panwar (7347289808) Email: <u>rpanwar@iiitdmj.ac.in</u>
 - Dr. Trivesh Kumar (9512763966) Email: trivesh@iiitdmj.ac.in

Website: ict.iiitdmj.ac.in

Application Form

Name of the Course / Programme: High Frequency and Low Frequency Electromagnetic Analysis using HFSS

Name of the Applicant (first, last):
Gender : M / F/ T Category: GEN/SC/ST/OBC
Designation:
Name and Address of the Organization/Institute/College:
City/town: Email:
Alternate email (if any):
Phone Number:
Mobile Number:

Do you need accommodation? (Yes/No):

Note: Accommodation and meal	facility will be available only
from the evening of March 18	to the morning of March 24,
2018.	
DD Number:	Date:
ssuing Bank:	payable at:

Signature of the Applicant

I hereby agree to relieve Mr./ Ms./	Dr
	in case she/he is selected

to attend the programme.

Signature and Seal of the Forwarding Authority

Name	
Iname	•

Designation