1. **COMPUTER AIDED DESIGNAND MODELING**

Credit hours: 2 (0+2)

Prerequisites: None

**Specific Objectives**

To impart skills in technical drawings with understanding of scale through computer aided designs.

**Learning Outcomes**

After studying this course, the learners will be able to:

1. Create objects accurately in AutoCAD
2. Draw basic 2D and 3D drawings in AutoCAD
3. Use AutoCAD in planning and designing of houses and housing schemes
4. Prepare technical drawings by utilizing the tools of AutoCAD

# Practical

* Introduction to Computer Aided Design (CAD) for Planners.
* Basic concepts of computer use in town planning.
* Computer configuration.
* Introduction to operating systems like DOS and Windows.
* Concepts of electronic drafting.
* Using the AutoCAD interface.
* Accessing AutoCAD commands.
* Units, Scale and Limits. Drawing tools.
* Drawing different objects accurately.
* Polylines, fills and hatching.
* Editing and modifying drawings.
* Dimensions and text in a drawing.
* Viewing drawing. 3D Modeling, shading and rendering.
* Printing or plotting a drawing.

**Proposed Teaching Methodology**

* Demonstration
* Drawing and drafting Assignments
* Use of related software

**Proposed Assessment (practical, 100%)**

* Presentations, assignments, viva voce, etc

**Recommended Books**

1. Omura. G., & Benton, B. (2017), *Mastering Auto CAD 2017*, John Willey & Sons Inc., Indiana.
2. CADArtifex (2016), *Auto CAD 2017: A Power Guide for Beginners and Intermediate Users.*
3. Stolins, F., Mardar, C., Marotti& Murphy, *Essentials of Computer Designs*, Labyrinth Publication, ISBN:1-59136-027-7