Computer Aided Drawing in Civil Engineering (ESCE0670T)

Teaching Scheme	Examination Scheme
Lectures : 01 Hrs./week	Term Test : 15 Marks
Tutorial : Nil	Teacher Assessment: 20 Marks
Credit : 02	End Sem Exam : 65 Marks
	Total Marks : 100 Marks

Course Objectives

1. To introduce the basic commands of Auto Cad.

2. Able to prepare a simple building drawing file using basic commands.

3. To Understand and demonstrate dimensioning concepts and techniques.

COs	Course Outcomes	Blooms Level	Blooms Description
CO1	Demonstrate basic concepts of the AutoCAD software	2	Understand, Apply
CO2	Students will be able to draw various types of drawing using Auto cad software	3	Evaluate, Create
CO3	Students can able to do design 2D Detailed Building drawing.	2	Analyze

Course Contents

Unit- I   Introduction to Auto Cad   **03Hrs.**

a) Introduction to CAD, Introduction to drafting software.

b) Explanation to precision Drawing & Drawing tools, Geometric Shapes, Basic Printing,

Editing Tools.

Unit-II   Basic Sign and Conventions   **02Hrs.**

Different Materials symbols, Architectural, Structural, Electrical and Plumbing symbols. Drawing symbols, dimensioning standards

Unit-II   2D Building Drawing   **03 Hrs.**

Terms, Elements of planning building drawing, Methods of making line drawing and detailed drawing. Site plan, floor plan, elevation and section drawing of small residential and public building drawing.

Unit-IV   Introduction to 3D Drawing   **04 Hrs.**

Introduction to 3D Drawing Terms, Elements required for drawing. Draw the basic Object, Residential building drawing.

Reference Books:

1. Subhash C Sharma & Gurucharan Singh (2005), "Civil Engineering Drawing",Standard Publishers
2. Ajeet Singh (2002), "Working with AUTOCAD 2000 with updates on AUTOCAD 200I", Tata- Mc Graw-Hill Company Limited, New Delhi
3. Sham Tickoo Swapna D (2009), "AUTOCAD for Engineers and Designers", Pearson Education,
4. Venugopal (2007), "Engineering Drawing AUTOCAD", New Age International Pvt. Ltd.

Evaluation Scheme:

Continuous Assessment (A):

Subject teacher will declare Teacher Assessment criteria at the start of Semester.

Continuous Assessment (B):

   16. Two term tests of 30 marks each will be conducted during the semester.

End Semester Examination (C):

Computer Aided Drawing in Civil Engineering Lab (ESCE6070L)

Teaching Scheme	Examination Scheme
Lectures : 0 Hrs./week	Term Test : Nil
Practical : Nil	Teacher Assessment: 20 Marks
Credit : 02	End Sem Exam : Nil
	Total Marks : 100 Marks

Course Objectives

1) To introduce the basic commands of Auto Cad.

2) Able to prepare a simple building drawing file using basic commands.

3) To Understand and demonstrate dimensioning concepts and techniques.

COs	Course Outcomes	Blooms Level	Blooms Description
CO1	Demonstrate basic concepts of the AutoCAD software	2	Understand, Apply
CO2	Students will be able to draw various types of drawing using Auto cad software	3	Evaluate, Create
CO3	Students can able to do design 2D Detailed Building drawing.	2	Analyze

List of Experiments

Term work shall consist of performing Min Five experimental sets from the list below.

1) To Study the basic commands and Initial settings of AutoCAD drawing files.

2) To draw the basic shapes of 2D and Line Plan of Residential/Public building drawing.

3) To draw the detailed drawing Plan of Residential building

4) To draw the above plan Elevation, section, site plan schedules of opening etc.

5) To draw the 3D drawing of basic shapes

6) To developed the 3D views of building

Evaluation Scheme:

Continuous Assessment (A):

Laboratory work shall consist of minimum 5 experiments and subject specific lab assignment/ Case study

The distribution of marks shall be as follows:

1. Performance in Experiments: 05 Marks

2. Journal Submission: 05 Marks

3. Viva-voce: 05 Marks

4. Subject Specific Lab Assignment/Case Study: 10 Marks

The final certification and acceptance of laboratory journal/manual/report will be subject to Satisfactory performance of laboratory work and upon fulfilling minimum passing criteria in the Teacher assessment.

End Semester Examination (C):

Oral / Practical examination will be based on the entire syllabus including, the practical's performed During laboratory sessions.