Course No.	Course Name	L-T-P - Credits	Year of Introduction
CE231	CIVIL ENGINEERING DRAFTING LAB	0-0-3-1	2016

**Prerequisite:** BE 110 - Engineering Graphics

## **Course Objectives:**

- 1. To introduce the fundamentals of Civil Engineering drawing.
- 2. To understand the principles of planning
- 3. To learn drafting of buildings.
- 4. To impart knowledge on drafting software such as AutoCAD.

## **List of Exercises :** (at least 10 exercises / plates are mandatory )

- 1. Paneled Doors
- 2. Glazed Windows and Ventilators in wood
- 3. Steel windows
- 4. Roof truss in steel sections
- 5. Reinforced concrete staircase
- 6. Residential buildings with flat roof
- 7. Residential buildings with tiled roof
- 8. Preparation of site plan and service plans as per building rules
- 9. Building Services (for single and two storied buildings only). Septic tanks and soak pit detailed drawing
- 10. Two storied and multi storied buildings
- 11. Public buildings like office, dispensary, post office, bank etc.
- 12. Industrial buildings with trusses

#### **Expected outcome.**

To accomplish the abilities/skills for the following.

- 1. To understand the drawings of various components of buildings
- 2. Preparation of building drawings.
- 3. Interpretation of building drawings.
- 4. Use of a drafting software.

#### **Text Books:**

- 1. National Building Code of India.
- 2. Kerala Municipal Building Rules.
- 3. Dr. Balagopal T.S. Prabhu, Building Drawing and Detailing, Spades Publishers, Calicut
- 4. AutoCAD Essentials, Autodesk official Press, John Wiley & Sons, USA

## **References:**

1. Shah, M.G., Kale, C. M. and Patki, S.Y. Building Drawing With An Intergrated Approach to Built Environment, Tata McGraw Hill Publishing Company Limited, New Delhi

# Points to note:

- 1. Equal weightage to be given for manual drafting and drafting using computer aided drafting software.
- 2. Evaluation of drawing, along with a viva-voce, to be done at the end of every day class.

