On Campus students training program on

CATIA & ANSYS

REPORT

(3rd October – 19th November 2015)

The Department of Mechanical Engineering, Integral University, Lucknow organized 80hrs on campus training program on “CATIA and ANSYS” from 3rd October till 19th November 2015. This student training program aimed at enriching skills of students with the state of art information on the modeling and experimental design techniques in the thrust areas of Mechanical Engineering and inculcate research interests in the said areas. The trainers were Mr. Satya Prakash, Mr. Vivek Kumar from CETPA InfoTech Pvt. Ltd. Lucknow.

Objective of the Workshop: With the increasing demand of variety of products, the industry of manufacturing is aiming to produce quality and economical products. This process depends on many parameters and intermediate correlations. New and innovative designs need to be developed to meet the demands of the customer and industry. The Design softwares have become powerful tool for the continuous improvement of quality in designing the products. The faculty members in the engineering institutions should have potential in the area of design and impart their knowledge to the students so that the students graduated are fruitful to the society.

Module-I was handled by Mr. Satya Prakash. In his module, He discussed about the fundamentals and discussed the utility of the Part design, creation of sketch - based features and best practice methodology is stressed throughout the session. He has covered all the areas for the part design workbench while interacting with sketcher and reference elements to create modifiable parts. After understanding the Fundamentals of CATIA V5, the students were able to draw the 2D drawings in sketcher module with ease. By understanding the advanced solutions for conceptual design, 3D modeling and documentation, this workshop also enables the students to understand about the product design, industrial design and styling. After completion of this module, the students will be able to design streamline 2D design, drafting, documentation with powerful tools for layout, drawing and 3D annotation assembly design and template based design.

Module-II was handled by Mr. Vivek Kumar. In his session, He discussed about the fundamentals of ANSYS, Failure analysis theory and FEM concepts. The Session was more Interactive and informative for all participants. The workshop is cover with different topics like Failure analysis theory, Geometry Design Modeler and Geometry import, Geometry cleanup, Meshing, Meshing advanced options, Static structural analysis, Transient structural analysis, Steady thermal analysis, Transient thermal analysis, Linear nonlinear analysis, Multi body dynamics familiarization, Model analysis, Thermal structural modal coupled analysis, Explicit dynamics, Fatigue failure analysis, Buckling FEM analysis. The whole sessions were very interactive with the doubts of the students and practice programs were conducted for each topics.

The entire event was well coordinated by Mr. Kamran Rasheed and Mr. Mohd Reyaz Ur Rahim, who ensured the smooth conducting of the training programme. The overall response from the participants was quite overwhelming and all the registered candidates were awarded with the certificates of participation.