## CHHOTUBHAI GOPALBHAI PATEL INSTITUTE OF TECHNOLOGY

# **Department of Electrical Engineering**

### A REPORT

### ON

# Two Days Workshop on "Domestic and Industrial Wiring"

Title of the Workshop	Domestic and Industrial Wiring	
Organizing Department	Department of Electrical Engineering	
Chief Patron	Dr. D. R. Shah, Provost, UTU.	
Patron	Dr. N. C. Shah, Director, CGPIT.	
Convener	Prof. Rakesh S. Gajre (Head of EC/Electrical Dept.)	
Program Coordinator	Ms. Yashvi Parmar Ms. Nitiksha Pancholi Ms. Zalak Vyas	
Organising Committee	Ms. Priyanka Patel Ms. Unnati Mali	
Target Audience	$1^{\text{st}}$ year Diploma , $2^{\text{nd}}$ year B.Tech, $1^{\text{st}}$ year M.Tech students and research scholars.	
Total Number of Participants	65	
Date of Programme	2 <sup>nd</sup> – 3 <sup>rd</sup> November, 2017	
Invited Speakers	Mr. Jay Patel, Assistant Professor, Electrical Engineering Department, CGPIT. Mr. Hiren Sidhpuria, Assistant Professor, Electrical Engineering Department, CGPIT. Mr. Mihir Raval, Proprietor, NiTech Automation, Surat	

### **Schedule of Workshop**

Thursday	Friday	
(2/11/2017)	(3/11/2017)	
Registration & Breakfast	Breakfast	
(8.30 AM – 09:30 AM)	(8.30 AM – 09:30 AM)	
Introduction to Switch gear terminology	Industrial wiring	
(9:30 A.M11:30 A.M.; C-207)	(Mr. Mihir Raval )	
(Mr. Jay Patel)	(9:30 A.M 11:00 A.M; K-105)	
Lunch break	Lunch break	
(11:30 A.M12:30 P.M.)	(11:00 A.M12:00 P.M.)	
Introduction to Electrical Wiring	Industrial wiring	
(12:30 P.M 02:00 P.M.; C-207)	( Mr. Mihir Raval )	
(Mr.Hiren Sidhpuria )	(12:00 P.M – 1:30 P.M.; K-105)	
Tea break	Tea break	
(02:00 PM – 2:15 PM)	(1:30 P.M. – 1:45 P.M.)	
Practical session	Practical session	
(2:15 P.M3:30 P.M.)	(1:45 P.M2:45 P.M.)	
	Valedictory and Certificate Distribution (2:45 PM - 3:30 PM)	

## **Details of the Workshop:**

### **Preamble:**

Department of Electrical Engineering, CGPIT has organized Two Days Workshop on "Domestic and Industrial Wiring"  $2^{nd}-3^{rd}$  November, 2017 sponsored by Uka Tarsadia University. Total 65 participants participated in this workshop, which includes Diploma, B.tech and M.tech students from CGPIT. Out of which 7 students from Diploma  $1^{st}$  year, 24 students from B.Tech  $2^{nd}$  year, 14 students from M.tech  $1^{st}$  year and 19 faculties participated.

As per tradition of CGPIT, all the dignitaries were given a warm welcome and were felicitated to express respect and gratitude towards them for devoting their valuable time and gracing the workshop. The dignitaries that graced the inauguration ceremony of workshop were Dr. N. C. Shah (Director, CGPIT), Dr. Chinmay Desai (Head of Mech/Auto Department, CGPIT), Ms. Purvi Tandel (H.O.D., CO/IT Department), Mr. Kamlesh Gandhi

(H.O.D., Civil Department). Along with the dignitaries and experts were felicitated by the coordinators of the workshop. The training programme was initiated by a small welcome address to the participants.

Ms. Zalak Vyas gave a brief introduction about the workshop. She introduced the experts and expressed her views about the importance of Wiring.

The Honourable Director of CGPIT, Dr. N.C. Shah gave the welcome speech. He motivated the students and faculties for participating in technical events like short term training program, workshop, expert talk, etc. As this workshop consisted of practical session, he emphasised the importance of teaching methodology i.e. "learning while doing". He also congratulated and appreciated the efforts made by the Electrical department for organizing such workshop.

### **Session Detail:**

All the sessions were very interactive and laid a very good impact on the audience.

**Session-1:** Introduction to Switchgear terminology

Session-2: Introduction to Electrical wiring

**Session-3:** Practical Session

Session-4 & 5: Industrial Wiring- Starters of Induction motor

#### • Introduction to Switchgear Terminology

In this session, Mr. Jay Patel discussed about term "Switchgear". He emphasised on the importance of switchgear for electrical engineering. Thus, he said that switchgear is a combination of electrical switches, fuses and circuit breaker used to control, protect and isolate electrical equipment. He explained the classification of low voltage and high voltage circuit breakers and explained in detail the tripping characteristics and operation of different low voltage circuit breakers that are used in residential and commercial areas. He also explained the criteria's to be taken into consideration regarding the selection of different switchgear devices.

#### • Introduction to Electrical Wiring

In this session, Mr. Hiren Sidhpuria discussed about the basics of Electrical Wiring and about different types of switches like, SPST, SPDT, DPST, DPST and their operation. He also taught students different types of wiring schemes which were used like cleat wiring, Batten wiring, Lead sheath wiring, casing and capping wiring, conduit wiring and

the advantages and disadvantages of all the wiring schemes. He also explained the different types of cables and for which voltage level they are used. The different types of conductors that can be used in electrical field were also discussed. He explained two types of wiring schemes i.e., Go-down wiring and staircase wiring and the rules to be considered for the installation in residential wiring schemes.

#### • Practical Session

In this session, Mr. Jay Patel explained the basic wiring schemes that are implemented in the protection laboratory and the contactors connections. Also Mr. Hiren Sidhpuria demonstrated the different wiring schemes. Thus students were made aware of how to implement different hardware circuits that can be useful to them in project and further semester subjects.

#### • Industrial Wiring-

In this session, Mr. Mihir Raval, an expert who is a Proprietor of NiTech Automation, Surat and thus practical exposure was made. He explained the students different industrial wiring schemes and gave introduction regarding the different panels that are used in Industries. He also explained the different fuses and switches that are used in the industrial panel. He explained the operation of different types of starters like DOL and star-delta starter, its implementation with the 3-phase Induction motor. He explained the students the wiring of starters and contactors on the panel.

# **Glimpse of the Workshop:**





**Registration and High Tea** 



**Welcoming Dignitaries** 



**Electrical Department with Dignitaries** 



Session on Switchgear and Terminology by Expert Mr. Jay Patel



Session on Domestic wiring by Mr. Hiren Sidhpuria



Session on Industrial Wiring by Expert Mr. Mihir Raval



**Lab Session** 



Thanking to experts and Certificate Distribution to participants



**Group Photo** 

# **Committee members of the Workshop:**

Sr.	Committee	Memebers	Tasks to be performed
no			
1	Certificate & Receipt	Prof. Ankur Rana	Certificate Writing & Receipt
İ	Writing	Prof. Darshan Vora	writing
		Prof. Lokesh Shah	
		Prof. Arpita Patel	
2	Registration, Kit	Prof. Arjun Jariwala	Handling participation entries,
		Prof. Ankit Basera	Collection of registration fees,
			Handling cancellation of any
			participation,
			Preparation of registration kit
3	Report writing	Prof. Yashvi Parmar	Summarizing each session,
		Prof. Chand Thakor	Complete report writing with
			photos and feedback,
4	Photography	Prof.Priyanka Patel	Clicking good photographs,
		Prof.Nitiksha	Storing good photographs for
		Pancholi	report making.
5	Food	Prof. Ranjit Rajak	Arrangements for food including
		Prof. Nidhi Shah	breakfast and tea.
6	Feedback & Distribute the	Prof. Unnati Mali	Take feedback, Analyse the
	final material	Prof. Jignesha Ahir	feedback, Generate graph, Send
			the final ppt or any material
7	Hosting	Prof. Zalak Vyas	Inauguration, Falicitation and
		Prof. Karmani	Valedictory Speech
		Rajput	

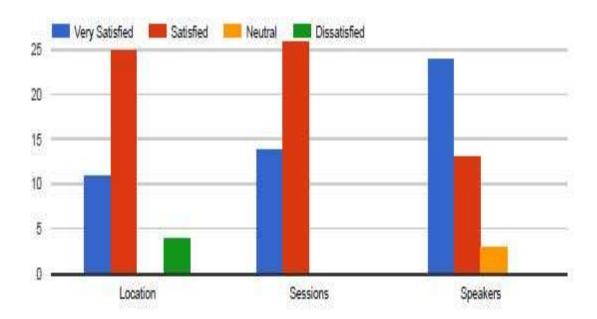
## **Feedback Analysis:**

Online feedback was collected from the participants in last session of the Workshop. The overall feedback of the Workshop was very positive. Here are some of the feedbacks, which were given by participants.

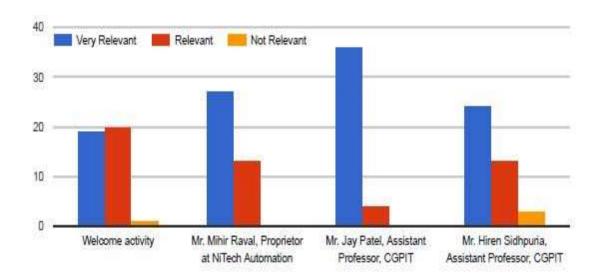
1) Do you think it will helpful in your career?



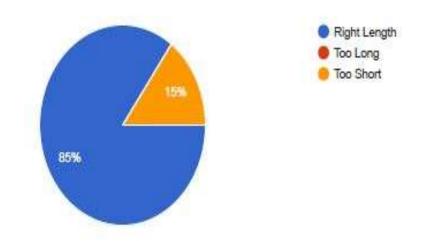
2) Please rate your overall level of satisfaction with the following aspects of Workshop.



## 3) Which sessions did you find most relevant?



# 5) For the given topic, This Workshop was



5) Please rate your overall level of satisfaction with this Workshop.

