



**MSME- TECHNOLOGY CENTRE, GUWAHATI**  
**TOOL ROOM & TRAINING CENTRE**  
Ministry of Micro, Small & Medium Enterprises, Govt. of India



**COURSE NAME: e – Learning on Application of Solidworks.**

**DURATION: 2 weeks (2hrs/day)**

SL No.	Contents
1	<ul style="list-style-type: none"><li>• Online Software installation guidance with self-introduction and interaction</li><li>• Introduction to TRTC &amp; its Courses</li><li>• Introduction to CAD/CAM/CAE</li></ul>
2	<ul style="list-style-type: none"><li>• Application of Solidworks and its importance in CAD Modelling.</li><li>• Introduction to Solid works interface.</li><li>• Demonstrations on various Sketching Tool &amp; also sketching in solid works , Creating ,editing and Constraining a Sketch</li></ul>
3	<ul style="list-style-type: none"><li>• Introduction to Solid modeling and different solid modelling tools to create and modify the model</li><li>• Demonstrations on different solid Modelling tools (Ex-Extrude, Revolve, Loft, Sweep...etc.) &amp; Practice Exercises.</li></ul>
4	<ul style="list-style-type: none"><li>• Demonstrations of Fillet, Chamfer , Pattern , Mirror &amp; Hole features</li><li>• Demonstration of Draft, Shell &amp; create and Modification of Curve Features also Practice Exercises.</li></ul>
5	<ul style="list-style-type: none"><li>• Demonstration of some advance solid Modeling tools (Hole Wizard ,Revolved Cut , Revolve Boss , Swept Boss...etc</li><li>• Reference geometry creation &amp; Practice Solid modeling using above Tools, Practice Exercises.</li></ul>
6	<ul style="list-style-type: none"><li>• Introduction to Surface Modeling.</li><li>• Demonstration on creating and Modification of Thin extruded surface, Revolved Surface, sweep surface &amp; Lofted surface etc.</li></ul>
7	<ul style="list-style-type: none"><li>• Different Surface Editing and modification Tools Fillet/Round, Offset, Radiate, Fill, Freeform, Ruled Surface, Mid Surface, Parting Surface</li><li>• Trim, Extend, Un-trim, Knit, Move/Copy, etc.&amp; Practice Exercises</li></ul>
8	<ul style="list-style-type: none"><li>• Introduction to Assembly Design.</li><li>• Demonstration on top and Bottom down assembly , filtering, mating conditions, Component pattern , exploding views and components, Assembly drawings</li></ul>
9	<ul style="list-style-type: none"><li>• Work with simple mates for different assembly component. Work with mate command for motion</li><li>• Create assembly feature like extrude, mirror, hole etc. Sectioning and assembly exercise Practice.</li></ul>
10	<ul style="list-style-type: none"><li>• Introduction to Design Sheet Preparation (Drafting)</li><li>• Standard three views, Model view, and predefined view, standard section views</li><li>• Creating dimensions, Annotations, Notes and Surface Finish Symbols</li></ul>

11	<ul style="list-style-type: none"> <li>• Geometric Tolerance to the Drawing Views, Add Center Marks and Center Lines to the Drawing Views, Add Center Marks and Center Lines to the Drawing Views.</li> <li>• Create drawing formats &amp; customizing an existing format,Also perform generative drawing on Solid Works</li> </ul>
12	<ul style="list-style-type: none"> <li>• Test and Question Discussion</li> <li>• Review , Feedback session &amp; Validation</li> </ul>