



# TOLANI COLLEGE OF ARTS & SCIENCE

Accredited A by NAAC, Bangalore,  
 Affiliated with KSKV Kachchh University, Bhuj, Gujarat  
 (Under the Management of Gandhidham Collegiate Board, Adipur)  
 Near Railway Station, Adipur (KUTCH) Gujarat. 370 205  
 Ph. (O) 02836 260698, Fax: 02836 260573  
 Website: [www.tcas.ac.in](http://www.tcas.ac.in)

Principal: Dr. S.G.Dharmani

Email: [tcasadipur@yahoo.co.in](mailto:tcasadipur@yahoo.co.in)

## Skill Enhancement Course

### SEC-I: Basics of Household electricity

Total credits-2 Teaching hours: 60

### SYLLABUS

#### Learning Outcomes:

After completing, students will be able to:

- To learn house wiring & devices.
- Gain self-competency in physics of household appliances.
- To prepare for self identified occupation with green energy and appliance repair.
- Understand and apply basic functions of every appliances.

Unit No.	Topics	Credit/hours
1	Household wiring & devices: Single phase & three phase power. Use of switch, Pin, holder, tester etc. Use of MCB, ELCB, Electric boards.	12 Hrs
2	Lights & fans: LED bulb, LED tube lights, Fans Power ratings (V, I, W)	12 Hrs
3	Power consumption: Power consumption meter Inverters Series & parallel connections & loads UPS, Stabilizer	12 Hrs



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<b>4</b>	Solar rooftopsystems:  Solar panels,  Power inverter  Power generation meters	<b>12 Hrs</b>
<b>5</b>	Self-repair at least one appliance	<b>12 Hrs</b>
	#### Assessment:  - Weekly quizzes or assignments to assess understanding  - Final project evaluation of self-repaired appliance  - Optional: Midterm and final exams for comprehensive evaluation	
	#### Resources:  - Recommended reference books  - Basics of Electronics by V.K. Mehta - Networks, Lines & fields by J. D. Ryder	

**Evaluation methodology: 25 +25 practical College/ University Assessment**

Question No.	Type of Questions	Marks
1	Practical performance	15
2	Objective/Viva	10