

A constituent college of

Bikaner Technical University (BTU), Bikaner

(State government Technical University vide act No.29/2017)

(Formerly College of Engineering & Technology, Bikaner)

University College of Engineering and Technology (UCET) Bikaner is constituent college of Bikaner Technical University (BTU). Before becoming constituent college of BTU it was known as Govt. College of Engineering and Technology (GCET). It was established in 2007 as an autonomous body of Govt. of Rajasthan, amidst the brown blooms of desert island, Bikaner. Bikaner Technical University was established in 2017 and soon after that UCET became constituent college of Bikaner Technical University (BTU).

## DEPARTMENT OF ELECTRICAL ENGINEERING





# **About Department**

The Department of Electrical Engineering came into existence in the year 2010 offering B.Tech. degree in Electrical Engineering with a intake of 60 students. The department will be flourished in all respects and is being now full fledging with competent, experienced and dedicated faculty and well-equipped laboratories with facilities to cater to the all-round development of the students in process

http://cet-gov.ac.in/web/department/electrical?ref=header#undefined5

Reach Us: Department of Electrical Engineering, University College of Engineering & Technology, Bikaner Karni Industrial Area, Pugal Road, Bikaner – 334004

For more information for admission

**REAP CODE: 054** 

Email: proctor@cet-gov.ac.in Contact: 0151-2250955

Fill google form for registration cum admission enquiry

https://forms.gle/L2QWcXxmuMYyZ9BB9

Contact or WhatsApp for more details:

9828506214, 9414512492, 7665554333, 8058750369, 9950451577 (MBA)



# **VISION**

To empower students by imparting quality technical education and encouraging innovative ideas, meeting the needs of global expectations in the field of Electrical Engineering.

## **MISSION**

- To facilitate students with quality technical tools and enable them to deal with industrial challenges.
- To motivate innovative ideas and provide knowledge, especially in the area of green energy to address socio-economic challenges

# **Program Educational Outcomes**

- Understand the needs of the society and perform the act of delivery based on engineering principles, tools ethically.
- Be an active engineer in fields such as research and consultancy to be compatible with global demands.
- To be involved in lifelong learning which improve professional skills thereby help possessing appropriate professional attitude.
- Help students inculcate methods to deal with societal engineering issues keeping in mind the scope of renewable energy source and their economic bounds.

## **Short Range Goals**

- To train students as competent Electrical Engineers to meet the requirements of industries.
- To strive for further improvement in academic performance of students.
- To improve placement of students.
- To closely monitor the progress of students. To inculcate human values and leadership qualities in the students.
- To enhance interaction with industries.
- To strengthen the alumni linkage for mutual benefit
- To organize bridge courses on areas relevant to industries.
- To update the knowledge of the faculty in emerging areas.
- To motivate the faculty to undertake research work.
- To depute the faculty and students for implant training to industries during vacation.
- To train the supporting technical staff.

# **Long Term Goals**

- Achieve excellence in undergraduate education.
- To promote research activities in the areas of non-conventional energy generation and power systems.
- To have atleast 50% of faculty with doctoral degree in diverse areas.
- The students of the Department of Electrical and Electronics Engineering are trained to become quality engineers, with adequate stress being laid on their personality development, paper presentation in seminars, group discussions etc., are some of the activities carried out by students. They also undertake projects in various organizations such as BEL, BHEL, CPRI, HAL, ABB, PRDC, Prok Devices etc.
- The department undertakes testing of all varieties of electrical equipments like induction machines, transformers etc.

### B. Tech programmes (duration 4 Years/ 8 Semester)

• Bachelor of Technology [B.Tech.] is a four-year undergraduate program. The Department of Electrical Engineering at UCET Bikaner is renowned for imparting state of the art undergraduate education. Department of Electrical Engineering offers **B. Tech** (Electrical Engineering)

### M. Tech programmes (duration 2 Years/ 4 Semester)

Master of Technology is a Post-Graduate Program of two year for specialising in certain areas of Electrical Engineering. Department of Electrical Engineering offers M.Tech program in the **M.Tech-Power Systems**.

## **HOD's Messages**



Mr. Vikas Bhalla
Assistant professor (M. Tech , B.E.)

University college of engineering and technology (UCET) Bikaner is a centre of erudition where we nurture young talents in Eelectrical Engineering. Our major emphasis of imparting technical training to encourage curiosity and innovativeness among our students and lay a foundation from where they can acquire quick learning ability and adaptively with the fast-changing needs of the industry. Our campus is an exciting place to study and grow where thinkers become leaders and where there is thirst for knowledge.

On behalf of our students and faculty, it is my privilege to welcome all of you to the Department of Electrical Engineering at University College of engineering and Technology. We take pride in our faculty, a team of highly capable and dedicated professionals, most of whom have academic and industrial experience and degrees from leading universities of the India. We provide ample opportunities to our faculty and students, through in -house trainings, workshops and trainings outside the college campus for further growth and development in their areas of expertise.

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# **Faculties**



Dr. Sanjay Kumar Bansal
Associate Professor
Ph.D, M.Tech(Hons.),B.tech.



<u>Archana</u>

- Assistant Professor (On Contract)
- Ph.d. MNIT (Pursuing)
- M.Tech., BIT Sindri



Mr. Sunil Kumar Baweja

Assistant Professor
M.tech (IIT Roorkee)



Mr. JanardanKundu

- Assistant Professor (On Contract)
- Ph.d. IIEST(Pursuing)
- M.Tech., NIT Allahabad



Mr. Jithin Sukumaran

- Assistant Professor (On Contract)
- M.Tech. IIT Roorkee
- (Electric Drives & Power Electronics)



### Manikant Kumar

- Assistant Professor (On Contract)
- PhD: MNIT Jaipur (Pursuing)
- Former research Scholar: IIT Delhi
- M.Tech :- NIT Rourkela

## Lab Details

Department of electrical\_engineering, UCET Bikaner has highly advanced laboratory equipment's with highly experienced lab technician. We have

- Power Electronics Lab
- ➤ Advance Power electronics Lab
- ➤ Power system Lab
- Electrical Machine Lab
- > Smart Micro grid Lab
- ➤ Electrical Circuit Design Lab
- Computer lab
- ➤ And may more...

#### **Smart Grid lab:**

Smart Grid Lab is prototype of model evolution of Power system. The smart grids represent an unprecedented opportunity to move the energy industry in to new era of reliability, availability and efficiency that will contribute to our economics and environmental health. The benefit associate with smart grid include

- ❖ More efficiency transmission of electricity
- ❖ Quicker restoration of electricity after power disturbances
- \* Reduced operations and management costs for utilities and ultimately lower power costs for consumers.
- Improved security.
- \* Reduced peak demand, which will also help lower electricity rates.

#### **Power Electronics Lab:**

Power electronics is the application of solid –state electronics to the control and conversion of electrical power. Now a day's Power electronics engineer are at high demand due to renewable energy applications and its future demands. Our Lab consist of high quality power converters (AC-AC, AC-DC, DC-AC, DC-DC and different types of electrical machine control equipments.

#### Power system lab:

Power system Laboratory of Electrical Engineering department comprises of protection, simulation and power system planning related experiments. Facilities are available for overcurrent, under voltage, directional and differential including different numerical relays. Facility of Simulation of DC distribution by network analyser is available in the laboratory. Study based facilities are available for power system planning lab.

### **Electrical Machine Lab**

Electrical Machines Laboratory of Electrical Engineering department comprises of load testing, regulation and estimation of parameters related experiments. DC shunt motors are available which provide the best speed regulation among DC motors. Transformers in Single and Three phase configurations are available. AC machines comprising of Synchronous and Induction motors are also available.

#### **Control System Lab**

Control System Lab in EE dept. is a well-equipped lab where many lab e.g. control lab, modelling and simulation lab, system programming lab, power system modelling and simulation lab runs on this lab. This lab has many computers with updated software's e.g. MATLAB, PSpice, Sequel.















### **Salient Features**

- Full Fledged placement cell assisting personality development training and communication development classes.
- Regular industry interaction.
- > Career opportunity seminars
- Regular counselling / mentoring for students.
- Employability Skills enhancement training.
- Free GATE classes
- ➤ Internship opportunities at IITs/NITs
- Access to SWAYAM- Prabha room to utilize SWAYAM MOOCs.

### **GATE (2019) qualified Students:**

- 1. Babul Choudhary
- 2. Brijesh Kumar
- 3. Chetan Panwar
- 4. Nisha Choudhary
- 5. Rohit Sirwani

### **GATE (2020) qualified Students:**

1. Saurabh Ranjan

## Notable alumni working in india

Name of Alumni	Name of the organisation
Mithilesh Agarwal	Ajmer Vidyut Vitran Nigam
Bhupendra Singh	BSNL
Anoop Yadav	SBI
Hemant Patel	Jodhpur Discom
Laxman singh	RVNL
Khyali Ram Gurjar	ONGC
Mayank Gupta	Vimpson electrical private ltd
Ashish Rewari	Jen in JVVNL

Our alumni are proud to serve the nation by serving national/International company.



## **Departmental Events**



Fig.1. Students during a workshop organised in department



Fig.2. Students during a workshop organised in department



Fig. Workshop for overall development of students.