Syllabus for 'Industrial training program in CFD grid generation using Ansys ICEM CFD

Course phasing

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Sr.No	Course contents	Date	Student Signature
1	Introduction to ANSYS ICEM CFD		
2	List of commands and applications		
3	Grid generation fundamentals		
4	Geometrical or database import and editing		
5	Geometrical clean up using ICEM CAD repair		
6	Introduction to mesh topology		
7	Types of CFD mesh		
8	Generating an Un-structured mesh (Tetra mesh)		
9	2 D shell grid generation (tetra elements)		
10	Input parameters to pre mesh		
11	Grid Edit (clustering, smoothening and coarsening)		
12	Octree mesh method		
13	Quality check for domain and surface grid		
14	Creating prism layers		
15	Smoothening of tetra/prism mesh		
16	Methods of improving the quality		
17	Different editing options for grid		
18	Introduction to Hexahedral mesh		
19	Intelligent geometry in hexa		
20	Creating blocks and multi blocks for hexa		
21	Creating a structured 3D block or volume mesh		
22	Block splitting merging		
23	Pre-mesh smoothing and editing		
24	Quality checks for Skewness,angle,warpage etc..		
25	Creating density boxes		
26	Creating material properties		
27	Setting boundary conditions and solver settings		
28	Exporting grid to flow solver		