19.3 Other Engineering Courses:

Course Title: Mechanical Engineering Drawing Course Code: ME 1104

Course Type: Other Engineering Course
Status: Sessional
Credits: 0.75
Pre-requisite: None

Course Rationale:

This course aims to provide students an understanding of engineering drawing, an essential means of communication in engineering.

Course Objectives:

The objectives of this course are-

- 1. To familiarize with drawing instruments and conventions in making engineering drawings.
- 2. To introduce with freehand single view and multi-view sketching. To acquaint with Isometric sketching techniques and multi-view projections.
- 3. To develop the knowledge of AutoCAD (Or Solid Works) in making engineering drawings with dimensions and taking sectional views.

Course Learning Outcomes (CLOs):

Upon successful completion of this course, students will be able to

- CLO1 Demonstrate (C2, P2) different drawing equipment, technical standards and procedures for construction of geometric figures
- CLO2 Draw (A2) freehand single view, multi-view sketches, and isometric sketches.
- CLO3 Create (P4) and modify (P4) two-dimensional orthographic drawings using CAD tools
- **CLO4** Report (A3) lab activities and experimental results or findings

Mapping of Course Outcomes to Program Outcomes-

		PLO(b)	PLO(c)	PLO(d)	PLO(e)	PLO(f)	PLO(g)	PLO(h)	PLO(i)	PLO(j)	PLO(k)	PLO(l)
CLO1	√				$\sqrt{}$							
CLO2	√											
CLO3	√											
CLO4	√								√			

Course Description:

SL No.	Course Content			
1.	Mechanical Engineering Drawing			
	Introduction, Orthographic drawings, First and third angle projections,	CLO2		
	scale drawing, sectional view, isometric views, missing line, auxiliary view,			
	detail and assembly drawing			

2.	CAD Tools	CLO3
	Drawing using CAD tools or contemporary packages instructed by the teachers.	
3.	Report	CLO4

Textbooks, References & Other Resources:

1. Lab Manuals

Mapping Course Learning Outcomes (CLOs) with the Teaching-Learning & Assessment Strategy:

CLOs	Teaching Learning Strategy	Assessment Strategy
CLO1	Interactive Lecture	Class Performance, QUIZ, VIVA
CLO2	1	Class Performance, Report
	 Design done by Students 	
CLO3	Mini Project	Class Performance, QUIZ,
	 Student Presentation 	Presentation
CLO4		
	 Student Demonstration 	Report

Course Title: Introduction to Electrical Engineering Course Code: EEE 1101

Course Type: Other Engineering Course
Status: Theory
Credits: 3
Pre-requisite: None

Course Rationale:

Intended to enable the students to learn the fundamentals of electrical circuits. Use the acquired knowledge to understand the working and operations of electrical circuits to solve the problems for industry opportunities.

Course Objectives:

The objective of the course is

- 1. To provide the knowledge of Alternating Current (AC) and Direct Current (DC) circuits/networks.
- 2. Helping the students develop the ability to solve the unknown electrical parameters used to design electrical circuits.
- 3. To develop skills to analyze and criticize the behavior of electrical circuits.

Course Learning Outcomes (CLOs):

Upon successful completion of this course, students will be able to

- **CLO1 Demonstrate** (C3) the electrical parameters which are used to design electrical and electronic devices.
- **CLO2 Illustrate** (**C3**) the circuit laws, network analysis and methodologies to solve DC as well as AC circuits/networks.
- **CLO3** Solve (C3) different types of circuit theorems to find the unknown parameters of an electrical circuit/network.