DETAIL OF COURSE CONTENTS AUTOCAD

(6-Months Course)

| Sr# | Contents | Theory Hours | Practical Hours | Total |
|-----|--|--------------|--------------------|-------|
| 1 | AUTOCAD 2D-3D | 12 | 28 | 40 |
| | Introduction of Shapes | | | |
| | 1. Introduction to 2d shapes in Ms paint | | | |
| | 2.Introducion to 3d shapes Ms paint | | | |
| | 3. Drawing of 2d shapes in ms paint | | | |
| | 4. Drawing of 3d shapes in ms paint | | | |
| | 5. Introduction to Autocad | | | |
| | A)uses in Civil Engineering | | | |
| | B) Uses in Electrical Engineering | | | |
| | C) Uses in Mechanical Engineering | | | |
| 2 | Installation of autcad | - | 3.5 | 3.5 |
| 3 | Uses of autocad commands | 25 | 30.5 | 55.5 |
| | Perform AutoCAD 2D Fundamentals | | | |
| 4 | Create 3D Interface/Drawings | 26 | 48 | 74 |
| | 1. Use different options to draw 3D Basic Ribbons | | | |
| | 2. Recognise the steps of executing Pull down menus | | | |
| | 3 Execute the steps to apply 3D Modelling panels | | | |
| | 4. P4. Identify options 3D Modelling Pull down menus | | | |
| | 5. Identify Viewports (-VPORTS command) | | | |
| | 6.Apply the technique to track the cursor | | | |
| | 7. Identify Viewpoints including: | | | |
| | 8. Apply the Thickness command at command prompt with different values or modify general properties of an object | | | |
| | 9. Apply the Thickness command at command prompt with different values or modify general properties of an object | | | |
| | 10. Execute the "Elev" command at command prompt with different values. | | | |
| | 11. Apply different visual functions | | | |
| | Draw Coordinates | 12 | 45 | 57 |
| | 1. Explain basic terminologies of Z Coordinates | | | |

| | 2. Define user Coordinates System | | | |
|-----|--|-----|-----|-----|
| | Draw 3D Orbit, Navigations and Model | | | |
| | Introduction | 18 | 48 | 66 |
| | 1.Develop familiarity with 3D Orbit | | | |
| | A. Define 3D orbit with the command | | | |
| 6 | B. Select different visual aids e.g. Compass, Grid and UCS Icon. | | | |
| | C. Discover other navigational modes including but not limited to Walk, Fly, Swivel, and Adjust Distance | | | |
| | 2. Perform 3D dimensional navigation | | | |
| | 3. Operate 3D Objects | 16 | 49 | 65 |
| | Produce 2D Solid and 3D Faces | | | |
| | Introduction | | | |
| 7 | 1.Draw Edges | | | |
| | 2. Draw basic 3D surfaces | | | |
| | 3. Comprehend complex 3D surfaces | 20 | | 62 |
| | Develop Solids | | | |
| 8 | 1. Create Solids | | 42 | |
| 0 | 2. Edit 3D Objects | | 42 | |
| | 3. Develop 3D Solid composites | 20 | 49 | 69 |
| | Modify Solid Faces | | | |
| | 1. Modify Solid Faces | | | |
| 9 | 2. Edit Solids | | | |
| | 3. Create shell or a hollow thin wall with a specified thickness from 3D solid object | 15 | 49 | 64 |
| | Navigate Sections and Merge Flat Objects from 3D Model | | | |
| | 1. Navigate Section Object | | | |
| 10 | 2. Merge Flat Objects | | | |
| | A. Use the intersection of plane and solids to create a region using "Section" command | | | |
| | b. Generate profiles and sections in viewports created with SOLVIEW using "SOLDRAW" command. | 16 | 28 | 44 |
| | Customise Rendering, Materials and Lights | | | |
| 4.4 | 1. Execute Rendering | | | |
| 11 | 2. Apply/Configure material | | | |
| | 3.Apply Lights | | | |
| | Total | 180 | 420 | 600 |