



# Merchant Engineering College



# Electrical Engineering Department



## Vision

To transform students into good human beings, responsible citizens and employable engineering graduates through imbibing human values and excellence in technical education.

## Mission

The mission of the institution is to help prepare outstanding educators, scholars, researchers, and to advance the profession of engineering through research on the science and art of teaching and learning. We will provide individual attention, quality education and take care of character building.

# From the Desk of the Chairman



Dear Readers,

Shri merchant Charitable Trust is established with a purpose of enriching the wireless generation of students with knowledge and skills. we started our journey towards imparting higher education to the present-day aspirant of quality education in area of Engineering and Technology. Our Institution of Higher Learning have the major goal of enabling the learners to Grab their present learning and embrace the uncertain future with confidence, commitment and dynamic energy overflowing with impressive ideas

To fulfil our commitment to students and motivate our faculty in forging ahead in their careers we have initiated a process of collaboration with universities and corporate leaders of India and abroad. We are constantly working on our academic strength and reaching out to the world to speak partner who share our enthusiasm and passion for towards a higher education.

- Mr. Rajeshkumar D. Patel, Chairman

# From the Desk of the Principal



Dear Readers,

It gives me immense pleasure in welcoming you all to our institution namely, MERCHANT ENGINEERING COLLEGE BASNA whose objective is to march around the central pivot of young student's desire to become an Engineer and responsible for the growth of country's wealth.

It is an institute where discipline and punctuality with conducive environment will provide quality education development in frontier areas of engineering and technology. We, the faculty, staff and administration at MEC BASNA will work for producing technologically superior and ethically strong engineers for the country and the world with a purpose to serve the society & mankind. With strong team work we would achieve technological excellence in a highly competitive environment around us.

There has been significant improvement in the activities carried out by the department during the period. It is progressing to achieve accreditation with the efforts of one and all in the department. I am sure the target will be achieved. It is our responsibility to commit ourselves for the country by delivering our duties with higher levels of enthusiasm and vigour.

- Dr. G.R Kulkarni, Principal

## **From the Desk of the Head of Department**



Dear Readers,

It gives me pleasure to present you the first edition of Department magazine. This is a platform for students and faculty members to represent their technological and academic activities. This volume also augments the work done at department. I would like to congratulate our faculties and students for continuing teaching learning activities through online/offline mode.

I acknowledge the efforts put by the team.

Keep It Up...

**-Prof. Vaishali Y. Patel, Head of Department**

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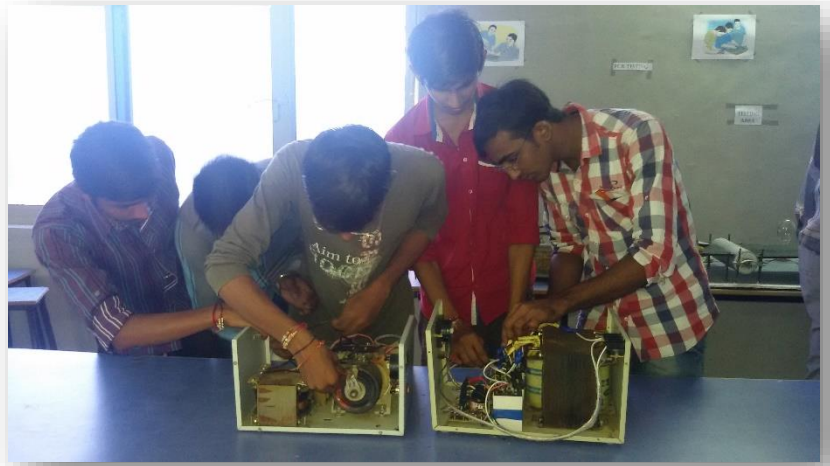
# 1.1 MEC Placement (Job Fair)

- **CAMPUS PLACEMENT DRIVE -1<sup>ST</sup> TO 6<sup>TH</sup> JUNE 2015**

Campus placement or campus interview is the program conducted within educational institutes or in a common place to provide jobs to students pursuing or in the stage of completing the programme. In this programme, industries visit the colleges to select students depending on their ability to work, capability, focus and aim. This programme was organized on **1<sup>st</sup> to 6<sup>th</sup> June 2015**.

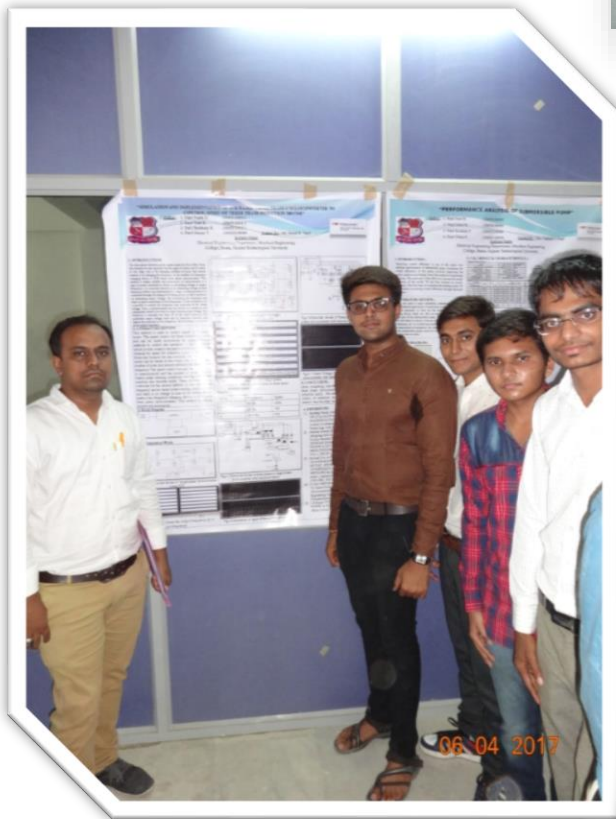


## 1.2 Live projects by students





# 1.3 Project presentation by students



## 2.1 THE SEMINAR ON RECRUITMENT PROCESS AWARENESS



## 2.2 THE SEMINAR ON BLOOMS TAXONOMY





## 2.3 THE SEMINAR ON NATIONAL EDUCATION POLICY





# 3.1 DETAILS OF HV/EHV LINES IN GUJARAT

Sr. No.	Name of the line/Equipment
01	400 kV Choraniya - Hadala
02	400 kV Hadala - Jetpur
03	400/220 kV 315 MVA ICT - 1 Hadala
04	400/220 kV 315 MVA ICT - 2 Hadala
05	220 kV Morbi - Hadala line No. 1
06	400 kV Vadavi Dehgam line No. - 1
07	400 kV Vadavi Dehgam line No. - 2
08	400/220 kV 315 MVA ICT - 1 Vadavi
09	400/220 kV 315 MVA ICT - 2 Vadavi
10	220 kV Hadala - Nyara 1
11	220 kV Hadala - Nyara 2
12	220 kV Mota-Chikhali line no.1
13	220 kV Mota-Chikhali line no.2
14	220 kV Nanikhakhar- Adani line no.2
15	400 kV Asoj -Amreli line In at chorania
16	400 kV Asoj -Amreli line LO at chorania
17	220 kV Panandhro - Anjar line - 2 LILO at 220 kV Kukma. (Kukma - Anjar)
18	220 kV Panandhro - Anjar line - 2 LILO at 220 kV Kukma. (Kukma - KLTPS)
19	220 kV Shivilakha - Morbi line no.2
20	220 kV N' Khakhar - APL Line No. 1
21	220 kV Bala - Choraniya Line No. 1 & 2
22	220 kV Sanodar - Motipaneli Line No. 1
23	220 kV Sanodar - Motipaneli Line No. 2
24	220 kV N' Khakhar - Sindhodi Line NO. 1
25	220 kV N' Khakhar - Sindhodi Line NO. 2
26	220 kV N' Khakhar - Suthari -1
27	220 kV N' Khakhar - Suthari -2
28	400 kV Adani -Sami -Dehgam-1
29	400 kV Adani -Sami -Dehgam-2
30	220 kV Shivilakha - Vandhiya Line No. 1
31	220 kV Shivilakha - Vandhiya Line No. 2

Sr. No.	Name of the line/Equipment
32	220 kV Bala - Adalsar Line
33	220 kV Bala - Dhanaki Line
34	220 kV Bala - Rajpar Line
35	220 kV Bala - Dudhrej Line
36	220 kV Rajpar - Dudhrej Line
37	220 kV N' Khakhar - CGPL Line
38	220 kV Panandhro - Anjar line - 1 LILO at 220 kV Kukma. (Kukma - Anjar)
39	220 kV Panandhro - Anjar line - 1 LILO at 220 kV Kukma. (Kukma - KLTPS)
40	220 kV Deoder - Anjar line LILO at 220 kV Shivilakha
41	220 kV SLPP - Gavasad Line No. 3
42	220 kV SLPP - Gavasad Line No. 4
43	220 kV APL - Tapar line No.1
44	220 kV APL - Tapar line No.2
45	132 kV Dahod - Godhra Line No.2
46	220 kV Salejada -Bhat Line 1
47	220 kV Salejada -Bhat Line 2
48	220 kV Viramgam -Bhat Line 1
49	220 kV Morbi - Tappar
50	220 kV Tappar - Hadala
51	220 kV Viramgam -Bhat Line 2
52	220 kV Viramgam -Bhat Line 1 & 2
53	220 kV Kasor - Vartej LI at Botad
54	220 kV Kasor - Vartej LO at Botad
55	220 kV Kansari Tharad line-1 LI at Agathala
56	220 kV Kansari Tharad line-1 LO at Agathala
57	220 kV Tapar - Varsana Line-3
58	220 kV Tapar - Varsana Line-4
59	400/220 kV 315 MVA ICT - 1 Varshana
60	400 kV Hadala - Varsana line
61	220 kV GSEG -KIM line-2 LI at Mora(L&T)

**-Prof. Vaishali Y. Patel, Head of Department**

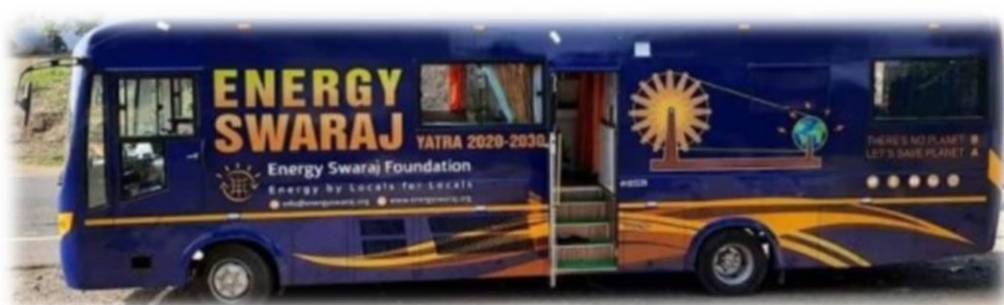
## 3.2 THE URJA SWARAJ MOVEMENT

**E**nergy is Everything and Everything is Energy. Gandhiji's statement that "Earth has enough for everybody's need but not for anybody's greed" is as fundamental as the fact Sun rising from the East. However, in contradiction, the world economies are increasingly trying to produce more and consume more. wherein increasing energy consumption is required to maintain economic growth, while rampant use of fossil energy is causing climate change. The climate change is threatening not only sustainable life but the sustainability of life on the planet. We have only 8-10 years left, before we reach global warming of 1.50C (IPCC report). Therefore "drastic" and "immediate" actions are required to mitigate climate change.

The solution lies in adopting Energy Swaraj or generating and consuming energy locally.

Adopting to Energy Swaraj will also help in skill development, livelihood creation, energy independence, local economy strengthening, and of course, climate change mitigation.

In order to create a public movement and establish Energy Swaraj across, a 11years long Energy Swaraj Yatra (2020-30) through a solar bus is undertaken by Prof. Chetan S. Solanki, IIT Bombay. Prof. Chetan S. Solanki is brand ambassador of Solar Energy for Govt. of MP, and Founder, Energy Swaraj Foundation, has pledged not to go home until 2030 and live & travel in the solar bus. It is his mobile home. The bus has facilities to go through all daily activities. The bus is fitted with 3.2 kW solar panels and 6 kWh of battery storage. It has 3 kVa inverter. Lights, cooler, cookstove, TV, AC, laptop charging inside bus are all solar powered. The engine of the bus runs on diesel.



**Empowering Locals**



**Solar Chai Thela Initiative**



**Solar Diya Initiative**



## “Let’s save planet A, because there is no planet B”:

Energy Swaraj Foundation (ESF), a not-for-profit organization is promoting Energy by Locals for Locals, an ideal that draws inspiration from Gandhian Philosophy. We can be a **MEMBER** of this movement by four different ways.

- **Become a Student Member of Energy Swaraj Movement:**



BECOME A STUDENT MEMBER

As a student, it is imperative that you take concrete steps to save the planet wherein you live. The student member would take a pledge to reduce their own electricity consumption by a certain percentage.

Benefits:

- Members name on the website
  - Access to Free solar system calculator
  - Access to Free courses
  - Opportunity to be volunteer of Energy Swaraj Yatra
- Exclusive webinar with Prof. Chetan Singh Solanki
  - Support in reducing monthly electricity bill



BECOME AN INDIVIDUAL MEMBER

BECOME AN INDIVIDUAL MEMBER

- **Become an Individual Member of Energy Swaraj Movement:**

As an individual, it is unto you to create a public movement and take measurable actions against climate change. By joining hands with the Energy Swaraj Movement, a mass public movement for a period of 10 years, you will contribute to making the planet Earth a sustainable one.

- **Become an Institute Member of Energy Swaraj Movement:**



BECOME AN INSTITUTE MEMBER

The institute should make the young generations aware of the severity of climate change and show the path to mitigate it. the institute would take a pledge to reduce their own electricity consumption by a certain percentage and contribute yearly membership fee to support the movement - the membership fees is Rs. 10,000/year to become Institute Associate or Rs. 25,000/year to become Institute Champion.



BECOME A CORPORATE MEMBER

- **Become an Become a Corporate Member of Energy Swaraj Movement:** corporate can set an unprecedented example of giving back to society and taking measurable actions against climate change. By joining hands with the Energy Swaraj Movement, a mass public movement for a period of 10 years, corporate will contribute to making the planet a sustainable one. Benefits:
  - Free guide for powering premises on 100% solar
  - Support in designing solar systems
  - Corporate's name on Foundation's website

**-Assist. Prof. Naman J. Bhatt**



# 4.1 75 CORER SURYA NAMASKAR

**MERCHANT ENGINEERING COLLEGE, BASNA**  
Project Duration: 1<sup>st</sup> January to 20<sup>th</sup> February 2022

**75 Azadi Ka Amrit Mahotsav**

**A Tribute on 75th Anniversary of Independence**  
**75 Crore Suryanamaskar**

**Supported by**  
MINISTRY OF AYUSH  
heartfulness  
FIT INDIA

**Prof. (Dr.) G. R. Kulkarni**  
Campus Director & Principal  
MEC, Basna

**Event In charge**  
Asst. Prof. Dixit M. Patel  
MEC, Basna





## 4.2 YOGA SHIBIR



# 4.3 THE CALIBRATION OF REPUBLIC DAY





# 5 FACULTY PROFILE



Dr (Mrs). Tejas Zaveri  
 Designation :Head of Department  
 Specialization: Electrical  
 Qualification : Ph. D(Electrical), M.E (Electrical Engineering), B.E (Electrical Engineering),  
 Experience: 00.00 Years(Industry),  
 20.00 Years(Teaching)



Mrs. Vaishali Y. Patel  
 Designation :Asst. Professor  
 Specialization: Electrical Power System  
 Qualification : M.E (Electrical Power System)  
 B.E (Electrical Engineering),  
 Experience: 00.00 Years(Industry),  
 13.00 Years(Teaching)



Mr. Jatin A. Patel  
 Designation: Assistant Professor  
 Specialization: Power System  
 Qualification : B.E (Electrical Engineering), M.E (Power System)  
 Experience: 0 Years(Industry), 08.00 Years(Teaching)



Mr. Hardik. H. Raval  
 Designation :Asst. Professor  
 Specialization: Power System  
 Qualification: B.E (Electrical Engineering), M.E (Power System)  
 Experience: 03.00 Years(Industry), 08.05 Years(Teaching)



Mr. Rutul R. Mehta  
 Designation: Adhoc Asst. Professor  
 Specialization: Instrumentation and Control System  
 Qualification: M.E (Instrumentation and Control System), B.E (Electrical Engineering)  
 Experience: 00.00 Years(Industry), 07.00 Years(Teaching)





Mr. Kaushik K. Patel  
Designation: Asst. Professor  
Specialization: Power System  
Qualification: M.E (Power System), B.E (Electrical Engineering)  
Experience: 00.00 Years(Industry), 06.00 Years(Teaching)



Mr. Sumit R. Patel  
Designation: Asst. Professor  
Specialization: Power System  
Qualification: B.E (Electrical Engineering), M.E (Power System)  
Experience: 0 Years(Industry), 06.10 Years(Teaching)



Mr. Ankur D. Chaudhary  
Designation: Asst. Professor  
Specialization: Power System  
Qualification: B.E (Electrical Engineering), M.E (Automation & Control Power System)  
Experience: 00.00 Years (Industry), 04.00 Years(Teaching)



Mr. Nirav P. Patani  
Designation: Adhoc Asst. Professor  
Specialization: Power System  
Qualification: M.E (Power System), B.E (Electrical Engineering)  
Experience: 00.00 Years (Industry), 05.00 Years (Teaching)



Mr. Pramit R. Patel  
Designation: Adhoc Asst. Professor  
Specialization: Power System  
Qualification: M.E (Automation and Control Power System), B.E (Electrical Engineering)  
Experience: 00.00 Years (Industry), 07.00 Years (Teaching)



Mr. Naman J. Bhatt  
Designation: Adhoc Asst. Professor  
Specialization: Electrical Engineering  
Qualification: M.E (Electrical Engineering), B.E (Electrical Engineering)  
Experience: 00.00 Years(Industry), 02Years(Teaching)



Mr. Chintan k Joshi  
Designation: Adhoc Asst. Professor  
Specialization: Electrical Engineering  
Qualification: M.E (Electrical Engineering), B.E (Electrical Engineering)  
Experience: 00.00 Years(Industry), 00.02 Years(Teaching)



Mr. Vipul J. Patel  
Designation: Assistant Professor  
Specialization: Electrical Power System  
Qualification: B.E (Electrical Engineering)  
Experience: 00.00 Years (Industry), 09.10 Years (Teaching)



Jaykishan sharma:  
Designation : Adhoc Asst. Professor  
Specialization: Power System  
Qualification :B.E (Electrical Engineering), M.E (Power System)  
Experience:00.00 Years(Industry), 02.00 Years(Teaching)



Jaykishan sharma:  
Designation : Adhoc Asst. Professor  
Specialization: Power System  
Qualification :B.E (Electrical Engineering), M.E (Power System)  
Experience:00.00 Years(Industry), 05.00 Years(Teaching)



Mr. Chetan R. Patel  
Designation: Lecturer  
Specialization: Power system  
Qualification: B.E. Electrical Engineering  
Experience: 00.00 Years(Industry), 07.00 Years(Teaching)



Mr. Mitesh M. Raut  
Designation: Visiting Lecturer  
Specialization: Power system  
Qualification: B.E (Electrical Engineering)  
Experience: 00.00 Years (Industry), 01.00 Years (Teaching)