



Bharatiya Vidya Bhavan's

Sardar Patel College of Engineering

(Government Aided Autonomous Institution under University of Mumbai)

Munshi Nagar, Andheri (W), Mumbai 400058



Report on One Day Workshop

Organized By Mentor Institute

Sardar Patel College of Engineering, Andheri, Mumbai

Under Twinning Activity of TEQIP – III for Mentee Institute

Govt. Engineering College, Rewa, M.P.

On

Advanced Structural Non-Linear Analysis

Using ANSYS Software

On Friday, 18th October 2019

By

Shirsh Techno Solutions, Mumbai

ANSYS Authorized Training Centre

Venue: Room No.213,

Sardar Patel College of Engineering, Andheri

Organized by

Dr Santosh B. Rane

Dean Academics

Report of One Day Workshop on Advanced Structural Non-Linear Analysis

One Day workshop was organised by Mentor Institute Sardar Patel College of Engineering, Andheri, Mumbai under Twinning Activity of TEQIP – III for Mentee Institute Govt. Engineering College, Rewa, M.P. on Advanced Structural Non-Linear Analysis on 18th October 2019 for students and faculty.

This program was specifically designed in order to provide a special insight regarding non-linear stress analysis on mechanical components. The program included presentations on fundamentals of Finite Element Analysis (FEA), informative case studies in industries regarding failures and Hands-On experience on stress analysis of different mechanical components like connecting rod, flow valve and pressure vessels by Mr. Ashish Vajir, CTO at Shirsh Techno Solutions, Mumbai.

The day of program commenced with the welcome of program instructor and also an alumni of SPCE Mr. Ashish Vajir by Dr. Santosh Rane, Dean Academics. It was followed by introduction of guest and felicitation program of guest.



Then, Dr. Santosh Rane, gave an overall idea of workshop which included objectives of the workshop, expected outcomes, schedule of the workshop, modules covered in the workshop. He informed that participants (30 students) from various departments of SPCE, Andheri has participated in the workshop. He elaborated that this program was specifically designed to provide a practical Hand-On learning experience of non-linear analysis on ANSYS software.



Program instructor Mr. Ashish Vajir took the charge of session and addressed the participants by valuable information on basics of FEA, Non-linear analysis, key application of software and career opportunities and challenges in stress analysis field. He explained the features of software and stress analysis for various loading criteria and boundary conditions.

In presentation, he discussed different ways of approach to solve the stress analysis problems. He demonstrated computation of stress and deformation values for different loading condition. Different failure cases of flow valve, pipe joints, accessories of pressure vessel were analysed using ANSYS software.



After refreshing tea break, program instructor explained the procedure of mesh generation, mesh control, force and constraint application to the component. Lab systems with ANSYS version 15.0 was used for conducting the analysis for the workshop.



After a lunch break, again the hands on session on Structural Non-Linear Analysis started with detailed training on making a cross section, result with different types of meshing and loading at different location of the components. Every participant got the chance to experience the hands on session on stress analysis using ANSYS software. With refreshing tea break, program instructor explained them different ways of solving stress analysis problem using ANSYS.



Dr.Santosh Rane thanked the expert speaker for his valuable presence and sharing his expert knowledge, imparting a specialized training using ANSYS and making one day workshop program memorable one.