EEC/MECH/1.3.2/1.
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VAC

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KOMARAPALAYAM - 637303

DEPARTMENT OF MECHANICAL ENGINEERING

S.No.	Year	Date	Course Title	PO Mapping	PSO Mapping
1.	2021-22	20.01.2022 TO 31.01.2022	SOLID WORKS	PO – 1,2,3,4,5,10,12	PSO – 1,2
2.		20.01.2022 TO 31.01.2022	CNC PRORAMMING ON LATHE AND MILLING	PO – 1,2,3,4,5,10,12	PSO – 1,2

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HEAD OF THE DEPARTMENT
MECHANICAL ENGINEERING,
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Date

20.01.2022

to

31.01.2022

B.E. - AERO, MECH, CSE, ECE

DEPARTMENT OF
MECHANICAL ENGINEERING ORGANISE

Value Added Course on

SOLIDWORKS

Dr.N.Natarajan
Head of the Department

Dr.R.Vinoth
Dr. N. TamilSelvan
Course Co-ordinators
MrMeyvel S M
Instructor

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Department of Mechanical Engineering
ONLINE CLASS TIME TABLE

Academic Year: 2021-22
Venue: CAMU Platform

Year/Sem : III(A&B)/V
Ver: I

Session	1	10.20AM-10.30AM	2	11.20AM-11.30AM	3	12.20PM-12.30PM	4	1.30PM-2.30PM	5
DAY/TIME	9.30AM-10.20AM		10.30AM-11.20AM		11.30AM-12.20PM		12.30PM-1.20PM		2.30PM-3.20PM
MON	PT-APT	BREAK	PT-COM	BREAK	VAC	BREAK	VAC	LUNCH	VAC
TUE	PT-APT		PT-COM		VAC		VAC		VAC
WED	PT-APT		PT-COM		VAC		VAC		VAC
THU	PT-APT		PT-COM		VAC		VAC		VAC
FRI	PT-APT		PT-COM		VAC		VAC		VAC
SAT	VAC		VAC		ACT		ACT		-

Course Code	Course Name	Acronym	No of Credits	Hrs	Faculty Name with Designation/Dept.
--	Placement- Communication	PT-COM	-	5	Mr.Manikam.R , Trainer/Placement
--	Placement- Aptitude	PT-APT	-	5	Mr.Ravindhar.S , Trainer/Placement
--	Value Added Course on Solid Works	VAC	-	10+5	Mr.Premraj,AP/Mech Mr.N.Selvakumar ,AP/Mech Mr.V.Karthikeyan ,AP/Mech Mr.M.Sambathkumar ,AP/Mech Dr.N.Tamilselvan ,AP/Mech Dr.N.Venkatachalam ,ASP/Mech Dr.R.Vinoth ,ASP/Mech Mr.T.M.sakthimuruga ,AP/Mech

S.No.	Name of the Mentors
1	Mr.Premraj,AP/Mech
2	Dr.R.Vinoth ,ASP/Mech

Department TT coordinator

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HoD

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DEPARTMENT OF MECHANCIAL

ENGINERRING ACADEMIC YEAR 2021-22

VALUE ADDED COURSE

SOLIDWORKS COURSE CONTENTS

Duration:30hrs

Hour	Description
1	Introduction to Solidworks Commands
2	Applications of 2D Sketch Tools
3	3D Solid Modeling - I
4	3D Solid Modeling - II
5	Surface Modeling - I
6	Surface Modeling - II
7	Sheet Metal Modeling - I
8	Sheet Metal Modeling - II
9	Modeling of Weldments
10	Assembly of Machine Components - I
11	Assembly of Machine Components - II
12	Assembly Motion Study
13	Extraction of 2D Drawing
14	Modeling Practice I
15	Modeling Practice II
16	Modeling Practice III
17	Modeling Practice IV
18	Assessment

Coordinator

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HOD

Windows and Display

- Cascade
  - Arranges all SolidWorks document windows so they overlap with title bars visible.
- Tile Horizontally – Tile Vertically
  - Arranges the open SolidWorks document windows so they are all visible
- Full Screen Mode.
  - Full Screen Mode hides menus, the status bar, and the Feature Manager design tree to show more of the graphics area.

  F9 – Show/Hide Feature Manager Design Tree

  F10 – Show/Hide All Toolbar

  F11 – Full Screen Mode

Introduction on Solidworks

- Solidworks is a solid modelling computer-aided design (CAD) and computer-aided engineering(CAE) computer program published by Dassault Systems.
- Solidworks is a Software that contains various tools which helps in modelling of a component/structure as part or assembly.

Toolbar

Toolbars are available for most SolidWorks tools, and also for add-in products.

Named toolbars assist you in performing specific design tasks such as applying surfaces or drawing curves.

Because the Command Manager contains the most frequently used tools for the currently selected document, toolbars are turned off by default.

You can display:

- SolidWorks toolbars
- Toolbars for add-in applications

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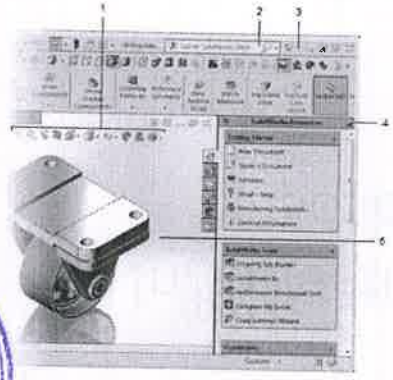
User Interface Overview



1. Heads-up View Toolbar
2. Solidworks Search
3. Help Flyout Menu
4. Task Pane
5. Graphics Area

Introduction Basics of Solidworks

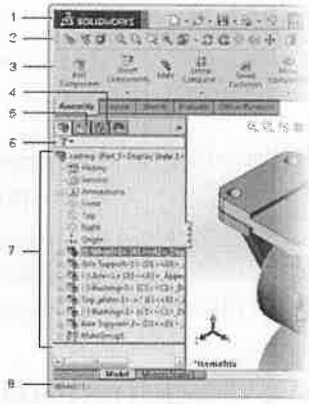
Windows and Display

- Each document in the SolidWorks application displays in a separate window.
- Document Window
  - In the SolidWorks application, each part, assembly, and drawing is referred to as a document, and each document is displayed in a separate window. (Each drawing document can contain multiple drawing *sheets*, though.)
- New Window
  - Creates a new window, with another view of the original document, for viewing the active part, assembly, or drawing.

Menu bar

The Menu Bar contains a set of the most frequently used tool buttons from the Standard toolbar, the SolidWorks menus, the SolidWorks Search, and a flyout menu of Help.

User Interface Overview



1. Menu Bar
2. Toolbar
3. Command Manager
4. Configuration Manager
5. Property Manager
6. Feature Manager Filter
7. Feature Manager Design Tree
8. Status Bar

Property Manager

Title Bar	The feature icon and feature name (Extrude1, for example) (read-only).
Buttons	OK — Accept the selections, execute the command, and close the PropertyManager. Cancel — Ignore any selections and close the PropertyManager. Preview — Display a preview of the feature. Help — Open the corresponding help topic. Keep Visible — Pin the PropertyManager open. Back — Return to the previous step. Next — Proceed to the next step. Undo — Undo the previous execution.
Message	A text box directing you to the next step, often listing various ways to implement the next step.
Group Box	Collection of related buttons, list boxes, and selection boxes, with a group title (Direction 1, for example), which can be expanded or collapsed
Selection Box	Accept selections in the graphics area or in the Feature Manager design tree. When active, the boxes are pink. When you select an item in the selection box, it is highlighted in the graphics area. To delete selections from a box, right-click and choose Delete (for one item) or Clear Selections (for all items).

Feature Manager Filter

The Feature Manager design tree filter lets you search for specific features of parts and components of assemblies.

To filter the Feature Manager design tree:

At the top of the Feature Manager, in the filter field type a keyword to display the items you want to view

You can filter by:

- Types of features
- Feature names
- Sketches
- Folders
- Mates
- User-defined tags

Toolbar

In addition, the following special toolbars help you work more productively:

- Heads-up View tools
- Context toolbars
- Shortcut bars

You can customize:

- Visibility and position of toolbars for part, assembly, and drawing documents.
- Visibility of context toolbars.
- Tool buttons on toolbars.

Configuration Manager

The Configuration Manager is a means to create, select, and view multiple configurations of parts and assemblies in a document.

To activate the Configuration Manager:

- Click the Configuration Manager tab at the top of the Manager Pane.
- Each configuration is listed separately.

The icons in the Configuration Manager denote how the configuration was created:

Manually.

With a design table.

Manually, and has an explode state or a derived configuration.

With a design table, and has an explode state or a derived configuration.

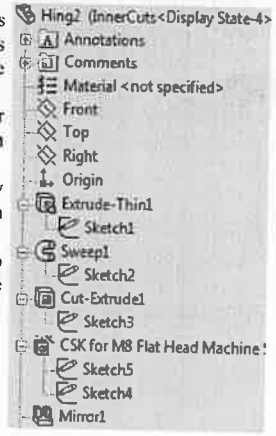
Feature Manager Design Tree

The Feature Manager design tree on the left side of the SolidWorks window provides an outline view of the active part, assembly, or drawing. This makes it easy to see how the model or assembly was constructed or to examine the various sheets and views in a drawing.

To toggle visibility of the Feature Manager design tree area, press **F9** or click **View > Feature Manager Tree Area**, which is especially useful when in full screen mode.

The Feature Manager design tree and the graphics area are dynamically linked. You can select features, sketches, drawing views, and construction geometry in either pane.

You can split the Feature Manager design tree and either display two Feature Manager instances, or combine the Feature Manager design tree with the Configuration Manager or Property Manager.



Status Bar

The status bar at the bottom of the SolidWorks window provides information related to the function you are performing.

To display or hide the status bar:

- Click View > Status Bar.

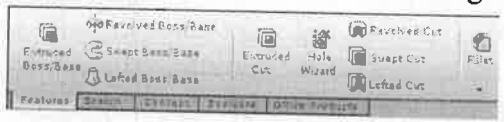
Typical information provided in the status bar:

- A brief description as you move the pointer over a tool or click a menu item.
- Sketch status and pointer coordinates, when you are working in a sketch.
- Commonly used measurements for selected entities, such as the length of an edge.
- A message to indicate that you are editing a part while in an assembly.
- Unit System MMGS which shows the unit system for the active document in the status bar and lets you change or customize the unit system.

Command Manager

The Command Manager is a context-sensitive toolbar that dynamically updates based on the toolbar you want to access. By default, it has toolbars embedded in it based on the document type.

When you click a tab below the Command Manager, it updates to show that toolbar.



Use **Ctrl+Page Up** and **Ctrl+Page Down** to scroll through the Command Manager tabs.

Property Manager

The Property Manager is a means to set properties and other options for many SolidWorks commands.

The Property Manager appears on the Property Manager tab in the panel to the left of the graphics area. It opens when you select entities or commands defined in the Property Manager. You can choose whether it opens in other cases in Tools > Options > System Options > General.

Graphics Area

The graphics area displays and lets you manipulate parts, assemblies, and drawings.

Contents:

- Reference Triad
- Triad
- Origin
- Heads-up View Toolbar
- Accepting Feature
- Callouts and Handles
- Viewports
- Image Capture

Triad

The triad facilitates manipulating various objects such as 3D sketch entities, parts, certain features, and components in assemblies.

The rings and wings are displayed when rotation and dragging along the wings' planes are possible.

Use commands to display information about the triad or to change the position and orientation of the triad. Available commands depend on the triad's context.

Heads-up View Toolbar

A transparent toolbar in each viewport provides all the common tools necessary for manipulating the view.

Custom and camera views you define appear on the View Orientations flyout. 

Task Pane

The Task Pane provides access to SolidWorks resources, libraries of reusable design elements, views to drag onto drawing sheets, and other useful items and information.

The Task Pane appears when you open the SolidWorks software. It contains the following tabs:

- Solidworks Resources
- Design Library
- File Explorer
- Search
- View Palette
- Document Recovery
- Appearances, Scenes and Decals
- Custom Properties
- Solidworks forum

Reference Triad

A triad appears in part and assembly documents to help orient you when viewing models. You can also use it to change the view orientation. You can hide the triad but you cannot use it as an inference point.

To change the view of Orientation with reference Triad, Do one of the following

Select an axis	See the view normal to the screen.
Select an axis that is normal to the screen	Change the view direction 180 degrees.
Shift + select	Rotate 90 degrees about the axis.
Ctrl + Shift + select	Rotate 90 degrees in the opposite direction.
Alt + select	Rotate about the axis by the **Arrow keys** increment specified in **Tools > Options > System Options > View**
Ctrl + Alt + select	Rotate in the opposite direction.

Origin

The model origin appears in blue and represents the (0,0,0) coordinate of the model. When a sketch is active, a sketch origin appears in red and represents the (0,0,0) coordinate of the sketch.

Dimensions and relations can be added to the model origin, but not to a sketch origin.

To toggle the origin display:

- Click **View** > **Origins**. When the icon next to the menu item is highlighted, origins are visible (except for origins you have hidden individually).

Solidworks Search and Help

You can use SolidWorks Search to find information in documentation and forums. You can also find files and models, and find and run a SolidWorks command with just a few keystrokes.

Search lets you find and run commands from SolidWorks Search or locate a command in the user interface.

When you access help, a Web version of the documentation is displayed in a Web-based view. You can choose to view a local help (.chm) file, for example, if your Internet connection is slow or unavailable.

Task Pane

SolidWorks Resources	Groups of commands for **Getting Started**, **Community**, and **Online Resources**, plus **Tip of the Day**.
Design Library	Reusable parts, **assemblies**, and **other elements**, including Library Features.
File Explorer	Duplicate of Windows Explorer on your computer, plus **Recent Documents** and **Open in SolidWorks**. If SolidWorks Workgroup PDM is added in, the tab changes to
Search	Results of search operations.
View Palette	Images of standard views, annotation views, section views, and flat patterns (sheet metal parts) to drag onto a drawing sheet.
Document Recovery	If auto-recovery is enabled in **Tools > Options > System Options > Backup/Recover** and the system terminates unexpectedly, recovered files appear on this tab the next time you start the application.
Appearances, Scenes, and Decals	Library of appearances, scenes, and decals.
Custom Properties	Enter custom properties in SolidWorks files.
SolidWorks Forum	Browse the SolidWorks Discussion Forum from directly within the Task Pane.

Viewports

You can view models through one, two, or four viewports.

To open four viewports:

- Click **Four View** from the Standard Views toolbar or **Window > Viewport > Four View**.

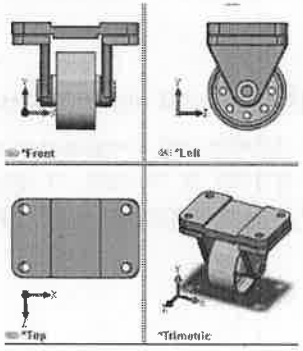


Image Capture

Captures the graphics area of the active window or viewport onto the clipboard.

To capture the screen:

1. Click **Image Capture** (Screen Capture toolbar) or **View > Screen Capture > Image Capture**.
2. Paste the image into another application such as Microsoft Word, Microsoft PowerPoint, etc.

Accepting Features

You have several streamlined ways to accept features you create, including right-click actions, using the Confirmation Corner, and using standard Property Manager commands.

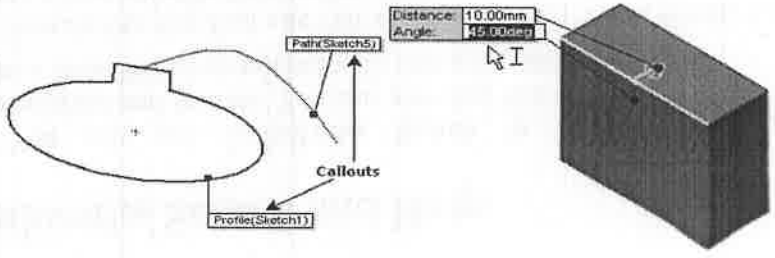
After creating a preview of a feature, you can:

- Right-click and select **OK** or **Cancel** from the shortcut menu.
- Right-click when the pointer changes to to accept the preview, or click to return to the preview without accepting the values

Callouts

Callouts are text-filled boxes that appear in the graphics area when you use certain tools. Handles allow you to dynamically click, move, and set certain parameters without leaving the graphics area.

Callouts help you easily distinguish between different entities.



Viewports

You can choose the following viewport arrangements from the Window menu or the Standard Views toolbar:

Views Displayed	
Single View	User-specified
Two View - Horizontal	Front and Top
Two View - Vertical	Front and Right
Four View	Front, Right, Top, and Trimetric (Third Angle), or Front, Left, Top, and Trimetric (First Angle). Specify **First Angle** or **Third Angle** in **Tools** > **Options** > **System Options** > **Display/Selection**.

Manager Pane

The left panel of the SolidWorks window manages part and assembly designs, drawing sheets, properties, configurations, and third party applications. The Command Manager provides access to the SolidWorks tools.

Manager Pane Contains,

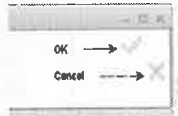
1. Feature Manager
2. Property Manager
3. Configuration Manager
4. DimXpert Manager
5. Display Manager

Accepting Features

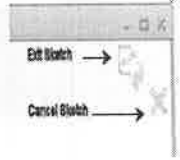
Conformation Corner

Another way to accept features is to use the Confirmation Corner.

- Click the **OK** or **Cancel** icons that appear in the Confirmation Corner of the SolidWorks graphics area.



- Click the **Exit Sketch** icon in the Confirmation Corner to finish the sketch or click the **Cancel Sketch** icon to discard changes to the sketch.

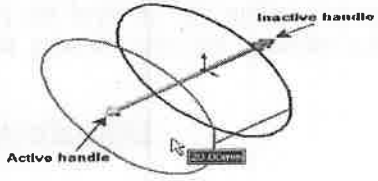


Handles

The handle color is set in **Tools** > **Options** > **System Options** > **Colors** in the System colors box. Active handles are the **Highlight** color. Inactive handles are the **Inactive Entities** color.

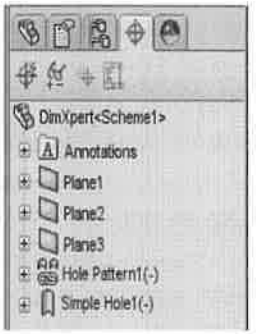
Handles span the length of extrusions. Drag the handle to the desired extrude depth, and the handle spans that length.

You can also drag the pointer (instead of the handle) to the desired extrude depth. Click the handle, then drag the pointer in either direction.



DimXpert Manager

The DimXpert Manager lists the tolerance features defined by DimXpert for parts. It also displays DimXpert tools that you use to insert dimensions and tolerances into parts. You can import these dimensions and tolerances into drawings.



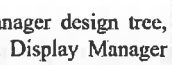
Manager Display

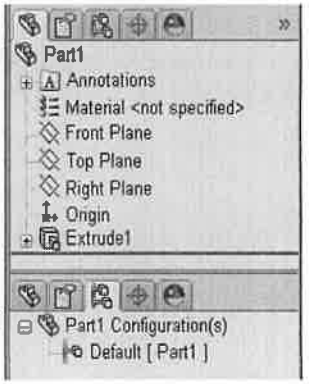
You can switch between the Feature Manager design tree, Property Manager, Configuration Manager, and Display Manager by clicking the tabs at the top of the left panel in the SolidWorks window.

You can split the panel and display more than one manager or multiple copies of one manager.

Splitting the Manager Pane

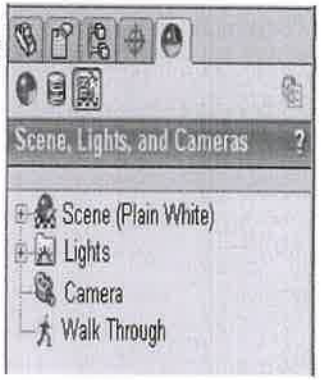
- Move the pointer to the top of the Manager Pane until it changes to ≑ .
- Drag the bar down below the last item in the Manager Pane. Each instance of the Manager Pane displays a set of tabs.
- Select a tab for each Manager Pane.





Display Manager

The **Display Manager** lists and provides editing access to appearances, decals, scene, lights, and cameras that are applied to the current model. When PhotoView 360 is added in, the Display Manager provides access to PhotoView Options.



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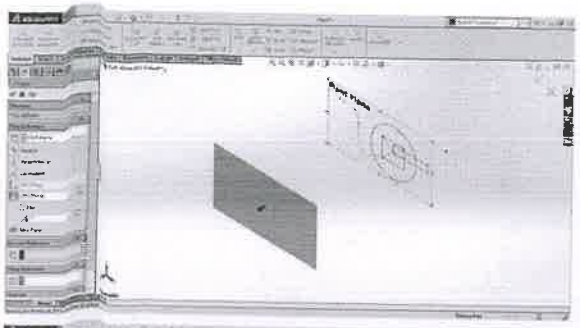

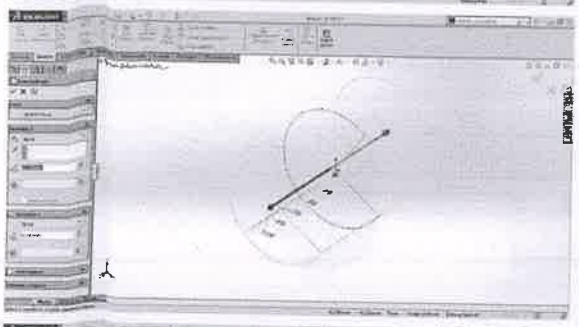

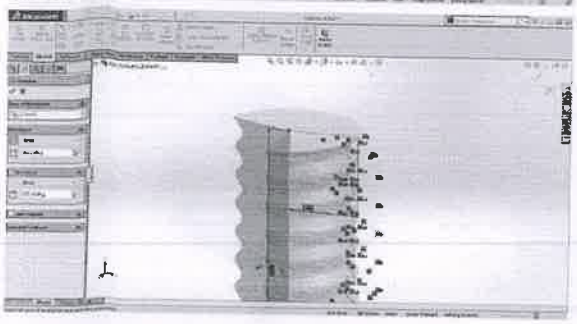

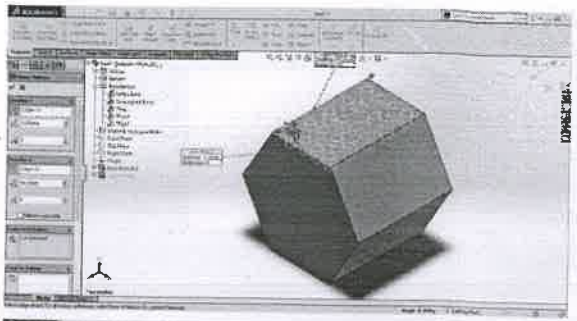

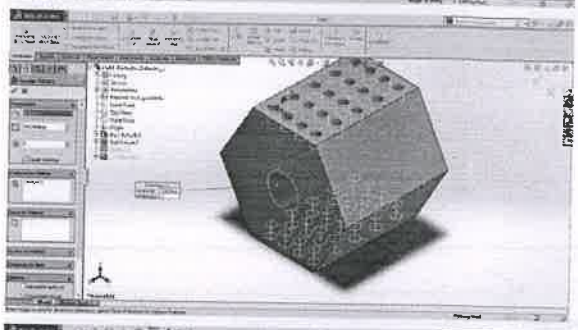

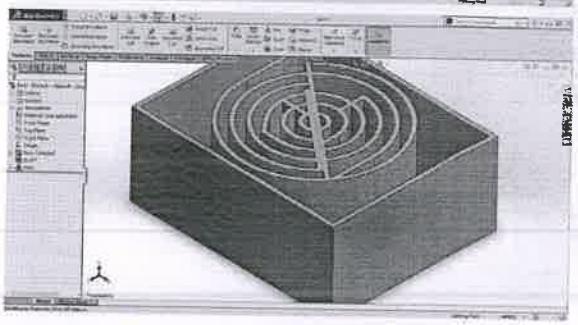

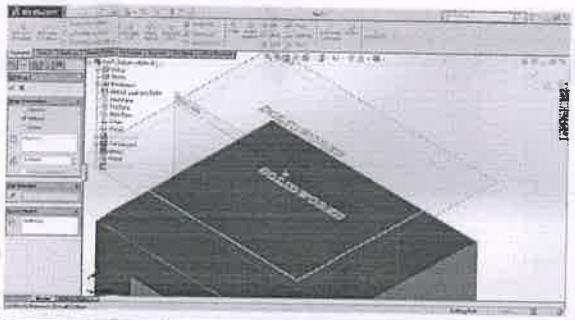

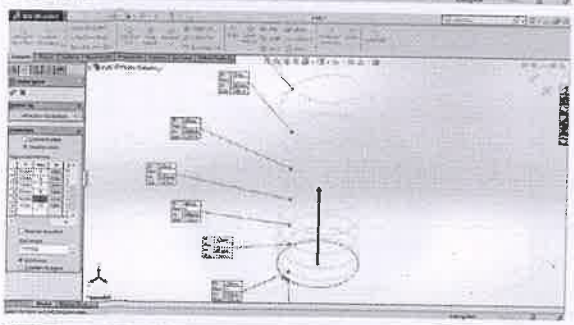

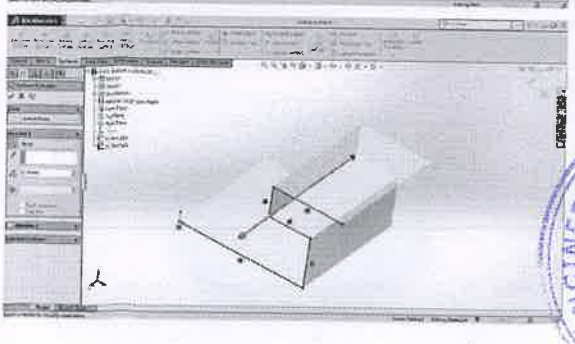

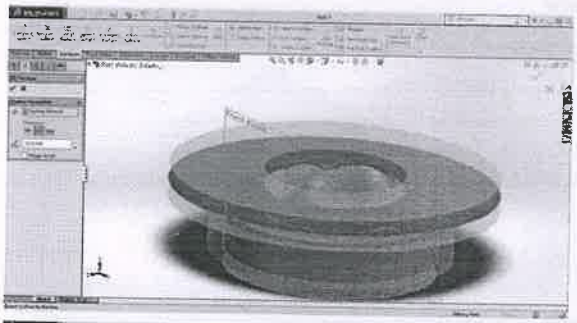

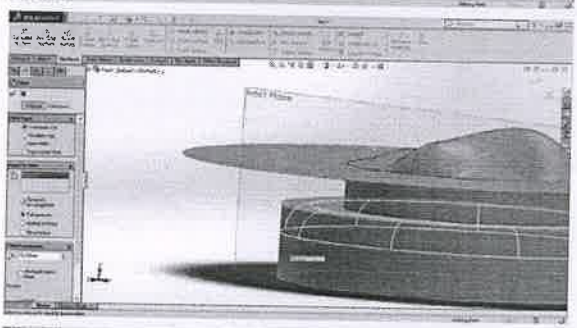

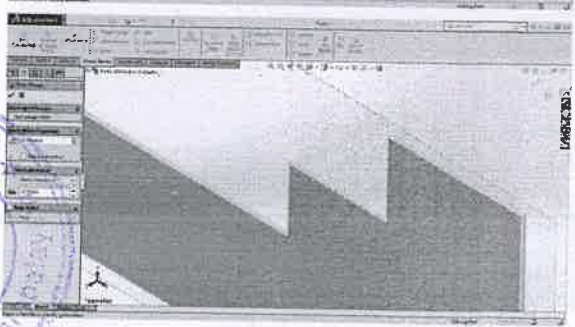

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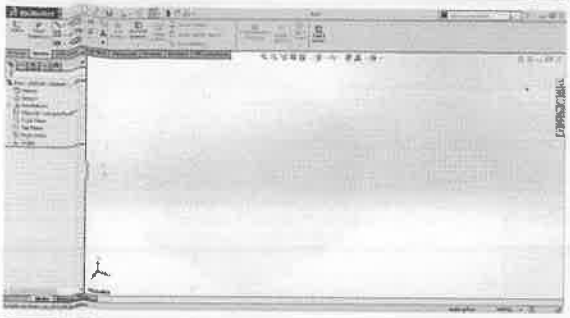

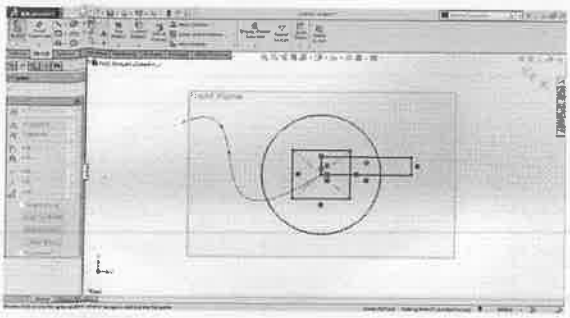

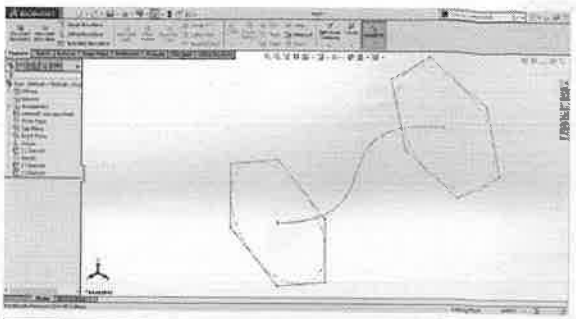

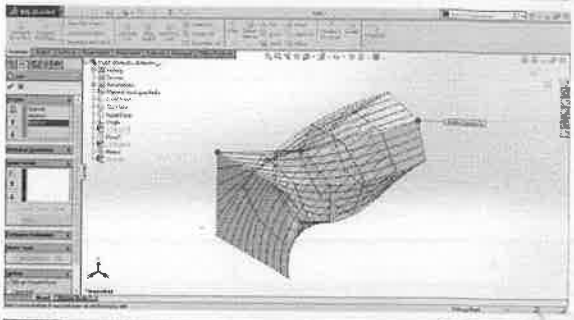

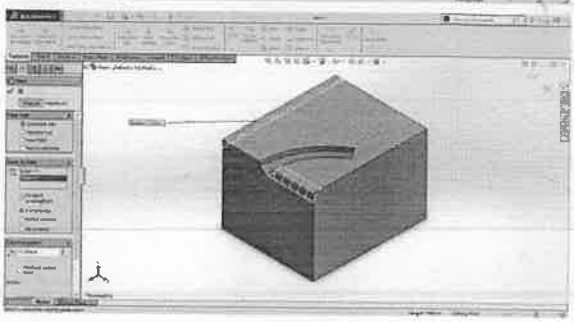

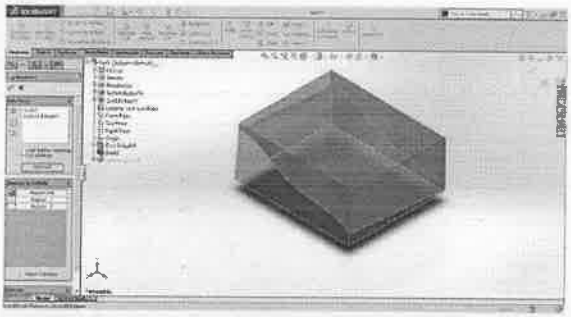

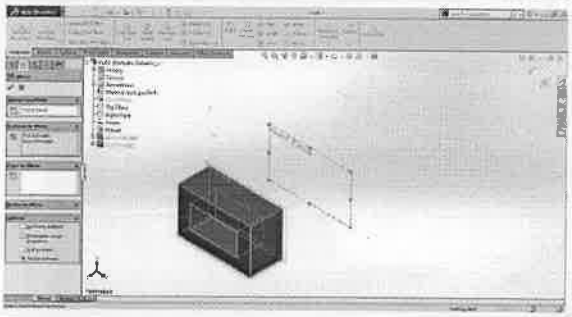

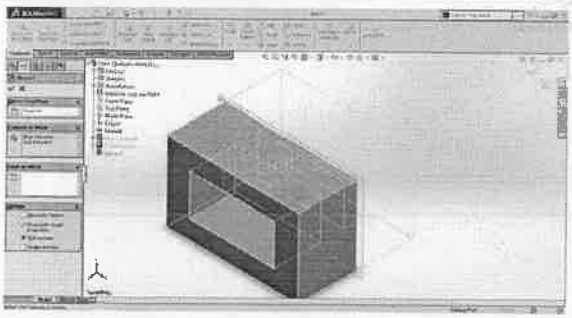

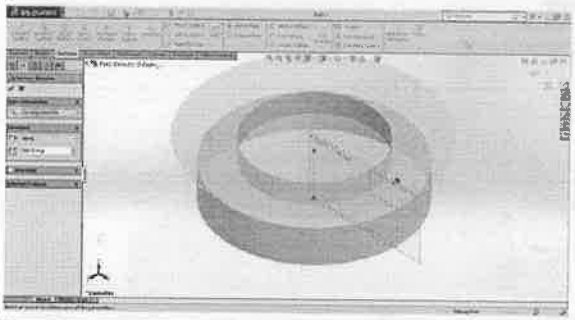

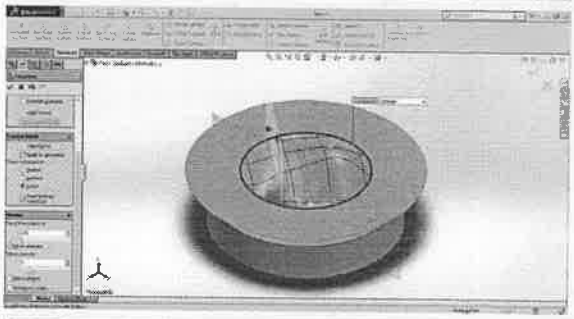

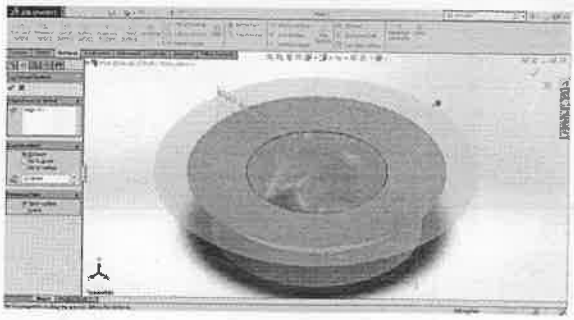

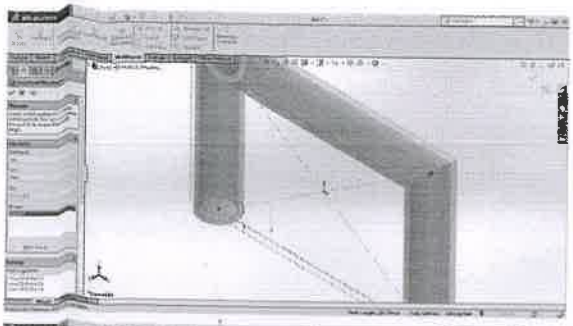

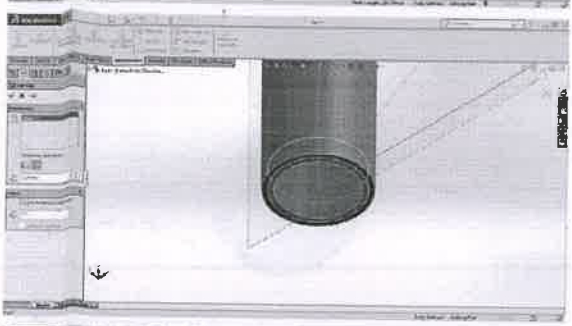

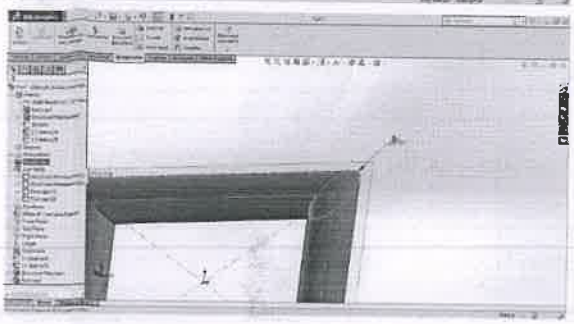

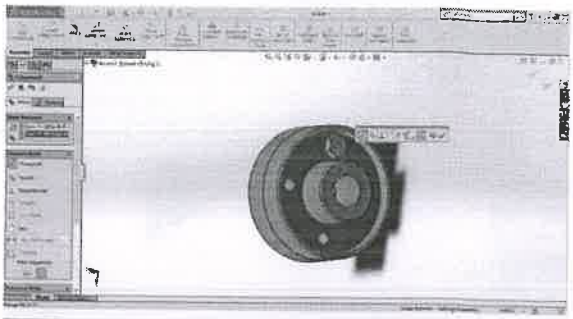

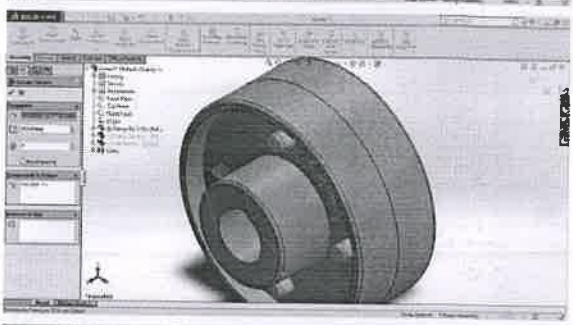

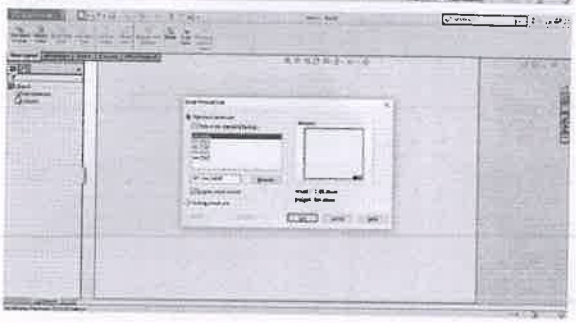

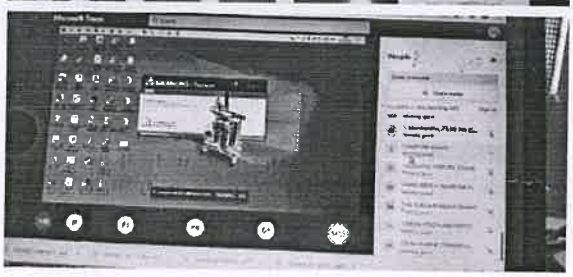

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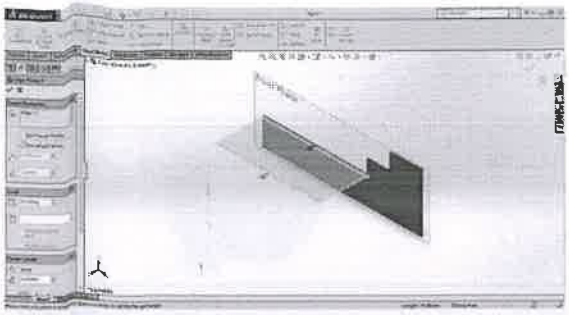

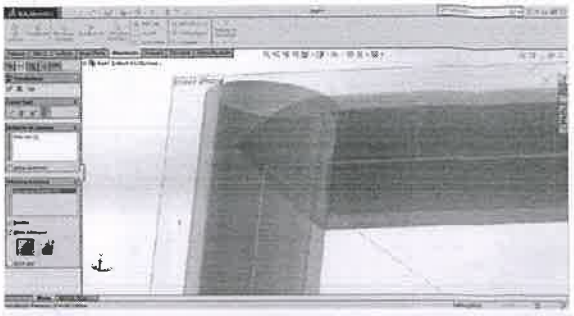

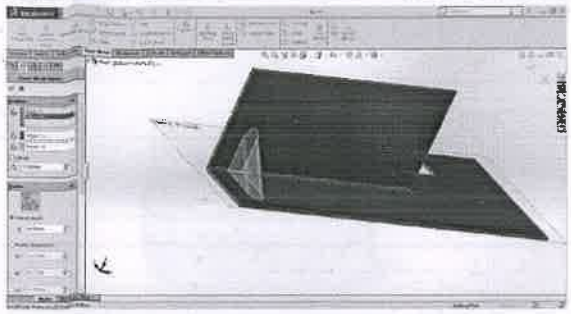

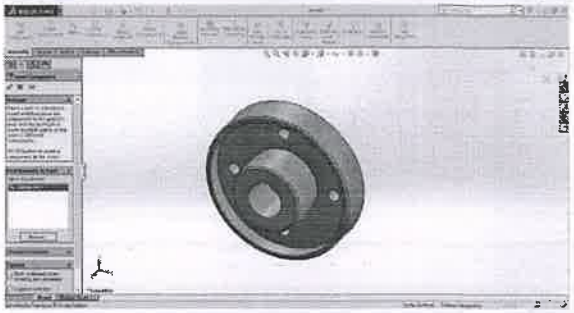

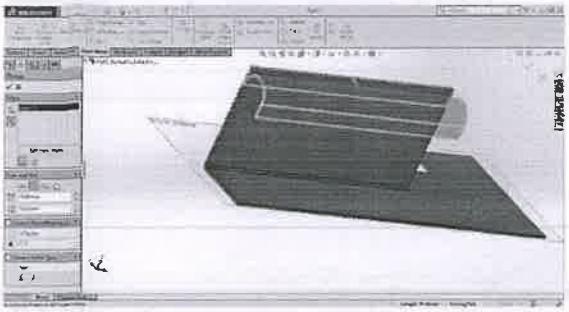

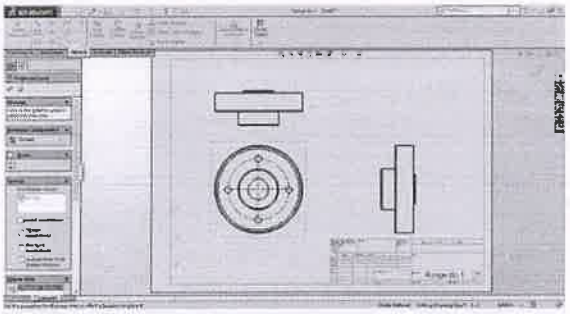

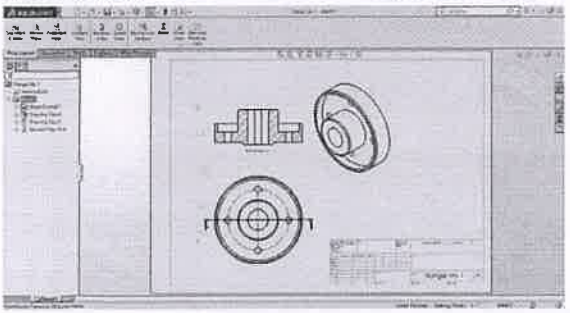

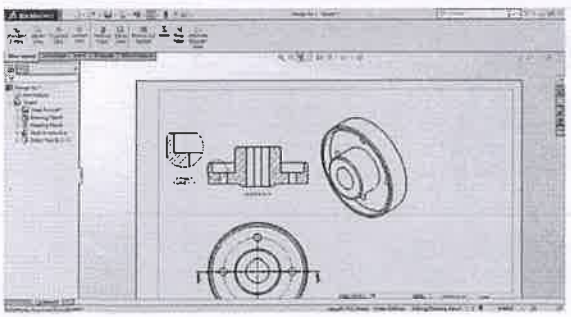

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Affiliated to Anna University, Chennai. Approved by AICTE, New Delhi

Pallakapalayam, Komarapalayam, Namakkal Dt.-637 303

Value Added Course

Title : Solid Works

S.No	Roll No	Name	20/1	22/1	23/1	24/1	26/1	27/1	28/1	29/1		
1	19ME001	AAKASH DEEP SHAH	/	a	/	/	/	/	/	/	a	/
2	19ME002	AKASH P	/	/	/	/	/	a	/	/	/	/
3	19ME003	AKHIL KUMAR.A .	/	/	/	a	a	/	/	/	a	/
4	19ME004	ALSON TONGBRAM	a	/	/	/	/	/	a	a	/	a
5	19ME006	ANIL LAMSAL .	/	/	/	/	/	/	/	/	/	/
6	19ME007	ANKIT KUMAR M	/	a	/	/	a	/	a	/	a	/
7	19ME009	ARJUN P	/	/	a	/	/	/	/	a	/	/
8	19ME010	ARUN PANDIYAN T	/	/	/	a	/	a	/	/	/	a
9	19ME011	ARUN R	/	/	/	/	/	/	a	/	a	/
10	19ME014	ASHUTOSH KUMAR YADAV	/	/	/	/	a	/	/	a	/	a
11	19ME015	BALAGANESH.R .	/	/	a	/	/	a	/	/	/	/
12	19ME016	BALAJI M	/	a	/	a	/	/	/	a	/	/
13	19ME017	BARATH M	/	/	/	/	a	a	/	/	a	/
14	19ME019	BOOPATHI RAJA M	/	/	/	/	/	/	a	/	/	a
15	19ME022	DEVA K	/	/	a	/	/	/	/	/	/	/
16	19ME023	DILDAS P.B	/	/	/	/	a	/	/	a	/	/
17	19ME024	DINAKAR.S .	a	/	/	/	/	a	/	/	a	/
18	19ME029	GAURAB DUBEY	/	/	/	/	/	/	/	a	/	a
19	19ME030	GAUTAM KUMAR	/	/	/	a	/	/	a	/	/	/
20	19ME031	GOKUL KRISHNA	/	a	/	/	/	/	/	a	/	/
21	19ME032	GOKUL S	/	/	a	/	a	a	/	/	a	/
22	19ME034	GULSHAN KUMAR THAKUR .	/	/	/	a	/	/	a	/	/	a
23	19ME037	JEEVA R	/	/	/	/	/	/	/	a	/	/
24	19ME038	JOTIN SHAH	a	/	/	/	/	a	/	/	/	/
25	19ME040	KANAGARAJ M	/	/	/	/	a	/	/	/	a	/
26	19ME042	KARTHIKAIVEL S	/	a	/	/	/	/	/	a	/	a
27	19ME044	KATHIRVEL D	/	/	/	a	/	a	a	/	/	/
28	19ME045	LOGANAND.J .	/	/	a	/	/	/	/	/	a	/
29	19ME049	MD FASHIULLAH .	/	/	/	/	a	/	/	a	/	a
30	19ME052	MD REHAN RAZA .	/	/	/	/	/	a	/	/	/	/
31	19ME054	MITHUN KUMAR .	a	/	/	/	/	/	a	/	/	/
32	19ME055	MOHAMED ANWARKHAN S	/	a	/	/	/	/	/	a	/	a
33	19ME057	MOHAN R	/	/	a	a	/	/	/	/	a	/
34	19ME058	MOHANA PRIYA P	/	/	/	/	a	/	/	/	/	a
35	19ME059	MUHAMMED AMEEN .	/	/	/	/	/	a	/	a	/	/
36	19ME060	MUTHUVEL G	/	/	/	a	/	/	a	/	a	/
37	19ME061	NAVEENKUMAR A	a	/	a	/	/	/	/	/	/	a
38	19ME063	PRANAV KOLLARA .	/	/	/	/	a	/	/	a	/	/
39	19ME064	PRANAV PRASANNAN .	/	a	/	/	/	a	a	/	/	a
40	19ME065	PRATHEESH K	/	/	/	a	/	/	/	a	/	/
41	19ME066	PRAVEEN M	a	/	a	/	/	/	/	/	/	/
42	19ME067	PREMLAL BASKI .	/	/	/	/	a	/	a	/	a	/
43	19ME069	RAHUL RAJESH M	/	a	/	/	/	a	/	/	/	a
44	19ME072	RAM KUMAR S	/	/	/	a	/	/	/	a	/	/
45	19ME074	RANJITHKUMAR R	a	/	/	/	/	/	a	/	/	/
46	19ME076	ROSHAN KUMAR SHARMA .	/	/	a	/	/	a	/	/	a	/
47	19ME078	SAMIR AKHTAR .	/	a	/	/	a	/	/	a	/	a
48	19ME080	SANTHAKUMAR.K .	/	/	/	/	/	/	a	/	/	/
49	19ME081	SARABOJI.S .	/	/	/	a	/	a	/	/	a	/
50	19ME082	SASIKUMAR S	a	/	/	/	/	/	/	/	/	a
51	19ME083	SAURABH KUMAR DUBEY	/	/	a	/	a	a	/	a	/	/
52	19ME084	SESHADRI T	/	a	/	/	/	/	a	/	/	/
53	19ME085	SHIBTAIN RAZA	/	/	/	a	/		/	/	a	/
54	19ME086	SOURAV.MJ .	/	/	/	/	a	/	/	/	/	a
55	19ME091	THUSHAR T	a	/	a	/	/	/	a	/	/	/
56	19ME092	TIMOTHY SHIBU .	/	/	/	/	/	a	/	a	a	/
57	19ME093	VIDURSAN M	/	a	/	a	/	/	/	/	/	a
58	19ME094	VIGNESH.R .	/	/	/	/	a	/	a	/	/	/
59	19ME095	VINAY KUMAR .	/	/	a	/	/	/	/	/	a	/
60	19ME096	YUVARAJ A	a	/	/	/	/	a	/	a	/	a

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61	20LME097	ABINESH V	/	a	/	a	/	/	/	/	/	a
62	20LME100	MANIKANDAN S	/	/	a	/	/	a	a	/	/	/
63	20LME104	SIVAKUMAR A	a	/	/	/	/	/	/	a	/	/
64	20LME105	VIJAY R	/	a	/	a	/	/	/	/	a	/
65	20LME106	PRADEEP K	/	/	a	/	/	/	/	a	/	/
66	20LME107	SUNDHRASAMY S	/	a	/	/	a	/		/	/	a
67	20LME108	SARMA G	a	/	/	a	/	/	/	/	a	/

Value Added Course

SOLIDWORKS QUIZ

* Required

1. Email *

Full Name

2. Full Name *

Roll Number

3. Roll Number *

Year and Section

4. Year and Section *

Section 1

5. A feature that adds material to a part? 1 point

Mark only one oval.

- Hole
- Boss
- Cut

10. What is axis? 1 point

Mark only one oval.

- A straight line that can be used to create model geometry, features, or patterns. Can be made in a number of different ways, including using the intersection of two planeson 1
- Repeats selected sketch entities, features, or components in an array, which can be linear, circular, or sketch-driven
- When there are not enough dimensions and relations to prevent entities from moving or changing size

11. What is boss in SolidWorks? 1 point

Mark only one oval.

- Flat construction geometry; can be used for a 2D sketch, section view of a model, and otherse tool that hollows out a part
- A feature that creates the base of a part, or adds material to a part, by extruding, revolving, sweeping, or lofting a sketch, or by thickening a surface
- A feature tool that hollows out a part

12. What is chamfer? 1 point

Mark only one oval.

- An internal rounding of a corner or edge in a sketch, or an edge on a surface or solid
- The 3D solid geometry in a part or assembly document
- Bevels a selected edge or vertex

17. A loft feature can be a boss only. 1 point

Mark only one oval.

- True
- False

18. You can mirror entities using reference planes and planar faces. 1 point

Mark only one oval.

- True
- False, only lines and Edges can be created

19. Which is a not a type of pattern in SOLIDWORKS? 1 point

Mark only one oval.

- Sketch driven Pattern
- Table driven Pattern
- Continuous pattern

20. Which tool would you use to cut a hole through the object? 1 point

Mark only one oval.

- Extrude Cut tool
- Extrude tool
- Trim tool

25. Which lines on a drawing should be the thickest? 1 point

Mark only one oval.

- Dimension Lines
- Center Lines
- Object Lines

26. Which tool makes the object into a 3D part after you've completed the sketch? 1 point

Mark only one oval.

- Line Tool
- Cut Tool
- Extrude Tool

27. A BOSS on a 3D Part is 1 point

Mark only one oval.

- A boss must be a Rectangular Part
- Any feature connected to the main body of the 3D part
- A boss must be a circular part

28. The drawing units in Solid Works can be changed from metric sizes to inches. 1 point

Mark only one oval.

- True
- False

6. A feature that removes material from part? 1 point

Mark only one oval.

- Cut
- Boss
- Hole

7. Relationships that align and fit components together in an assembly? 1 point

Mark only one oval.

- Part
- Mate
- Component

8. A collection of frequently used commands called? 1 point

Mark only one oval.

- Menubar
- Toolbar
- Feature

9. What is assembly? 1 point

Mark only one oval.

- A document in which parts, features, and other pieces are mated together
- The First Solid Feature of a Part, Created by a boss
- A geometric relationship, such as coincident, perpendicular, tangent, and so on, between parts in an assembly

13. What is origin? 1 point

Mark only one oval.

- The point of intersection of the three default reference planes
- A singular location in a sketch, or a projection into a sketch at a single location of an external entity
- A single 3D object made up of features

14. Unlike an extruded feature, a swept feature requires at least two sketches. What are they? 1 point

Mark only one oval.

- The sweep section and the sweep path
- Top and front view
- Exit sketch and smart dimension

15. What is the minimum number of profiles required for a loft feature? 1 point

Mark only one oval.

- 2
- 3
- 4

16. A loft blends multiple profiles together. 1 point

Mark only one oval.

- True
- False

21. Which of the Following communicates the size of an object? 1 point

Mark only one oval.

- Format
- Shape
- Dimension

22. View that lets you look at the assembly as if you took a saw and cut it open. 1 point

Mark only one oval.

- Assembly View
- Section View
- Tool View

23. A file where you combine parts together. 1 point

Mark only one oval.

- Part
- Assembly
- Drawing

24. Which view should show the most detail of the object being drawn? 1 point

Mark only one oval.

- Top View
- Front View
- Right View

29. What are the three standard views we show on our drawings? 1 point

Mark only one oval.

- top, front, left
- top, front, right
- left, right, top

Section 2

30. Which is NOT an end condition for an extrusion? 1 point

Mark only one oval.

- Up to Line
- Up to Body
- Up to Vertex

31. When you start a new sketch, what sketch types do you select from? 1 point

Mark only one oval.

- 3D Sketch and Front Plane
- Sketch and 3D Sketch
- Sketch and Block

32. Which feature do you use to create a tapped hole? 1 point

Mark only one oval.

- Extruded Cut
- Swept Cut
- Hole Wizard

33. Which Keyboard Shortcut allows you to view in full screen? 1 point

Mark only one oval.

- F9
- F11
- F12

34. While dimensioning, what causes all the dimensions to go yellow and an error message to appear? 1 point

Mark only one oval.

- Adding the wrong size
- Adding too many dimensions to the sketch (over-defined)
- Not enough dimension on the sketch

35. Once you 3D a part, you CANNOT go back and change the sketch. 1 point

Mark only one oval.

- True
- False

36. If you begin a part on the front plane, which axis usually gives the object depth or thickness? 1 point

Mark only one oval.

- X Axis
- Y Axis
- Z Axis

41. The Sketches Tab has all of the following tools except which one? 1 point

Mark only one oval.

- Line
- Revolve
- Smart Dimension

42. What is the correct comparison between an Extruded (Revolved, Lofted, Swept) and Extruded Cut (Revolved Cut, Lofted Cut, Swept Cut)? 1 point

Mark only one oval.

- An extruded feature adds material; an extruded cut divides the feature into equal pieces
- An extruded feature adds material; an extruded cut removes material
- An extruded feature adds material; an extruded cut hurts the material

43. You have to have one of these to sketch on. 1 point

Mark only one oval.

- Corner
- Axis
- Plane

44. When a part is created what do you need to create to show someone else how to build your object? 1 point

Mark only one oval.

- Create an Assembly
- Create a Drawing
- Write out descriptors with text on your object

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49. If a feature tool is not working what is the most likely issue? 1 point

Mark only one oval.

- The sketch is not fully defined
- There is an error in the sketch
- The sketch is not labeled properly

50. If you wanted to take your sketch and make it travel around an axis what features tool would you use? 1 point

Mark only one oval.

- Revolved
- Swept
- Lofted

51. What are the most necessary dimensions for a drawing that would be included in almost every object? 1 point

Mark only one oval.

- Height, Width, Depth
- Across, Width, Wideness
- Height, Width, Across

52. What tool would you use to round off the corners of an object? 1 point

Mark only one oval.

- Chamfer
- Fillet
- Dome

37. If you have multiple parts and want to show how the parts fit together you must create what. 1 point

Mark only one oval.

- A drawing for every part and look back and forth at each to see if it will work
- An Assembly of many parts
- Draw everything in one part rather than multiple parts

38. When sketching what are the little green boxes with different symbols in them called. 1 point

Mark only one oval.

- Relations
- Mates
- Identifying Markers

39. What are thin lines alternating long and short dashes used to designate centers of holes arcs, and other symmetrical objects? 1 point

Mark only one oval.

- Dimension lines
- Hidden lines
- Center lines

40. In an Assembly what tool should be used to create connections between different parts? 1 point

Mark only one oval.

- Relations
- Mate
- Connection

45. What visual indication is there that a sketch is fully defined? 1 point

Mark only one oval.

- Lines blink rapidly
- Dimensions become yellow
- Lines become black

46. To what should your first sketch be referenced to? 1 point

Mark only one oval.

- Origin
- Axis
- Centerline

47. Once you are finished with your sketch the next step is to click on what? 1 point

Mark only one oval.

- Features Tab
- Exit Sketch
- Done

48. If you had created multiple planes with each plane having a different sketch, and you wanted to connect all of the sketches together as one feature what features tool would you use? 1 point

Mark only one oval.

- Revolved
- Swept
- Loft

53. To begin a sketch in SolidWorks the first thing you must do is? 1 point

Mark only one oval.

- Dimension the lines
- Create a set of points that the lines will go through
- Select the plane that you will draw on.

54. In an Isometric drawing what angle is used to draw the height of an object? 1 point

Mark only one oval.

- 30 Degrees
- 60 Degrees
- 90 Degrees

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Value Added Course SolidWorks Feedback Form

Excel Engineering College (Autonomous), Department of Mechanical Engineering.

* Required

1. Email *

Section 1

2. Name *

3. Roll Number *

4. Department *

5. Year *

Mark only one oval.

- IV
- III
- II
- I

6. Section *

Mark only one oval.

- A
- B

Section 2

7. How useful did you think this course for you? *

Mark only one oval.

	1	2	3	4	5	
Very Low	◯	◯	◯	◯	◯	Very Good

8. Did you receive all the information you required? *

Mark only one oval.

- Yes
- No
- Maybe

9. Where the contents delivered was helpful to you? *

Mark only one oval.

- Yes
- No
- Maybe

10. Did the Instructor do an effective job of presenting the material? *

Mark only one oval.

- Yes
- No
- Maybe

11. How much this course was useful from the knowledge and information point of view? *

Mark only one oval.

	1	2	3	4	5	
Very Low	◯	◯	◯	◯	◯	Very High

This content is neither created nor endorsed by Google.

Google Forms

SolidWorks Certificate Course Feedback Responses

Name	Roll Number	How useful did you think this course for you?	Did you receive all the Information you required?	Where the contents delivered was helpful to you?	Did the Instructor do an effective job of presenting the material?	How much this course was useful from the knowledge and Information point of view?
Gautam Kumar	19ME030	3	No	No	No	3
Dinakaran	19ME025	4	Yes	Yes	Yes	4
Roshan Kumar Sharma	19ME076	3	Maybe	Maybe	Maybe	3
P.Dinesh	19ME027	5	Yes	Yes	Yes	4
SAURABH KUMAR DUBEY	19ME083	5	Yes	Yes	Yes	5
DINESH KUMAR.S	19me028	4	Yes	Yes	Yes	4
GAURAB KUMAR DUBEY	19ME029	5	Yes	Yes	Yes	5
HARIPRASATH	19ME036	5	Yes	Yes	Yes	5
m. balaji	19me016	5	Yes	Yes	Yes	5
S.SARABOJI	19ME081	4	Maybe	Maybe	Yes	3
Gulshan kumar Thakur	19me034	5	No	Yes	Yes	5
Deva.K	19ME022	4	Maybe	No	Yes	5
M.Kanagaraj	19ME040	5	Maybe	Yes	Yes	3
Dildas p b	19ME023	4	Maybe	Yes	Yes	4
Ashutosh Kumar Yadav	19ME014	5	Yes	Yes	Yes	5
Samir Akhtar	19ME078	5	Yes	Yes	Yes	5
Vinay kumar	19ME095	4	Maybe	Yes	Yes	4
K.Santhakumar	19ME080	1	Yes	Yes	Yes	1
Akhil kumar A	730919114003	5	Yes	Yes	Yes	5
BUBENDRA B	19ME077	5	Yes	Yes	Yes	5

EXCEL ENGINEERING COLLEGE * DEPT. OF MECHANICAL ENGG. * Komarapalayam

HEAD OF THE DEPARTMENT
MECHANICAL ENGINEERING
EXCEL ENGINEERING COLLEGE
KOMARAPALAYAM - 637 303.

SolidWorks Certificate Course Assessment

Name	M Kanagaraj	M. Madhanraj	HARIPRASATH	Gautam Kumar	Vinay kumar	Barath	Roshan kumar sharma	MOHAMED ANWARKHAN . S
Roll Number	19ME040	19ME047	19ME036	19ME030	19ME095	19me017	19ME076	19ME055
Marks Scored	20 / 50	17 / 50	30 / 50	25 / 50	47 / 50	20 / 50	47 / 50	38 / 50
A feature that adds material to a part?	Boss	Boss	Boss	Boss	Boss	Boss	Boss	Boss
A feature that removes material from part?	Boss	Boss	Boss	Cut	Cut	Cut	Cut	Cut
Relationships that align and fit components together in an assembly?	Component	Component	Mate	Mate	Mate	Part	Mate	Mate
A collection of frequently used commands called?	Menubar	Toolbar	Toolbar	Toolbar	Toolbar	Toolbar	Toolbar	Toolbar
What is assembly?	A geometric relationship, such as coincident, perpendicular, tangent, and so on, between parts in an assembly	The First Solid Feature of a Part, Created by a boss	A document in which parts, features, and other pieces are mated together	A document in which parts, features, and other pieces are mated together	A document in which parts, features, and other pieces are mated together	The First Solid Feature of a Part, Created by a boss	A document in which parts, features, and other pieces are mated together	A document in which parts, features, and other pieces are mated together
What is axis?	When there are not enough dimensions and relations to prevent entities from moving or changing size	Repeats selected sketch entities, features, or components in an array, which can be linear, circular, or sketch-driven	A straight line that can be used to create model geometry, features, or patterns. Can be made in a number of different ways, including using the intersection of two planeson 1	A straight line that can be used to create model geometry, features, or patterns. Can be made in a number of different ways, including using the intersection of two planeson 1	A straight line that can be used to create model geometry, features, or patterns. Can be made in a number of different ways, including using the intersection of two planeson 1	When there are not enough dimensions and relations to prevent entities from moving or changing size	A straight line that can be used to create model geometry, features, or patterns. Can be made in a number of different ways, including using the intersection of two planeson 1	A straight line that can be used to create model geometry, features, or patterns. Can be made in a number of different ways, including using the intersection of two planeson 1
What is boss in [illegible]orks?	Flat construction geometry; can be used for a 2D sketch, section view of a model, and otherse tool that hollows out a part	A feature that creates the base of a part, or adds material to a part, by extruding, revolving, sweeping, or lofting a sketch, or by thickening a surface	Flat construction geometry; can be used for a 2D sketch, section view of a model, and otherse tool that hollows out a part	A feature that creates the base of a part, or adds material to a part, by extruding, revolving, sweeping, or lofting a sketch, or by thickening a surface	A feature that creates the base of a part, or adds material to a part, by extruding, revolving, sweeping, or lofting a sketch, or by thickening a surface	Flat construction geometry; can be used for a 2D sketch, section view of a model, and otherse tool that hollows out a part	A feature that creates the base of a part, or adds material to a part, by extruding, revolving, sweeping, or lofting a sketch, or by thickening a surface	A feature that creates the base of a part, or adds material to a part, by extruding, revolving, sweeping, or lofting a sketch, or by thickening a surface
What is chamfer?	The 3D solid geometry in a part or assembly document	The 3D solid geometry in a part or assembly document	An internal rounding of a corner or edge in a sketch, or an edge on a surface or solid	Bevels a selected edge or vertex	Bevels a selected edge or vertex	An internal rounding of a corner or edge in a sketch, or an edge on a surface or solid	Bevels a selected edge or vertex	Bevels a selected edge or vertex
What is origin?	A single 3D object made up of features	The point of intersection of the three default reference planes	The point of intersection of the three default reference planes	The point of intersection of the three default reference planes	The point of intersection of the three default reference planes	(blank)	The point of intersection of the three default reference planes	The point of intersection of the three default reference planes
Unlike an extruded feature, a swept feature requires at least two sketches. What are they?	Top and front view	The sweep section and the sweep path	The sweep section and the sweep path	The sweep section and the sweep path	The sweep section and the sweep path	The sweep section and the sweep path	The sweep section and the sweep path	The sweep section and the sweep path
What is the minimum number of profiles required for a loft feature?	2	3	2	2	2	3	2	2
A loft blends multiple profiles together.	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	TRUE	FALSE
A loft feature can be a boss only.	TRUE	TRUE	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE
You can mirror entities using reference planes and planar faces.	False, only lines and Edges can be created	TRUE	False, only lines and Edges can be created	TRUE	TRUE	False, only lines and Edges can be created	TRUE	TRUE
Which is a not a type of pattern in SOLIDWORKS?	Continuous pattern	Continuous pattern	Continuous pattern	Continuous pattern	Continuous pattern	Table driven Pattern	Continuous pattern	Sketch driven Pattern
Which tool would you use to cut a hole through the object?	Extrude tool	Extrude tool	Extrude Cut tool	Extrude Cut tool	Extrude Cut tool	Extrude Cut tool	Extrude Cut tool	Extrude Cut tool
Which of the Following co[illegible]cates the size of [illegible]ject?	Dimension	Format	Dimension	Dimension	Dimension	Dimension	Dimension	Dimension
View that lets you look at the assembly as if you took a saw and cut it open.	Section View	Tool View	Section View	Section View	Section View	Section View	Section View	Section View
A file where you combine parts together.	Drawing	Drawing	Assembly	Assembly	Assembly	Part	Assembly	Assembly
Which view should show the most detail of the object being drawn?	Front View	Front View	Front View	Front View	Front View	Front View	Front View	Right View
Which lines on a drawing should be the thickest?	Center Lines	Center Lines	Object Lines	Center Lines	Object Lines	Dimension Lines	Object Lines	Object Lines
Which tool makes the object into a 3D part after you've completed the sketch?	Line Tool	Line Tool	Extrude Tool	Extrude Tool	Extrude Tool	Extrude Tool	Extrude Tool	Extrude Tool
A BOSS on a 3D Part is	Any feature connected to the main body of the 3D part	Any feature connected to the main body of the 3D part	Any feature connected to the main body of the 3D part	Any feature connected to the main body of the 3D part	Any feature connected to the main body of the 3D part	A boss must be a circular part	Any feature connected to the main body of the 3D part	Any feature connected to the main body of the 3D part
The drawing units in Solid Works can be changed from metric sizes to inches.	FALSE	TRUE	TRUE	FALSE	TRUE	TRUE	TRUE	TRUE
What are the three standard views we show on our drawings?	top, front, right	top, front, right	top, front, right	top, front, left	top, front, right	top, front, right	top, front, right	top, front, right
Which is NOT an end condition for an extrusion?	Up to Vertex	Up to Line	Up to Line	Up to Body	Up to Line	Up to Body	Up to Line	Up to Line
When you start a new sketch, what sketch types do you select from?	Sketch and 3D Sketch	3D Sketch and Front Plane	Sketch and 3D Sketch	Sketch and 3D Sketch	Sketch and 3D Sketch	3D Sketch and Front Plane	Sketch and 3D Sketch	Sketch and 3D Sketch

Which feature do you use to create a tapped hole?	Swept Cut	Swept Cut	Swept Cut	Swept Cut	Hole Wizard	Hole Wizard	Hole Wizard	Hole Wizard
Which Keyboard Shortcut allows you to view in full screen?	F9	F12	F11	F11	F11	F9	F11	F11
While dimensioning, what causes all the dimensions to go yellow and an error message to appear?	Adding too many dimensions to the sketch (over-defined)	Adding the wrong size	Adding too many dimensions to the sketch (over-defined)	Not enough dimension on the sketch	Adding too many dimensions to the sketch (over-defined)	Adding too many dimensions to the sketch (over-defined)	Adding too many dimensions to the sketch (over-defined)	Adding too many dimensions to the sketch (over-defined)
Once you 3D a part, you CANNOT go back and change the sketch.	TRUE	TRUE	FALSE	TRUE	FALSE	TRUE	FALSE	FALSE
If you begin a part on the front plane, which axis usually gives the object depth or thickness?	X Axis	X Axis	X Axis	X Axis	Z Axis	X Axis	Z Axis	Z Axis
If you have multiple parts and want to show how the parts fit together you must create what.	An Assembly of many parts	A drawing for every part and look back and forth at each to see if it will work	Draw everything in one part rather than multiple parts	(blank)	An Assembly of many parts	A drawing for every part and look back and forth at each to see if it will work	An Assembly of many parts	A drawing for every part and look back and forth at each to see if it will work
When sketching what are the little green boxes with different symbols in them called.	Mates	Identifying Markers	Mates	Identifying Markers	Relations	Identifying Markers	Relations	Mates
What are thin lines alternating long and short dashes used to designate centers of holes arcs, and other symmetrical objects?	Center lines	Hidden lines	Hidden lines	Dimension lines	Center lines	Hidden lines	Center lines	Center lines
In an Assembly what tool should be used to create connections between different parts?	Mate	Connection	Relations	Relations	Mate	Relations	Mate	Mate
The Sketches Tab has all of the following tools except which one?	Line	Line	Smart Dimension	Smart Dimension	Smart Dimension	Revolve	Smart Dimension	Revolve
What is the correct comparison between an Extruded (Revolved, Lofted, Swept) and Extruded Cut (Revolved Cut, Lofted Cut, Swept Cut)?	An extruded feature adds material; an extruded cut hurts the material	An extruded feature adds material; an extruded cut removes material	An extruded feature adds material; an extruded cut removes material	An extruded feature adds material; an extruded cut divides the feature into equal pieces	An extruded feature adds material; an extruded cut removes material	An extruded feature adds material; an extruded cut divides the feature into equal pieces	An extruded feature adds material; an extruded cut removes material	An extruded feature adds material; an extruded cut divides the feature into equal pieces
You have to have one of these to sketch on.	Axis	Axis	Axis	Plane	Plane	Plane	Plane	Plane
When a part is created what do you need to create to show someone else how to build your object?	Create a Drawing	Create a Drawing	Create a Drawing	Create an Assembly	Create a Drawing	Create a Drawing	Create a Drawing	Create a Drawing
What visual indication is there that a sketch is fully defined?	Dimensions become yellow	Dimensions become yellow	Lines become black	Lines blink rapidly	Lines become black	Dimensions become yellow	Lines become black	Lines become black
To what should your first sketch be referenced to?	Axis	Axis	Axis	Axis	Origin	Origin	Origin	Origin
Once you are finished with your sketch the next step is to click on what?	Exit Sketch	Features Tab	Done	Exit Sketch	Exit Sketch	Features Tab	Exit Sketch	Done
If you had created multiple planes with each plane having a different sketch, and you wanted to connect all of the sketches together as one feature what features tool would you use?	Loft	Swept	Swept	Swept	Loft	Swept	Loft	Swept
If a feature tool is not working what is the most likely issue?	There is an error in the sketch	There is an error in the sketch	The sketch is not labeled properly	The sketch is not fully defined	There is an error in the sketch	There is an error in the sketch	There is an error in the sketch	There is an error in the sketch
If you wanted to take your sketch and make it travel around an axis what features tool would you use?	Swept	Swept	Swept	Swept	Swept	Revolved	Swept	Lofted
What are the most necessary dimensions for a drawing that would be included in almost every object?	Height, Width, Depth	Height, Width, Depth	Height, Width, Depth	Height, Width, Depth	Height, Width, Depth	Height, Width, Depth	Height, Width, Depth	Height, Width, Depth
What tool would you use to round off the corners of an object?	Dome	Fillet	Fillet	Chamfer	Fillet	Dome	Fillet	Fillet
To begin a sketch in SolidWorks the first thing you must do is?	Dimension the lines	Create a set of points that the lines will go through	Create a set of points that the lines will go through	(blank)	Select the plane that you will draw on.	Dimension the lines	Select the plane that you will draw on.	Select the plane that you will draw on.
In an Isometric drawing what angle is used to draw the height of an object?	30 Degrees	60 Degrees	60 Degrees	60 Degrees	90 Degrees	30 Degrees	90 Degrees	30 Degrees

EXCEL ENGINEERING COLLEGE
DEPT. OF MECHANICAL ENGG.
Komarapalayam

N. Natarajan

HEAD OF THE DEPARTMENT
MECHANICAL ENGINEERING,
EXCEL ENGINEERING COLLEGE
KOMARAPALAYAM - 637 303.

Excel Engineering College
(Autonomous)
Komarapalayam - 637303

A+ Grade (3.26)

B.E. - AERO, MECH, CSE, ECE

INSTITUTION'S INNOVATION COUNCIL

CERTIFICATE

BALAJI.M

Has completed the Value Added Course titled "SolidWorks" successfully organized by Department of Mechanical Engineering

CERTIFIED

Course Coordinator

DEPT. OF MECHANICAL ENGG.

Dr.N.Natarajan
Head of the Department

MERIT

Excel ENGINEERING COLLEGE
Komarapalayam-637303

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR: 2021 - 2022

Indirect Assessment of Program Outcomes & Program Specific Outcomes through Curricular and Extracurricular Activities

---

Student Name : K. DEVA **Date:** 31/01/2022

Batch : 2019-2023 **Year/Semester:** III/

Type of Activity: Value Added Course - SOLIDWORKS

*Provide your level of attainment for the following questions by **SELECTING** in the ☐ given,*

[3/2/1 Indicates Level of Attainment; 3 – Very Much, 2 – Moderate, 1 – Some Extent]

1. Does this Activity/ Course improve your Technical Skill?
   3 ☑ **2** ☐ **1** ☐
2. Does this Activity /Course improve your Problem Solving Skill?
   3 ☐ **2** ☐ **1** ☑
3. Does this training / Course improve your practical Exposure?
   3 ☐ **2** ☑ **1** ☐
4. Have you learnt any modern tools through this activity/ training?
   Yes ☑ **No** ☐ if yes name of tool Solid works
5. Does this activity /training useful to improve your professional ethics?
   3 ☐ **2** ☐ **1** ☑
6. Does this activity /training useful to apply for any modern research programs?
   3 ☑ **2** ☐ **1** ☐
7. Have you got any ideas to improve our environmental & social needs?
   3 ☐ **2** ☑ **1** ☐
8. Have you ever felt that your communication skill & leadership skill has been improved through this activity?
   3 ☑ **2** ☐ **1** ☐
9. Does this Activity / training useful to improve learning attitude with zeal?
   3 ☐ **2** ☐ **1** ☑
10. Does this Activity /training useful for you to work in multi-disciplinary team?
    3 ☐ **2** ☑ **1** ☐
11. Does this Activity /training improve your mind to face any changes in your life?
    3 ☑ **2** ☐ **1** ☐

Any other Comments:

K. DEVA

Signature

Excel ENGINEERING COLLEGE
Komarapalayam-637303

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR: 2021 - 2022

Indirect Assessment of Program Outcomes & Program Specific Outcomes through Curricular and Extracurricular Activities

---

Student Name : M. BALAJI **Date:** 31/01/2022

Batch : 2019-2023 **Year/Semester:** III/

Type of Activity: Value Added Course - SOLID WORKS

*Provide your level of attainment for the following questions by **SELECTING** in the ☐ given,*

[3/2/1 Indicates Level of Attainment; 3 – Very Much, 2 – Moderate, 1 – Some Extent]

1. Does this Activity/ Course improve your Technical Skill?
   3 ☐ **2** ☑ **1** ☐
2. Does this Activity /Course improve your Problem Solving Skill?
   3 ☐ **2** ☐ **1** ☑
3. Does this training / Course improve your practical Exposure?
   3 ☑ **2** ☐ **1** ☐
4. Have you learnt any modern tools through this activity/ training?
   Yes ☐ **No** ☑ if yes name of tool Solid works
5. Does this activity /training useful to improve your professional ethics?
   3 ☐ **2** ☑ **1** ☐
6. Does this activity /training useful to apply for any modern research programs?
   3 ☑ **2** ☐ **1** ☑
7. Have you got any ideas to improve our environmental & social needs?
   3 ☐ **2** ☐ **1** ☑
8. Have you ever felt that your communication skill & leadership skill has been improved through this activity?
   3 ☐ **2** ☑ **1** ☐
9. Does this Activity / training useful to improve learning attitude with zeal?
   3 ☑ **2** ☐ **1** ☐
10. Does this Activity /training useful for you to work in multi-disciplinary team?
    3 ☐ **2** ☐ **1** ☑
11. Does this Activity /training improve your mind to face any changes in your life?
    3 ☑ **2** ☐ **1** ☐

Any other Comments:

M.Bala

Signature

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Komarapalayam-637303

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR: 2021 - 2022

Indirect Assessment of Program Outcomes & Program Specific Outcomes through Curricular and Extracurricular Activities

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Student Name : DINAKARAN **Date:** 31/01/2022

Batch : ~~19-23~~ 2019-23 **Year/Semester:** IV/

Type of Activity: Value Added Course – SOLIDWORKS

*Provide your level of attainment for the following questions by **SELECTING** in the ☐ given,*

[3/2/1 Indicates Level of Attainment; 3 – Very Much, 2 – Moderate, 1 – Some Extent]

1. Does this Activity/ Course improve your Technical Skill?
   3 ☑ **2** ☐ **1** ☐
2. Does this Activity /Course improve your Problem Solving Skill?
   3 ☐ **2** ☐ **1** ☑
3. Does this training / Course improve your practical Exposure?
   3 ☐ **2** ☑ **1** ☐
4. Have you learnt any modern tools through this activity/ training?
   Yes ☑ **No** ☐ if yes name of tool Solid Works
5. Does this activity /training useful to improve your professional ethics?
   3 ☑ **2** ☐ **1** ☐
6. Does this activity /training useful to apply for any modern research programs?
   3 ☐ **2** ☑ **1** ☐
7. Have you got any ideas to improve our environmental & social needs?
   3 ☐ **2** ☐ **1** ☑
8. Have you ever felt that your communication skill & leadership skill has been improved through this activity?
   3 ☑ **2** ☐ **1** ☐
9. Does this Activity / training useful to improve learning attitude with zeal?
   3 ☐ **2** ☑ **1** ☐
10. Does this Activity /training useful for you to work in multi-disciplinary team?
    3 ☑ **2** ☐ **1** ☐
11. Does this Activity /training improve your mind to face any changes in your life?
    3 ☐ **2** ☐ **1** ☑

Any other Comments:

Dinakaran

Signature

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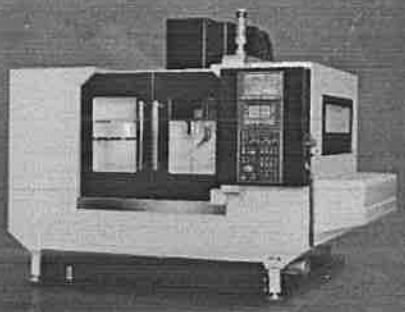
KOMARAPALAYAM - 637303

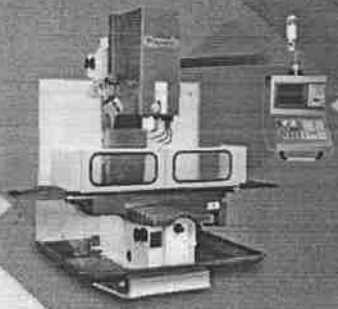
DEPARTMENT OF MECHANICAL ENGINEERING

ORGANISING

Online Certificate Course on

CNC PROGRAMMING LATHE & MILLING





Duration: 20 hrs

Course starts from:

20.01.2022- 31.01.2022

Time: 9.30am to 1.30 pm

Coordinator: Dr A.Karthikeyan
9944620850

Coordinator: Mr V.Karthikeyan
9952220184

Convener: Dr. N.Natarajan,
Head of the Department -Mechanical

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KOMARAPALAYAM - 637303

Department of Mechanical Engineering
ONLINE CLASS TIME TABLE

Academic Year: 2021-22
Venue: CAMU Platform

Year/Sem : IV(A)/VII
Ver: I

Session	1	10.20AM-10.30AM	2	11.20AM-11.30AM	3	12.20PM-12.30PM	4	1.30PM-2.30PM	5
DAY/TIME	9.30AM-10.20AM		10.30AM-11.20AM		11.30AM-12.20PM		12.30PM-1.20PM		2.30PM-3.20PM
MON	CC	BREAK	CC	BREAK	CC	BREAK	CC	LUNCH	PW
TUE	CC		CC		CC		CC		PW
WED	CC		CC		CC		CC		PW
THU	CC		CC		CC		CC		PW
FRI	Project Review		Project Review		Project Review		Project Review		Project Review

Course Code	Course Name	Acronym	No of Credits	Hrs	Faculty Name with Designation/Dept.
ME 8811	Project Work & Review	PW	10	9	Mr.V.Udhayakumar ,AP/Mech & Project Co ordinators.
--	Certificate Course on CNC Programming	CC	-	16	Dr.A.Karthikeyan ,ASP/Mech Dr.N.Tamilselvan ,AP/Mech

S.No.	Name of the Mentors
1	Mr.V.Udhayakumar ,AP/Mech , (Chief Mentor)
2	Mr.S.S.Jayaraman ,AP/Mech
3	Dr.N.Tamilselvan ,AP/Mech

Department TT coordinator

EXCEL ENGINEERING COLLEGE ★ DEPT. OF MECHANICAL ENGG. ★ Komarapalayam

HoD

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KOMARAPALAYAM – 637303

Department of Mechanical Engineering

ONLINE CLASS TIME TABLE

Academic Year: 2021-22 **Year/Sem : IV(B)/VII**

Venue: CAMU Platform **Ver: I**

Session	1	10.20AM-10.30AM	2	11.20AM-11.30AM	3	12.20PM-12.30PM	4	1.30PM-2.30PM	5
DAY/TIME	9.30AM-10.20AM		10.30AM-11.20AM		11.30AM-12.20PM		12.30PM-1.20PM		2.30PM-3.20PM
MON	CC		CC		CC		CC		PW
TUE	CC		CC		CC		CC		PW
WED	CC	BREAK	CC	BREAK	CC	BREAK	CC	LUNCH	PW
THU	CC		CC		CC		CC		PW
FRI	Project Review		Project Review		Project Review		Project Review		Project Review

Course Code	Course Name	Acronym	No of Credits	Hrs	Faculty Name with Designation/Dept.
ME 8811	Project Work & Review	PW	10	9	Mr.T.M.Sakthimuruga ,AP/Mech & Project Co ordinators.
--	Certificate Course on CNC Programming	CC	-	16	Dr.A.Karthikeyan ,ASP/Mech Dr.Vinoth, ASP/Mech

S.No.	Name of the Mentors
1	Mr.T.M.Sakthimuruga ,AP/Mech , (Chief Mentor)
2	Dr.N.Venkatachalam ,ASP/Mech
3	Mr.M.Sambathkumar ,AP/Mech

EXCEL ENGINEERING COLLEGE * DEPT. OF MECHANICAL ENGG. * Komarapalayam

Department TT coordinator

HoD

EXCEL ENGINEERING COLLEGE

(Autonomous)

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
Accredited by NBA, NAAC with "A+" and Recognised by UGC (2f &12B)
KOMARAPALAYAM – 637303

DEPARTMENT OF MECHANCIAL ENGINERRING

ACADEMIC YEAR 2021-22

CERTIFICATE COURSE FINAL YEAR

Programming on CNC LATHE AND MILLING

COURSE CONTENTS

Duration :30hrs

Lecture No	Descriptions
1	Introduction
2	Lathe Coordinate system & Operations
3	G & M codes
4	CNC lathe – facing & Turning operation
5	Step Turning operation
6	Taper & Step Turning operation
7	External Threading Operation
8	Grooving Operation
9	Drilling operation
10	Boring Operation
11	Step & Taper boring Operation
12	Internal Threading Operation
13	CNC Milling Coordinates & Operation introduction
14	Contouring operation
15	Pocketing operation
16	Drilling operation
17	Mirroring command
18	Discussion about process planning
19	CNC lathe and Milling Demo
20	MCQ Exam

EXCEL ENGINEERING COLLEGE DEPT. OF MECHANICAL ENGG. Komarapalayam

Coordinator

HOD

Lecture No	Course Contents
1	CNC Milling Coordinates & Operation introduction
2	Contouring operation (linear)
3	Contouring operation (Circular)
4	Contouring operation (letters)
5	Pocketing operation
6	Drilling operation
7	Mirroring command
8	Combined Exercise
9	Process planning
10	Test

EXCEL ENGINEERING COLLEGE

DEPARTMENT OF MECHANICAL ENGINEERING

ONLINE

CNC MILLING PROGRAMMING CERTIFICATE COURSE

Dr. A.Karthikeyan
Asso.Prof
Department of Mechanical Engineering
Excel Engineering College

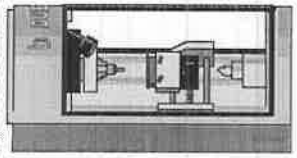
INPUT

THE COMPUTER IS USED TO INPUT THE DESIGN. SOFTWARE SUCH AS TECH SOFT IS USED TO DRAW THE DESIGN. THE *COMPUTER CONNECTS TO THE INTERFACE.*

PROCESS

THE INTERFACE PROCESSES THE SIGNALS FROM THE COMPUTER TO A FORM THAT THE CNC MACHINE CAN USE. THE INTERFACE IS CONNECTED TO THE CNC MACHINE

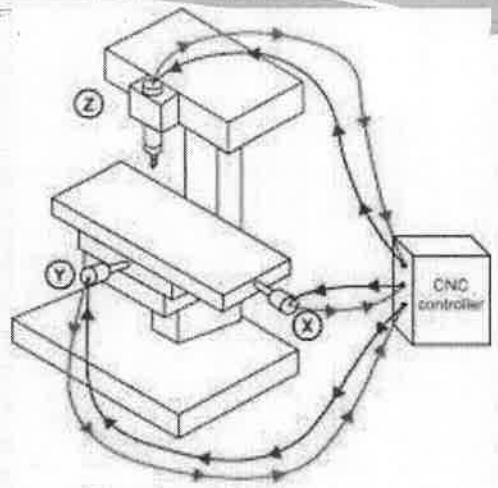
OUTPUT



THE SIGNALS FROM THE INTERFACE CONTROLS THE MOVEMENT OF THE CUTTING TOOL. THE DESIGN IS MANUFACTURED ON THE *CNC MACHINE.*

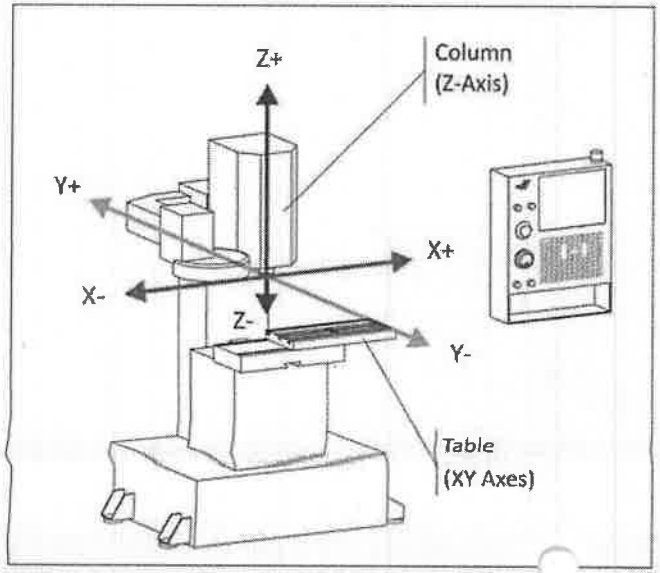
Computer Numerical Control

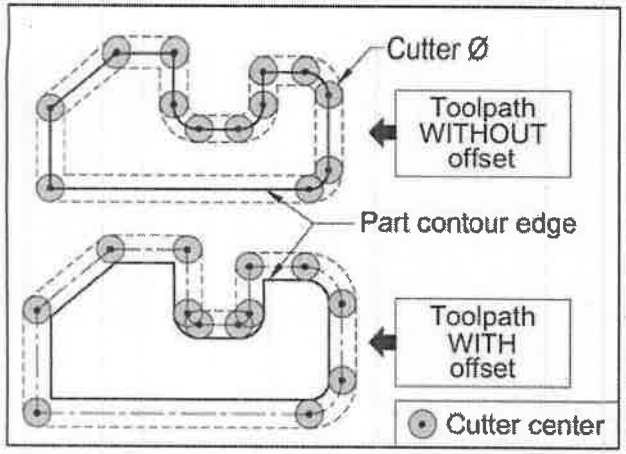
G cods ,M Codes, Numbers
G 94 X 30 Z 100 F 25
G 00
G01
M 03
M05 S 3500



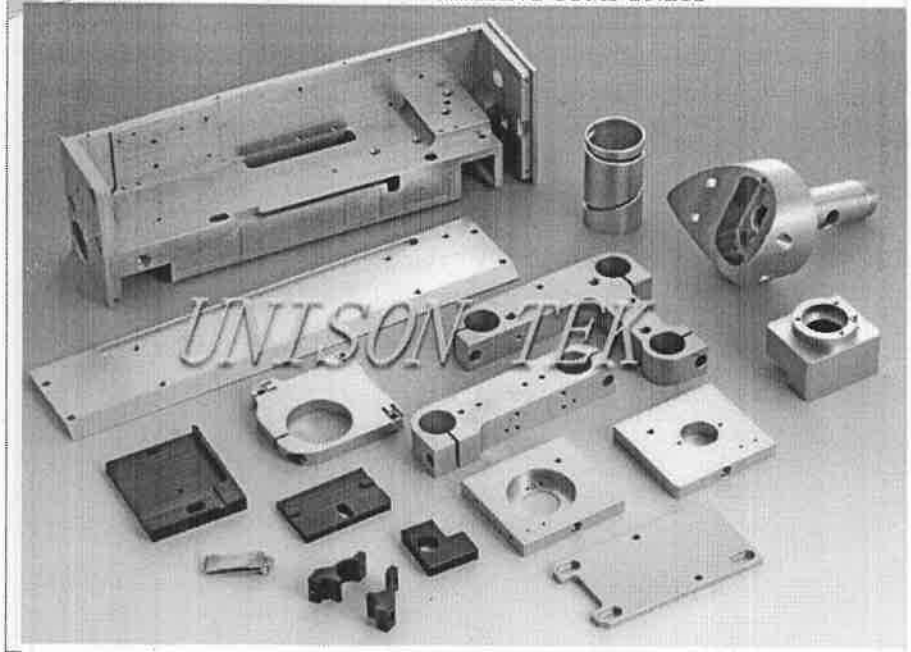
Closed-Loop-System

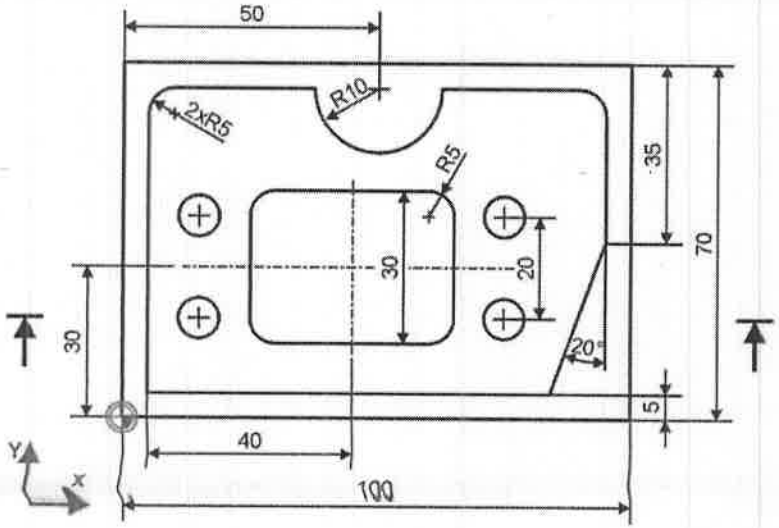
CNC MILLING AXIS



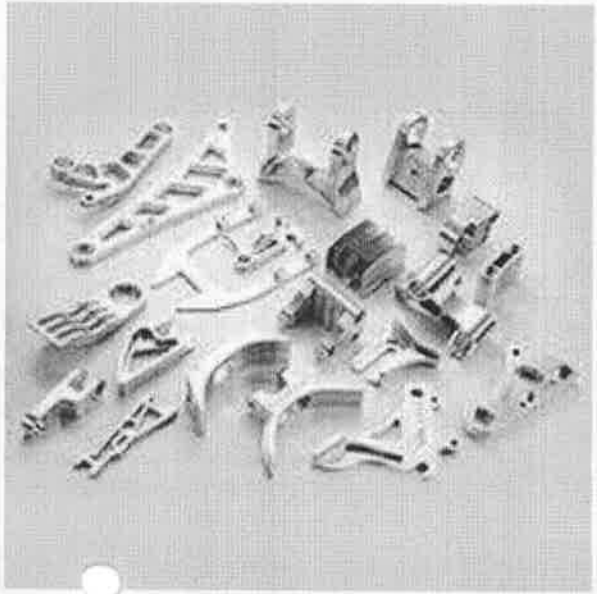


CNC MILLING COMPONETS



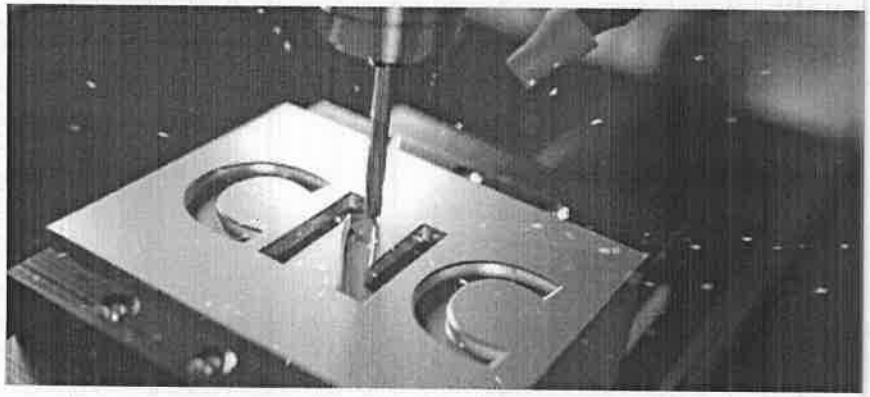


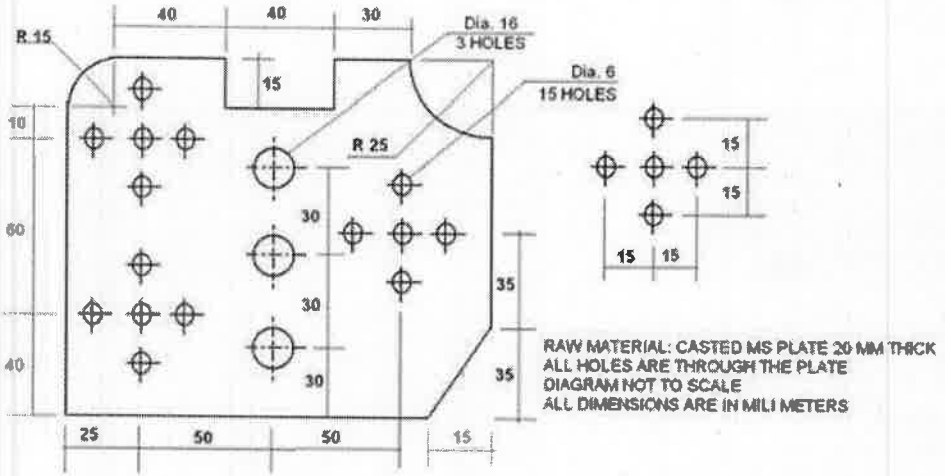
CNC MILLING COMPONETS



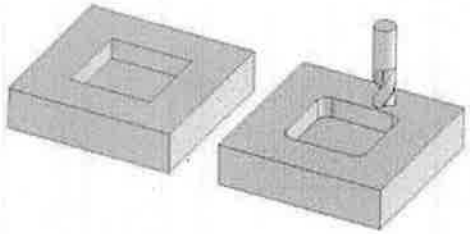
Milling OPERATIONS

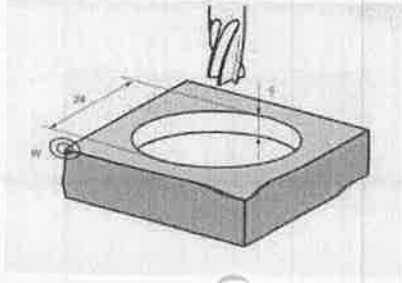
Contouring

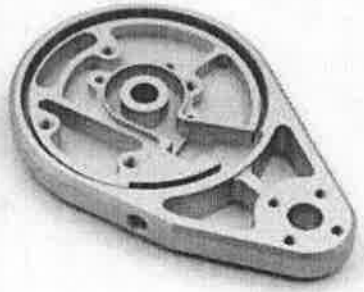




POCKETING







CNC MILLING CUTTERS

CNC DRILLING

Advantages of CNC

- Flexible, high accuracy
- Short production time
- Complex shapes
- Short setting time
- No skill requirement
- Short inspection time/ high quality product
- Low cost

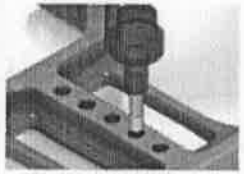
BASIC ISO PROGRAMMING


Face Milling


Slot Milling


Engraving


Profile Milling


Pecking / Drilling / Threading / Reaming


Pocket Milling

Disadvantages of CNC

- High machine cost
- Complicated maintenance
- Skill & training are required for programming and maintenance.
- Parts are imported from aboard.
- High tooling cost
- Temperature, humidity & dust must be controlled.

HEAD OF THE DEPARTMENT
MECHANICAL ENGINEERING,
EXCEL ENGINEERING COLLEGE
KOMARAPALAYAM - 637 303.

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DEPT. OF MECHANICAL ENGG.
Komarapalayam

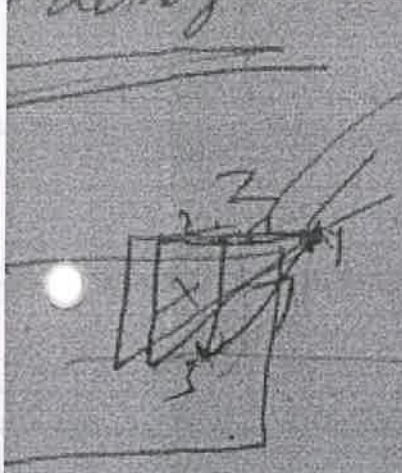
Z+

Z−

X−

100

Facing



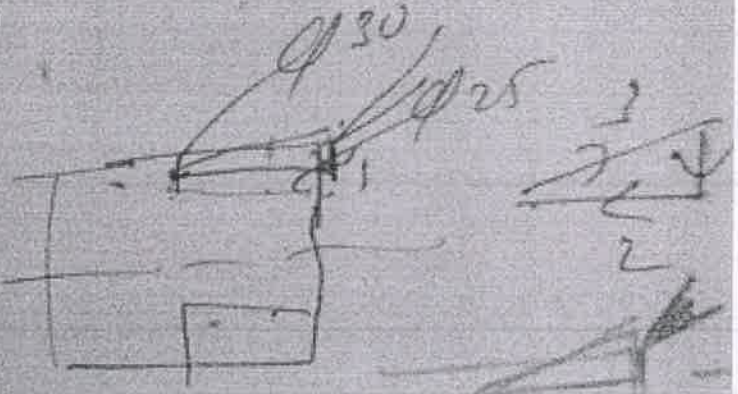
1) Z

2) X

depth of cut 2mm

15 rpm, 2, 1mm

Turning

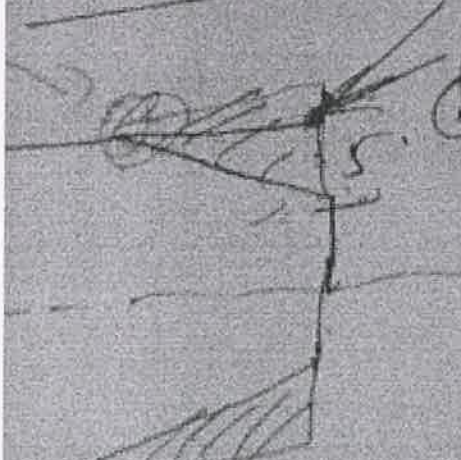


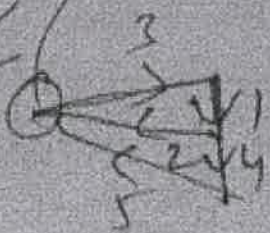
X 2 feed.

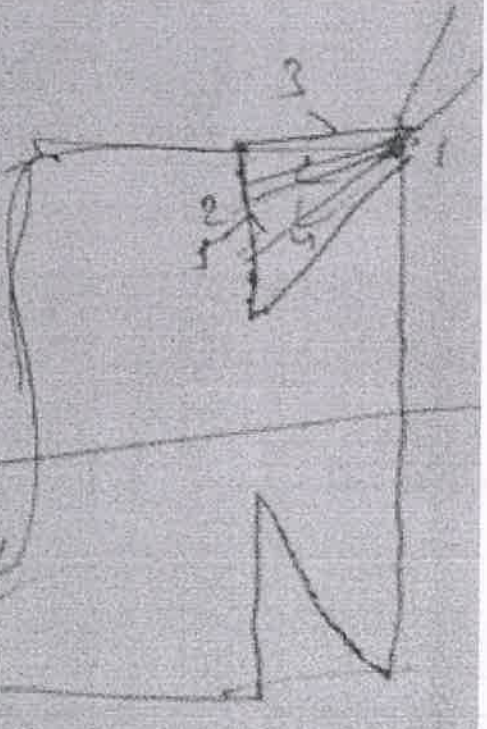
Turning

one entry

multiple entry







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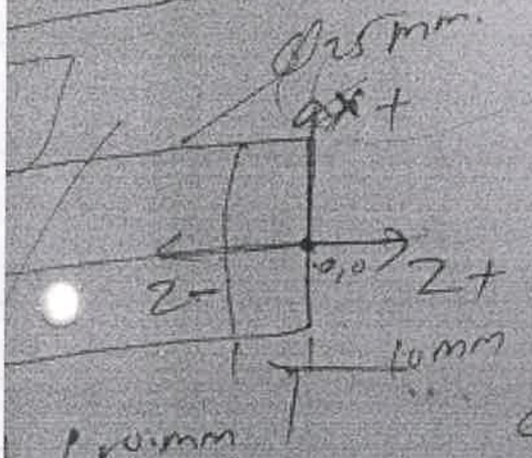
Kapalayam

Ex-1

Facing operation

Tool home

2mm depth of cut



feed = f = 40mm/min

Speed , S=2500 rpm

[Billet X25 Z100

G21 → mm

G98 → feed min.

G28 U0 W0 → Tool home position

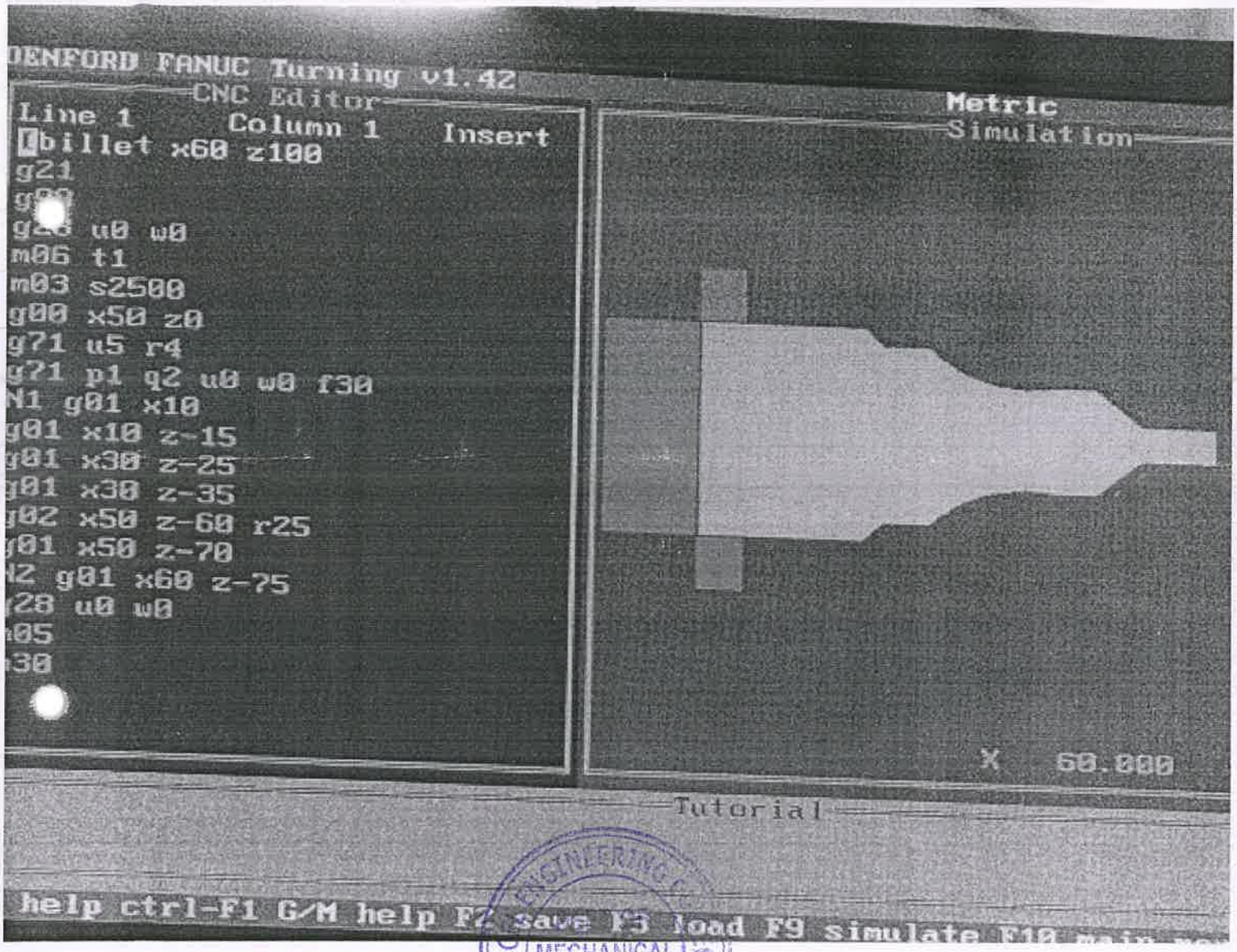
M06 T01 → facing tool

M03 S2500.

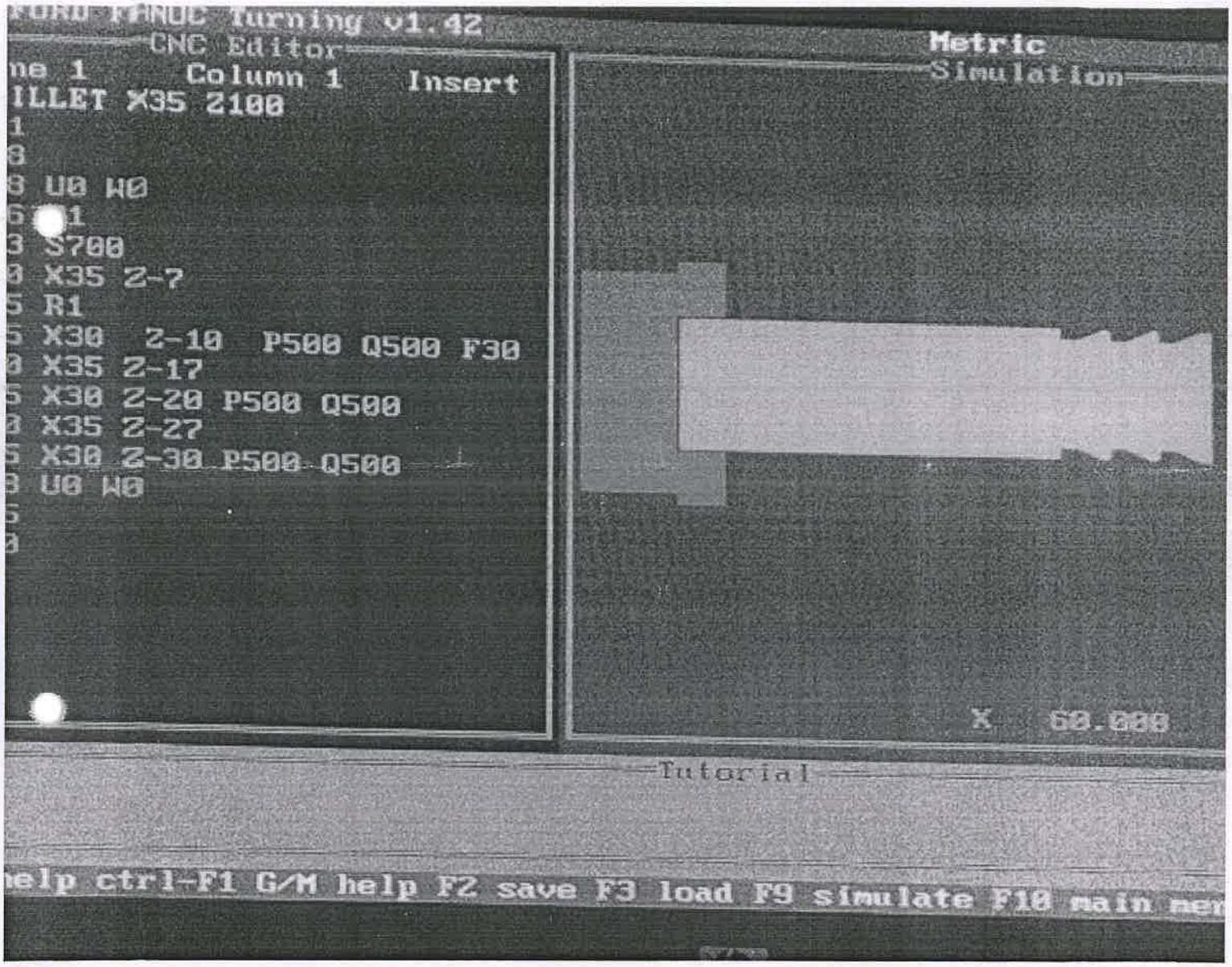
G00 X26 Z0

2-2.5 f40

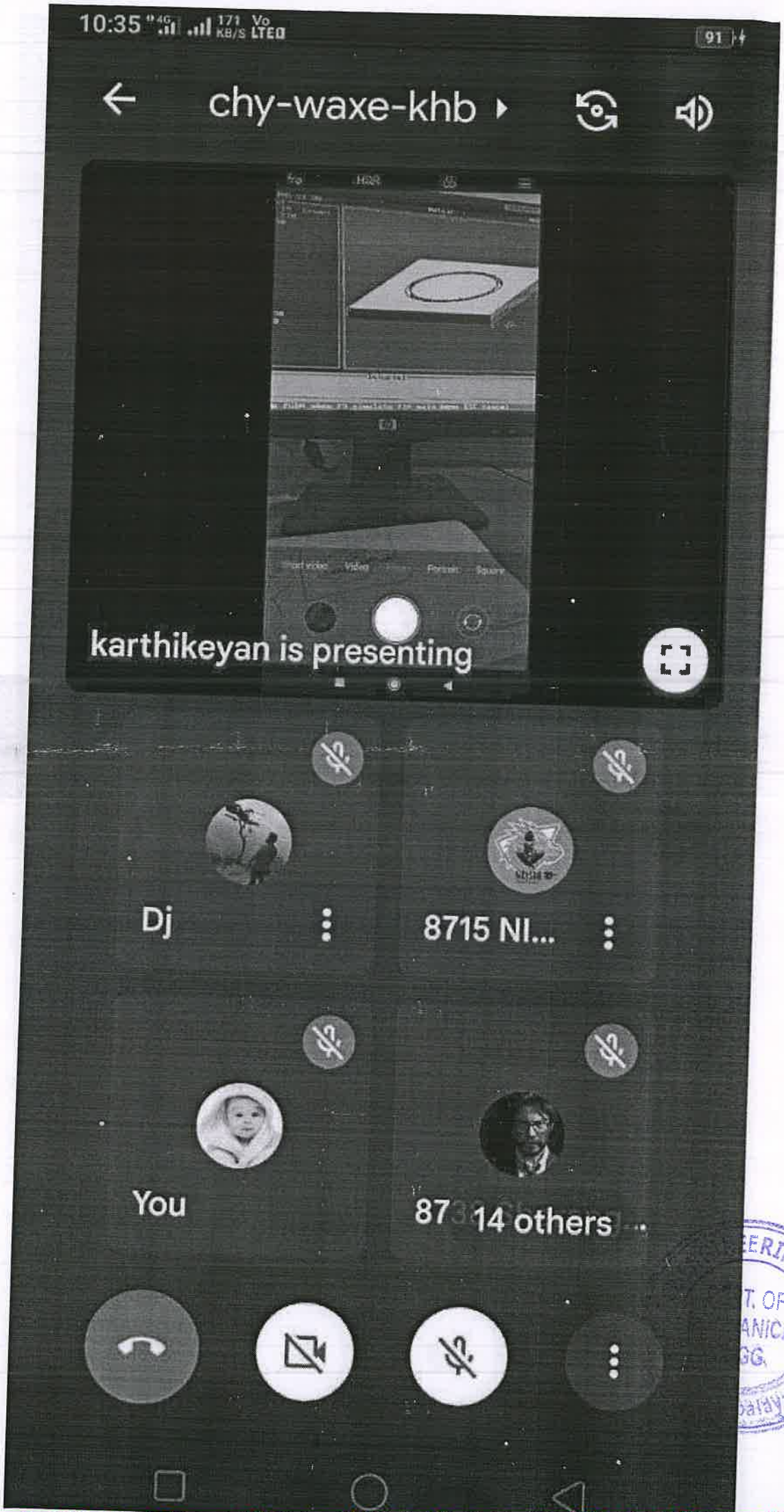
EXCEL ENGINEERING COLLEGE DEPT. OF MECHANICAL ENGG.

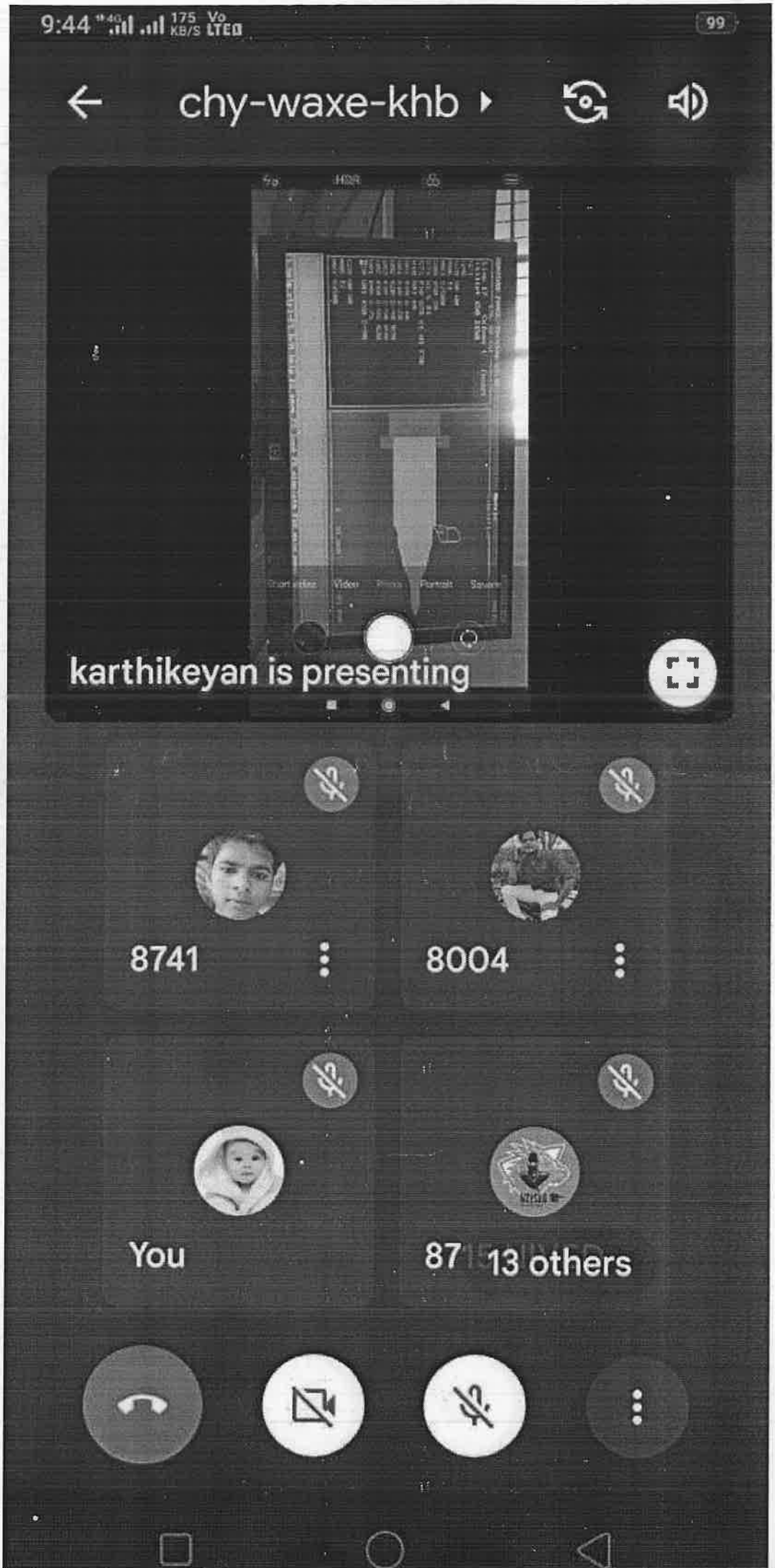


EXCEL ENGINEERING COLLEGE
MECHANICAL ENGG



EXCEL ENGINEERING COLLEGE
DEPT. OF MECHANICAL ENGG
Komarapalayam


10:35
chy-waxe-khb
karthikeyan is presenting
Dj
8715 NI...
You
14 others


9:44
99
chy-waxe-khb
karthikeyan is presenting
8741
8004
You
87
13 others

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Pallakapalayam, Komarapalayam, Namakkal Dt.-637 303

Value Added Course

Title : CNC programming on lathe & Milling

S.No	Register No	Name	20/1	21/1	22/1	24/1	26/1	27/1	28/1	29/1		
1	730918114001	AASHAP SOLOMON K [2001-03-07]	/	/	/	/	/	a	/	a	/	/
2	730918114002	AKASH K [2000-05-04]	/	/	/	/	a	/	a	/	a	/
3	730918114003	AKSHAY R KUMAR [1999-11-12]	/	/	/	/	/	/	/	/	/	a
4	730918114004	ANBARASU A [2000-10-31]	/	a	/	/	/	a	/	/	/	/
5	730918114005	ANBARASU A [2000-12-31]	/	/	/	/	/	/	/	/	a	/
6	730918114006	ANISH KUMAR R [2001-03-17]	/	/	a	/	/	/	a	/	/	/
7	730918114007	AL ANOODH AFSAL [2000-07-08]	a	/	/	/	a	/	/	a	/	/
8	730918114008	ARAVINTH R [2001-06-03]	/	/	/	a	/	/	/	/	a	/
9	730918114009	ARAVINTHAN M [2001-07-19]	/	/	/	/	/	a	/	/	/	a
10	730918114011	AYUSH KUMAR SINGH [2002-06-06]	/	/	/	/	/	/	/	/	/	/
11	730918114014	BHARATHRAJ R [2001-06-08]	/	/	a	/	/	/	/	a	/	/
12	730918114015	CHANDRU S [2001-08-09]	/	a	/	/	a	/	a	/	a	/
13	730918114016	CHRISTO JOHN EMMANUEL [2000-07-13]	a	/	/	/	/	/	/	/	/	a
14	730918114017	DEEPAN B [2000-05-17]	/	/	/	a	/	a	/	/	a	/
15	730918114019	DEEPAN RAJ M [2000-04-02]	/	/	/	/	/	/	/	a	/	/
16	730918114021	DHANAPAL A [2000-12-21]	/	/	/	/	/	/	/	/	/	a
17	730918114023	DHEENADHAYALAN K [2002-03-31]	/	a	/	/	/	/	a	/	/	/
18	730918114024	DHEVAN V [2001-01-18]	/	/	/	/	a	/	/	/	a	/
19	730918114025	DHINAGARAN G [2001-06-02]	/	/	a	/	/	/	/	/	/	a
20	730918114026	DHINAKARAN S [2000-04-10]	/	/	/	/	/	a	/	a	/	/
21	730918114027	DHIRAJ KUSHWAHA [1999-04-24]	/	/	/	a	/	/	/	/	/	/
22	730918114028	DINESH G [2000-10-11]	/	/	/	/	a	/	a	/	/	a
23	730918114029	DINESHKUMAR S [2000-04-20]		/	/	/	/	/	/	/	a	/
24	730918114034	GOVINDARAJ S [2001-05-24]	/	/	/	/	/	/	/	/	/	a
25	730918114035	GOWTHAM S [2001-04-03]	/	a	/	/	/	a	/	/	/	/
26	730918114036	HABIB DHUNIYA [1997-12-20]	/	/	/	/	a	/	/	a	/	/
27	730918114037	JAGAN R [2001-02-20]	/	/	a	/	/	/	a	/	a	/
28	730918114038	JIJITHPRASANTH S [2001-07-07]	/	/	/	/	/	/	/	/	/	/
29	730918114039	KALAIARASAN C [2000-10-16]	/	/	/	a	/	/	/	/	/	a
30	730918114040	KAMALAKKANNAN A [2000-11-27]	a	/	/	/	/	a	/	/	/	/
31	730918114041	KARTHEEPAN T [2000-12-01]	/	/	/	/	a	/	/	a	/	/
32	730918114042	KARTHI E [2001-03-21]	/	/	/	/	/	/	a	/	a	/
33	730918114043	KARTHICK R [2001-01-07]	/	a	/	/	/	/	/	/	/	/
34	730918114044	MANIKANDAN K [2001-07-27]	/	/	/	/	/	/	/	/	/	/
35	730918114045	MANI PRAKASH S [2001-11-04]	/	/	/	/	/	/	/	/	/	a
36	730918114046	MANIVEL R [2001-08-21]	/	/	a	/	a	/	/	/	/	/
37	730918114047	MANJAY KUMAR THAKUR [1999-02-10]	a	/	/	/	/	a	/	a	/	/
38	730918114049	MOTIF ANSARI [1998-12-28]	/	/	/	a	/	/	/	/	a	/
39	730918114051	MUGHIL R [2000-03-05]	/	/	/	/	/	/	a	/	/	a
40	730918114053	NETHAJI S [2001-03-16]	/	/	/	/	/	/	/	/	/	/
41	730918114054	NIRAJ KUMAR YADAV [1997-07-08]	/	a	/	/	a	/	/	/	/	/
42	730918114055	NIRANKUMAR HAOBAM [2000-03-07]	a	/	/	/	/	a	/	/	/	/
43	730918114057	NITHISHKUMAR N [2000-11-26]	/	/	/	a	/	/	a	/	a	/
44	730918114058	PANKAJ YADAV [1999-07-24]	/	/	/	/	/	/	/	a	/	/
45	730918114060	PRABIN MAHATO [2001-09-22]	/	/	/	/	/	/	/	/	/	a
46	730918114062	PRASANNA KUMAR M [2001-04-10]	/	/	a	/	a	/	/	/	/	/
47	730918114064	PREMKUMAR S [2000-11-21]	/	a	/	/	/	a	/	/	/	/
48	730918114068	RAJKUMAR S [1998-07-11]	/	/	/	a	/	/	a	/	/	/
49	730918114069	RANJITHKUMAR P [2001-05-14]	a	/	/	/	/	/	/	/	/	a
50	730918114070	RAMKUMAR S [2001-04-08]	/	/	/	/	/	/	/	a	/	/
51	730918114074	SANTHOSHKUMAR G [2001-04-22]	/	/	a	/	a	/	/	/	/	/
52	730918114075	SANTHOSH KUMAR C [2000-05-03]	/	a	/	/	/	a	/	/	/	/
53	730918114076	SATHISHKUMAR M [2001-12-06]	/	/	/	/	/	/	/	/	/	a
54	730918114080	SHANMUGAM N [2001-01-16]	/	/	/	a	/	/	a	/	/	/
55	730918114081	SIVAKUMAR S [2000-09-17]	a	/	/	/	a	/	/	a	/	/
56	730918114082	SUNDARESAN A [2001-03-26]	/	/	a	/	/	a	/	/	/	/
57	730918114084	UDHAYA KUMAR L [2000-12-09]	/	/	/	a	/	/	/	a	/	a
58	730918114086	VENGADESAN S [2001-06-07]	/	/	/	/	/	/	/	/	/	/
59	730918114089	VIJAY S [2001-06-03]	/	/	/	/	/	/	/	a	/	/
60	730918114301	DHANANJEYAN S [1999-08-28]	/	/	/	/	/	/	a	/	/	

DEPT OF MECHANICAL ENGG. Komarapalayam

61	730918114302	GOKULAKANNAN R [1999-05-20]	a				a														
62	730918114303	IUTO Y SHOHE [1996-11-19]			a			a													
63	730918114304	LOGESHWARAN S [2001-06-18]		a			a														
64	730918114305	NESTLINE ANTO JOHNY [1999-08-30]	a			a															
65	730918114306	SAM SABU [1998-04-13]						a													
66	730918114308	SUDHAKAR S [1998-06-05]		a		a															
67	730918114309	VENKATESH G [1997-07-03]			a		a														
68	730918114701	GOWTHAM M [2000-11-06]	a					a													
69	730918114702	MUTHUKRISHNAN R [2001-04-13]				a															
70	730918114703	JAYA PRASANTH V [2000-11-04]		a			a														
71	730918114704	VIJAY S [2001-01-07]			a	a		a													
72	730918114705	MANIKANDAN R [2001-07-22]					a														
73	730918114706	BATHIRANKARTHI M [2000-11-16]	a												a						
74	730918114708	ELANGOVAN E [2000-10-04]		a				a								a					
75	730918114709	MADHANRAJ A [2001-03-07]			a				a												
76	730918114710	SANTHOSH V [2001-02-21]				a				a											
77	730918114711	JANARTHANAN S [2001-07-25]			a			a			a										
78	730918114712	KABILAN K K [2001-04-25]	a				a		a												
79	730918114713	SANDHIYA B [2000-09-15]		a																	
80	730918114715	NIVED K V [2000-04-05]				a		a		a											
81	730918114716	SIVAPRASANTH D [2001-07-12]			a				a		a										
82	730918114717	VIKRAM N [2001-09-09]	a				a	a								a					
83	730918114718	MATHANKUMAR R [2001-02-25]		a																	
84	730918114719	BHARATHIRAJA M [2001-05-18]				a	a				a										
85	730918114720	BOOPATHI M [2001-06-06]			a			a		a											
86	730918114721	VINITH S [2001-04-09]	a						a												
87	730918114722	LOKESH J [2001-10-05]		a			a									a					
88	730918114723	VIJISRI A [2001-03-03]				a		a			d										
89	730918114724	NITHIN R [2001-06-26]			a				a												
90	730918114725	ABIMANI P [2001-03-22]		d			a			a											
91	730918114727	ARAVINTHAN C [2001-06-12]				a															
92	730918114729	VASANTH R [2000-06-05]	a							a											
93	730918114730	MUGESH KANNAN B [2001-06-24]			a						d										
94	730918114731	MANOJKUMAR M [2001-04-12]		a			a		a												
95	730918114732	PRANOOP P [2000-10-15]				a															
96	730918114733	VISHWANATHAN S [2001-04-03]					a			a		a									
97	730918114734	MANIKANDAN R [2001-02-07]	a						a		a										
98	730918114735	SATHISH KUMAR S [2001-03-07]		a																	
99	730918114736	JAYA KUMAR P [2001-02-01]			a					a											
100	730918114738	SHARANG N C [2001-01-06]					a		a			a									
101	730918114739	SURESH C [2001-10-04]			a						a										
102	730918114740	RAVI KUMAR R [2001-06-25]		a			a														
103	730918114741	VELMANI S [2001-08-15]	a							a		a									
104	730918114742	LAVANYA M [2000-11-10]			a				a												
105	730918114743	PERUMAL D [2001-02-06]					a				a										
106	730918114744	THAVARAJ P [2000-02-29]																			
107	730918114745	P M MOHAMMED SHAMIL [2000-03-04]			a					a		a									
108	730918114747	SURESH C [2001-07-05]					a		a		a										
109	730918114748	KAVIN K V [2001-05-14]	a																		
110	730918114749	SUMESH E [1999-04-24]		a						a		a									

EXCEL ENGINEERING COLLEGE
DEPT. OF MECHANICAL ENGG.
Komarapalayam

EXCEL ENGINEERING COLLEGE

(Autonomous)

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
Accredited by NBA, NAAC with "A+" and Recognised by UGC (2f &12B)
KOMARAPALAYAM – 637303

CERTIFICATE CNC PROGRAMMING COURSE
FEEDBACK

IV YEAR (20.01.2022- 01.02.2022)

akarthikeyan.eec@excelcolleges.com (not shared) Switch account

* Required
Name of student *

Roll No *

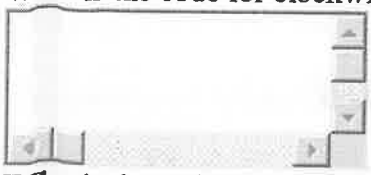
Howmuch syllabus covered ? *
80-100 %,60- 79%,40- 59%,below 40%
How the faculty members handled the class *
Effectively,Good,Average,Poor
How many classes you attended? *
more than 80%,60-79%,40-59%,below 40%
What is the code for inch *

What is the code for reference position *

What is the code for Non cutting movement *

What is the code for linear cutting movement *

What is the code for clockwise cutting movement *



What is the code for multiple turning *

What is the code for Grooving *

What is the code for Drilling *

What is the code for threading *

What is the code for feed/ min *

What is the code for coolant on *

What is the code for tool change *

What is the code for spindle off *

How many axis for lathe *

How many axis for Milling *

What is the code incremental method in CNC milling *

What are the operation in CNC MILLING *

Excel Engineering College
(Autonomous)
Komarapalayam - 637303

A+ Grade (3.26)

B.E. - AERO, MECH, CSE, ECE

INSTITUTION'S INNOVATION COUNCIL

CERTIFICATE

MERIT

AKASH. K

Has completed the Certificate Course titled "CNC Programming on Lathe & Milling " successfully from to organize by Department of Mechanical Engineering

CERTIFIED

Dr.A.Karthikeyan
Coordinator

Dr.N.Natarajan
Head of the Department

Excel ENGINEERING COLLEGE
Komarapalayam-637303

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR: 2021 - 2022

Indirect Assessment of Program Outcomes & Program Specific Outcomes through Curricular and Extracurricular Activities

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Student Name : SANTHIYA. B **Date:** 31/1/2020

Batch : 2018/2022 **Year/Semester:** / IV

Type of Activity: Value Added Course CNC Programming

*Provide your level of attainment for the following questions by **SELECTING** in the ☐ given,*

[3/2/1 Indicates Level of Attainment; 3 – Very Much, 2 – Moderate, 1 – Some Extent]

1. Does this Activity/ Course improve your Technical Skill?
   3 ☑ **2** ☐ **1** ☐
2. Does this Activity /Course improve your Problem Solving Skill?
   3 ☐ **2** ☑ **1** ☐
3. Does this training / Course improve your practical Exposure?
   3 ☑ **2** ☐ **1** ☐
4. Have you learnt any modern tools through this activity/ training?
   Yes ☑ **No** ☐ if yes name of tool CNC Programming
5. Does this activity /training useful to improve your professional ethics?
   3 ☐ **2** ☑ **1** ☐
6. Does this activity /training useful to apply for any modern research programs?
   3 ☑ **2** ☐ **1** ☐
7. Have you got any ideas to improve our environmental & social needs?
   3 ☐ **2** ☐ **1** ☑
8. Have you ever felt that your communication skill & leadership skill has been improved through this activity?
   3 ☑ **2** ☐ **1** ☐
9. Does this Activity / training useful to improve learning attitude with zeal?
   3 ☐ **2** ☑ **1** ☐
10. Does this Activity /training useful for you to work in multi-disciplinary team?
    3 ☐ **2** ☐ **1** ☑
11. Does this Activity /training improve your mind to face any changes in your life?
    3 ☐ **2** ☑ **1** ☐

Any other Comments:

B. Santhiya

Signature

EXCEL ENGINEERING COLLEGE
Komarapalayam-637303

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR: 2021 - 2022

Indirect Assessment of Program Outcomes & Program Specific Outcomes through Curricular and Extracurricular Activities

---

Student Name : DEEPAN.B **Date:** 31/1/2020

Batch : 2018/2022 **Year/Semester:** / IV

Type of Activity: Value Added Course CNC Programming

*Provide your level of attainment for the following questions by **SELECTING** in the ☐ given,*

[3/2/1 Indicates Level of Attainment; 3 – Very Much, 2 – Moderate, 1 – Some Extent]

1. Does this Activity/ Course improve your Technical Skill?
   3 ☐ **2** ☑ **1** ☐
2. Does this Activity /Course improve your Problem Solving Skill?
   3 ☑ **2** ☐ **1** ☐
3. Does this training / Course improve your practical Exposure?
   3 ☐ **2** ☐ **1** ☑
4. Have you learnt any modern tools through this activity/ training?
   Yes ☑ **No** ☐ if yes name of tool CNC Programming
5. Does this activity /training useful to improve your professional ethics?
   3 ☑ **2** ☐ **1** ☐
6. Does this activity /training useful to apply for any modern research programs?
   3 ☐ **2** ☑ **1** ☐
7. Have you got any ideas to improve our environmental & social needs?
   3 ☑ **2** ☐ **1** ☐
8. Have you ever felt that your communication skill & leadership skill has been improved through this activity?
   3 ☐ **2** ☐ **1** ☑
9. Does this Activity / training useful to improve learning attitude with zeal?
   3 ☑ **2** ☐ **1** ☐
10. Does this Activity /training useful for you to work in multi-disciplinary team?
    3 ☐ **2** ☐ **1** ☑
11. Does this Activity /training improve your mind to face any changes in your life?
    3 ☑ **2** ☐ **1** ☐

Any other Comments:

B. Deepan

Signature

EXCEL ENGINEERING COLLEGE
Komarapalayam-637303

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR: 2021 - 2022

Indirect Assessment of Program Outcomes & Program Specific Outcomes through Curricular and Extracurricular Activities

---

Student Name : AKASH . K **Date:** 31/1/2022

Batch : 2018 to 2022 **Year/Semester:** / IV year

Type of Activity: Value Added Course CNC Programming

*Provide your level of attainment for the following questions by **SELECTING** in the ☐ given,*

[3/2/1 Indicates Level of Attainment; 3 – Very Much, 2 – Moderate, 1 – Some Extent]

1. Does this Activity/ Course improve your Technical Skill?
   3 ☐ **2** ☑ **1** ☐
2. Does this Activity /Course improve your Problem Solving Skill?
   3 ☐ **2** ☑ **1** ☐
3. Does this training / Course improve your practical Exposure?
   3 ☑ **2** ☐ **1** ☐
4. Have you learnt any modern tools through this activity/ training?
   Yes ☑ **No** ☐ if yes name of tool CNC Programming
5. Does this activity /training useful to improve your professional ethics?
   3 ☐ **2** ☑ **1** ☐
6. Does this activity /training useful to apply for any modern research programs?
   3 ☐ **2** ☐ **1** ☑
7. Have you got any ideas to improve our environmental & social needs?
   3 ☑ **2** ☐ **1** ☐
8. Have you ever felt that your communication skill & leadership skill has been improved through this activity?
   3 ☐ **2** ☐ **1** ☑
9. Does this Activity / training useful to improve learning attitude with zeal?
   3 ☑ **2** ☐ **1** ☐
10. Does this Activity /training useful for you to work in multi-disciplinary team?
    3 ☐ **2** ☑ **1** ☐
11. Does this Activity /training improve your mind to face any changes in your life?
    3 ☑ **2** ☐ **1** ☐

Any other Comments:

K. Akash.
Signature