



BHARATI VIDYAPEETH'S

COLLEGE OF ENGINEERING LAVALE, PUNE 412115

Mechanical Engineering Department

Date- 20/03/2016

Report On ONE WEEK Training Program On "SOLIDWORKS Software (CAD/CAE)"

**One Week SolidWorks
Training Programme**

Organized By
Mechanical Engineering Department,
Bharati Vidyapeeth COE, Lavale-Pune

In Collaboration With
Pelf InfoTech Pvt. Ltd., Pune

DATE- 01 MAR. 2016 TO
5 MAR. 2016

VENUE- Mechanical Engineering
Department, BVCOE, Lavale-Pune

The One week training program on **"SOLIDWORKS Software (CAD/CAE)** was successfully organized in first week of march from 01/03/2016 to 05/03/2017 at **Mechanical Engineering Department, BVCOEL, Pune**. This training program was arranged by Prof. V. S. Jadhav (HOD, Mechanical Engineering Department) & Prof. S. N. Kadam (Assistant Professor). This Training Program Conducted by Experts from pelf Infotech Pvt. Ltd. Pune and attended by final year BE Mechanical Engineering Students.

Pelf Infotech Provides four Experts to conduct training program Mr. Abhishek Rakshe & Mr. Narendra to conduct session's based on CAD. In this program they covered basic cad tools, sketches, 3D modeling and Feature base modeling. Mr. Sanjay Mohanty Provide Guidance & Training based on Computer aided Manufacturing, CAMWORKS user interface and generation

of CNC Codes with the help of software. Mr. Pranav Joshi Provide the guidance based on Linear Structural Analysis of Components.

The program was successfully concluded with question answer session followed by open discussion & formal vote of thanks.

SCHEDULE OF 1 Week Training Program on “SOLIDWORKS Software (CAD/CAE)”

Day 1 (01/03/2016)

CAD

Sr. No.	Time	Topic
	9:30 to 10:00	Introduction to CAD software,
	10:00 to 11:30	Basics of Sketcher, 2D Sketch (Dimensioning, Constraints, Plane selection, Mirror, Pattern)
	11:30 to 12:15	LUNCH
	12:15 to 01:00	Practice session on basic sketcher commands
	01:00 to 02:15	Part Modelling (Parametric Modelling-Transform 2D sketch into 3D Solid)
	02:15 to 02:30	BREAK
	02:30 to 03:30	Basics of Feature Based Modelling, Feature recognition
	03:30 to 04:30	Assembly Drawing and commands, Illustration of one simple assembly drawing of machine component

Day 2 (02/03/2016)

Sr. No.	Time	Topic
	9:30 to 10:00	Guest Lecture of Pelf InfoTech Marketing Head
	10:00 to 11:30	Assembly Drawing continue with practice on at least 2 assembly Drawing (IC Engine- Piston, Piston ring, Connecting rod, Crankshaft, Bearing)
	11:30 to 12:15	LUNCH
	12:15 to 01:00	Practice session on basic assembly drawing
	01:00 to 02:15	Basics of Sheet Metal Drawing / Design approach
	02:15 to 02:30	BREAK
	02:30 to 03:15	Generate 2D sketches from parts and Assembly 3D model
	03:15 to 04:30	Discussion on other modeling Features of Solidworks

Day 3 (03/03/2016)

CAE

Sr. No.	Time	Topic
	9:30 to 11:30	Importing CAD file to CAE Meshing- Basics of mesh selection and various mesh types, Mesh quality and use for structural analysis
	11:30 to 12:15	LUNCH
	12:15 to 02:15	Examples of Meshing by using simple Machine components to critical machine components.
	02:15 to 02:30	BREAK
	02:30 to 04:30	CAE Analysis and Numerical Introduction and selection of element type, Stress and deflection analysis of any machine component using FEA (1 problem based on 2D and 1 problem based on 3D)

Day 4 (04/03/2016)

Sr. No.	Time	Topic
	9:30 to 11:30	Tatic stress concentration Factor Calculation for a plate with center hole subjected to axial loading in tension using FEA Modal Analysis of 1D beam (SSB or Cantilever Beam), Modal analysis of any Machine Component
	11:30 to 12:15	LUNCH
	12:15 to 02:15	2D Forced Convection Problem using FEA, Thermal Analysis Problem Based on Conduction (Simple Wall Problems)
CAM		
	02:15 to 02:30	BREAK
	02:30 to 04:30	Cad model drawing for milling and turning. Tool path generation for turning.(grooving and threading)

Day 5 (05/03/2016)

Sr. No.	Time	Topic
	9:30 to 11:30	Tool path generation for milling.(facing, pocketing, contouring and drilling). Cad model drawing for turnmill and multi axis machining.
	11:30 to 12:15	LUNCH
	12:15 to 02:15	Tool path generation for turnmill. Tool path generation for multi axis machining.
	02:15 to 02:30	BREAK
	02:30 to 04:30	VOTE OF THANKS AND SNACKS

