

A Faculty Development Program on "Electromagnetics, Microwave, RF and Antenna Design" Using ANSYS HFSS Tool flow

Offered by EntupleTechnologies in collaboration with Department of ECE, ABESIT, Ghaziabad Duration: 5 Days, 15th - 19th January, 2018



About Entuple:

Entuple Technologies is a next generation solutions enabler in cutting edge technologies. Entuple delivers world class simulation solutions in Applied Electromagnetics, Semiconductor (VLSI), System Design & Reliability, Mechanical, CFD and RF. Our product solutions include PCB Prototyping, Planer Antenna prototyping systems. Entuple has developed its own range of semiconductor based power drives and process control solutions. We cater to wide range of customers in semiconductor, manufacturing, defense & aerospace and academia. Entuple has set up center of excellence in the northern region at ABESIT, Ghaziabad to train the faculty & industry professionals in this cutting edge technology.

About the Program:

The program provides an immersive learning experience on the concepts of computational electromagnetics and runs through the design of filters, waveguides and different types of antennas using industry standard 3D electromagnetic simulation tool. It adds the insights of antenna characterization. The program offers lucid examples, case studies and engaging hands-on sessions under the supervision of practicing industry resource.

Who should Attend?

This program is designed for

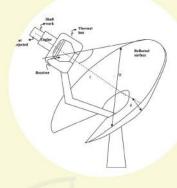
- Faculty pursuing their Research / Research Scholars in electromagnetic simulations, RF design, design and analysis of antennas and more.
- Post Graduate (PG) students interested to acquire skill in RF Design, high frequency simulations and antenna design & analysis.

Objectives:

After the completion of this program participants will be able to

- Explain the concepts of computational electromagnetics
- Illustrate the key elements of High frequency simulations
- · Design, simulate, optimize antennas for the given specification





About ABESIT:

The ABESIT Institute of Technology, Ghaziabad (UP) is a reputed Engineering Institute in NCR which embarked on its mission in the field of technical education from the Academic Session 2007-08. The institute has lush green and sprawling campus situated next to Crossing Republik, NH-24, Ghaziabad. Institute's philosophy has been to invest all the resources towards students' cause and development. Institute's teaching staff is qualified, painstaking and competently meeting out students' curriculum requirements. This is reflected in the institutes result.

ABESIT has Human resources with corporate background as a part of faculty which ensures the right blend of theory and practical applicability of the course concept. Eleven Centers of Excellence & Innovation (CEI)' have been setup at the Institute to take the curriculum beyond academics and through mechanism that provides "hand on practice" and encourages innovation for development of products amongst students.

Testimonials of Training Program from Entuple:

This Course is very much relevant.

-- Faculty, IIT BHU

Trainer's expertise on the Subject is exceptional.

-- Faculty, BSA Ubiversity, Chennai

The Program I attended was a good exposure to Antenna designs and HFSS.



About the Department:

The ECE Department of the Institute offers an Under Graduate program in Electronics and Communication Engineering. The program covers all areas of Electronics and Communication Engineering under the broad categories such as Digital Signal Processing (DSP), Image and Speech recognition and Processing, Embedded Systems Design, Wireless Communication, Optical Communication & Networks, Antenna & RF Systems and VLSI.

The department also conducts various Faculty Development Programs, Seminars and Workshops at regular intervals to keep students abreast with the latest trends in the Industry. It also provides ample opportunities to students to work on live projects, develop communication skills, explore internship opportunities in industry & world-class institutes of higher learning and take part in national and international competitions.

Course Outline:

Day 1:

- Introduction to Computational Electromagnetics
- HFSS Introduction: High Frequency Simulation and Analysis basics
- · Boundary conditions and excitations
- Design, Simulation, optimization and Characterization of a patch Antenna

Day 2:

- Fundamentals of Waveguides
- Modes-TE, TM and TEM
- Design, Simulation and Characterization of a Rectangular Waveguide
- Band pass filter / Eigen mode Coaxial resonator filter using HFSS

Day 3:

- · SAR Analysis using HFSS
- Design, Simulation and Characterization of a Horn fed Reflector Antenna

Day 4 & 5:

- · Getting started with Designer
- Designer RF HFSS dynamic linking &Impedance matching of an antenna
- Reconfigurable Structures Hands-on session
- Fractal Demonstration
- Metamaterials Demonstration

Design Case Study: 30 Days

A common design case study will be provided to all participants. The participants will be allowed to work on the case study at their respective institutions. Participants will receive a Certificate of Appreciation on successful completion of design case study.

For further information, please contact:

Entuple Technologies

Mr. Aravinth N, Developer, Mobile No: +91 9513940119

Ms. Sona V, Manager, Mobile No: +91 7022600846 Entuple Technologies Pvt. Ltd., #2730, Trikannika, 80 Feet Road, HAL 3rd Stage, Indiranagar, Bangalore - 560038

ABESIT

Prof.S.B.Bajpayee, Head - CEI Mobile No: +91 8700173032

Prof. (Dr.) Sapna Katiyar, HOD EC & EEE Dept, Mobile No: +91 9811583876 ABES Institute of Technology, Campus-2, 19th Km Stone, NH-24, Vijay Nagar, Ghaziabad-201009 (U.P.)

Registration Fee:

Industry Participants: INR 25,000.00

Teaching Faculty / Research Scholars (Full Time) / PG / UG Students: INR 7,500.00

Registration: Online registration can be done at Entuple website: http://events.entuple.com

Payment Details:

 Online Transaction: Name: ABES Institute of Technology, Account No: 0674009300226366, Bank: Punjab National Bank. IFSC Code: PUNB0370300, RTGS Code: PUNB0370300

Venue: ABES Institute of Technology, Campus-2,19th Km. Stone, NH-24, Vijay Nagar, Ghaziabad-201009 (U.P.)