



GUJARAT TECHNOLOGICAL UNIVERSITY

Syllabus for Bachelor of Vocation (B.Voc.), 6th Semester

Branch: Solar & Renewable Energy

Subject Name: Computer Aided Design Lab

Subject Code: 1160706

Type of course: Core

Prerequisite: None

Rationale: Computer-aided design (CAD) is used to design and develop electrical Systems. CAD software enables electrical engineers to create and modify diagrams and layouts including 2D models.

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical		
			ESE (E)	PA(M)	ESE (V)	PA (I)		
0	0	4	2	0	0	30	20	50

L- Lectures; T- Tutorial/Teacher Guided Student Activity; P- Practical; C- Credit; ESE- End Semester Examination; PA- Progressive Assessment

Contents:

Sr. No.	Practical / Hands on Exercise	Teaching Hrs.
1	INTRODUCTION OF AUTOCAD.	2
2	TO STUDY OF ELECTRICAL SYMBOLS.	2
3	TO STUDY OF ELECTRONIC SYMBOLS.	2
4	PREPARE RLC SERIES AND PARALLEL CIRCUIT.	2
5	PREPARE LAYOUT OF TUBE LIGHT WIRING CONNECTION.	2
6	PREPARE LAYOUT OF TWO WAY WIRING CONNECTION.	2
7	PREPARE LAYOUT OF GODOWN WIRING CONNECTION.	2
8	PREPARE LAYOUT OF CLASS ROOM WIRING CONNECTION.	2
9	PREPARE LAYOUT OF SOLAR PANEL CONNECTION.	2
10	TO STUDY ABOUT LOAD CALCULATION OF ELECTRICAL LOAD.	2
	Total	20



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Course Outcome:

Sr. No.	CO statement	Marks% weightage
CO1	Basics of AUTOCAD.	20
CO2	Comprehend Electrical & Electronics elements.	30
CO3	Prepare different types of wiring.	30
CO4	Prepare Electrical load & Solar Panel connection.	20

Reference Books:

1. Inside AUTO-CAD by Racter & Rice
2. Mastering AUTO-CAD by Georse Omura

Major Equipment:

1. Computer System