ZENUS INFOTECH INDIA PVT. LTD. CURRICULUM OF ANSYS

Course Duration: 6/8 Weeks*

Session 1	 Introduction to FEM/FEA concepts
	Introduction to Ansys
	Creating geometry
	• Generation of key points, lines,
Session 2	• Areas & volumes
	• Extruding areas, lines & key points
	• Work plane management, coordinate systems.
	• Editing geometry
	• Performing Boolean operations (Add, subtract,
	intersect)
	Boolean operation- (divide, glue, partition,
Session 3	• overlap)
	• Move/modify,
	 Copy& reflect geometries.
	• Check geometric properties.
	 Import geometry from other CAD software
Session 4	Material Definition
	 Explaining about nodes & elements
	• Meshing
	 Types of mesh-Free& mapped meshing
	• Explaining about mesh attributes. Size controls
	• Meshing key points, lines, areas & volumes.
Session 5	Mapped meshing.
	Mesh concatenation
	• Mesh extrusion,
	• Mesh sweeping.
	• Hexa – tetra conversion
	 Define loading & boundary conditions.
	• Different types of loads
	• Different types of constraints.
Session 6	Introduction to Static Structural Analysis
	• Beam analysis,
	Truss analysis
	Stresses in bars
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Session 7	• Stresses in composite bars, strain energy calculations
	• Finding out reaction solutions
	Modal analysis
Session 8	Transient Dynamic analysis
	• Over view on Non-linear analysis,
	• Thermal analysis
Session 9	Coupled field analysis
	APDL Concepts
	 Advanced post processing
	Report generation
Session 10	Modal Analysis
	Impulse Loading
	Sinusoidal Loading
	Harmonic Loading
Session 11	Transient Heat Analysis
Session 12	Fluid Dynamics
Session 13	• Test & Review.

Office Address: S-11, Opposite BSNL Telephone exchange , Avas Vikas

Roorkee, Uttarakhand - 247667 | www.zenusinfotech.in | Ph No- 8218088730