



**COER**  
**UNIVERSITY**

FORMERLY KNOWN AS UETR

# **BUILDING THE FUTURE OF SMART INDIA @ COLLEGE OF ENGINEERING**

## **OFFERED PROGRAMS**

- Diploma in CE/ ME/EN
- B.Tech. in CE /ME/EN
- M.Tech (CE/ME/EN)
- Ph.D

Registrations Open: 2023-24

[www.coeruniversity.ac.in](http://www.coeruniversity.ac.in)

## About Us

College of Engineering at COER University (carries 24 years of legacy of COER) is where innovation and excellence converge to shape the future. As a premier institution for engineering education, we pride ourselves on fostering a dynamic learning environment that nurtures aspiring engineers to become industry leaders and change-makers. With state-of-the-art facilities, expert faculty, and a curriculum designed to blend theory with hands-on experience, we empower our students to think critically, solve complex problems, and create transformative solutions. Whether it's Mechanical Engineering, Electrical & Electronics Engineering, or Civil Engineering, our programs are built on a strong foundation of technical expertise, interdisciplinary collaboration, and a commitment to ethical and sustainable practices.





At the College of Engineering, we believe in equipping our students with the skills and knowledge necessary to thrive in a rapidly evolving technological landscape. Our industry-aligned curriculum ensures that graduates are well-prepared to tackle real-world challenges and contribute meaningfully to society. Through internships, research opportunities, and industry partnerships, students gain invaluable practical experience that complements their academic training. Our dedicated faculty members are passionate about mentorship and provide personalized guidance to help students reach their full potential. With a vibrant campus life, student organizations, and networking events, we foster a strong sense of community and collaboration. Join us at the College of Engineering and unlock endless possibilities for innovation and success.



# Collaborations



## International Collaborations

Academic Exchange and Research Collaboration

 <p>University of Kentucky, USA</p>	 <p>Debre Tabor University, Ethiopia</p>	 <p>Kuban State Agrarian University, Russia</p>
 <p>Southern Utah University, USA</p>	 <p>École de technologie supérieure, Canada</p>	 <p>Wayne State University USA</p>



## Industry Collaborations

 <p>Mahindra and Mahindra Ltd</p>	 <p>Pyrax Polymers</p>	 <p>Himalayan Environmental Studies and Conservation Organization, India</p>	 <p>INTEL-COER Institutions</p>	 <p>NIIT-COER Institutions</p>
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## Industry Association National Collaborations

 <p>SIDCUL MFG. ASSOCIATION UTTARAKHAND</p>	 <p>IIT Roorkee</p>	 <p>NITTR Chandigarh</p>	 <p>AIESEC in Delhi University</p>	 <p>Central Building Research Institute (CSIR-CBRI) Roorkee</p>
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# USPs

## 1. Awards

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The University is ranked No. 1 University in the State of Uttarakhand, No. 1 in the North Zone (UP, Uttarakhand, Haryana, Rajasthan and Punjab) and No. 10 in India among top 50 emerging Universities by Education Post, Vol. IX, Issue 11, Feb.-March 2022 under "IIRF 2022 University Ranking India"



## 2. NEP 2020 Powered Curriculum

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Our Curriculum framework comprises the best features from the National Education Policy-2020 that blends academic, sports, art and continuous skills through internship.



## 3. Project Based Learning

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Project Based Learning (PBL) is an instructional method where students work on real-world projects and problems to learn new skills and knowledge.



## 4. Faculty

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Qualified and experienced faculty members with PhD from Institutes of National repute, who have completed 100+ FDPs and training program in last one year in emerging area. Resource person in many workshops on Entrepreneurship and research methodology.



## 5. Collaborations

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Academic Opportunities with 7 International Universities, 4 National Universities and Research Institutes of repute, Industrial alliances with 49 Industries and 3 Industrial Associations for the overall development of students.



## 6. Esteemed Distinguished Mentors

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Distinguished Mentors from IITs, Foreign universities like Ecole de Technologie Supérieure (ETS) in Montreal, Quebec, Canada, are associated to provide guidance, support, and mentorship to others in their respective fields. The university also have a collaborative agreement with the Kuban State Agrarian University, Debre Tabore University, Ethiopia, International American University.

## 7. Campus Placement & Career Opportunities

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The students of the departments are employed in esteemed organizations like Amazon, Intellipat, Argusoft, Accenture, Google, Cognizant, Infosys, Wipro, Capgemini and many more with competitive salaries ranging upto 44 LPA.

## 8. Entrepreneurship and Innovation

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COER University's Incubation Cell fosters an entrepreneurial mindset and provides students with the tools they need to succeed. We believe that the Incubation program can have a transformative impact on our students and the wider community. We aim to contribute to a more sustainable, equitable and prosperous future.



## 9. Advanced Computing Laboratories

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At College of Engineering, we have facilities of research and innovation which gives students and faculty the opportunity to work on real life problems.

## 10. Research & Innovation Lab:

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Innovation Labs are a co-working space – both virtual and physical – in which new ideas can be explored, in which hands-on project management takes place, and in which lessons learned are documented and shared with the co-owning Division. Innovation Labs are also a space from which the scaling of good practices can emerge.



# Courses & Eligibility Criteria

## ENGINEERING DIPLOMA

3 YEARS (6 SEMESTERS)

### Civil/Mechanical/Electrical Engineering

Candidate who has passed 10th examination with or equivalent Grade Point Average (GPA) from a recognized board can apply for admission.

## BACHELOR PROGRAMS

4 YEARS (8 SEMESTERS)

### Civil Engineering, Mechanical Engineering and Electrical & Electronics Engineering

Civil Engineering, Mechanical Engineering and Electrical & Electronics Engineering Candidate must have passed 10+2 or equivalent from a recognized educational board with Physics, Mathematics as core subjects and third Subject from the Following Subjects (Chemistry/Computer Science/Electronics/Information Technology/Biology/Informatics Practices/Biotechnology/ Technical Vocational subject/Agriculture/Engineering Graphics/Business Studies/Entrepreneurship) with a minimum aggregate score of 45% (40% in case reserved category) in above subjects taken together.

## MASTER PROGRAMS

2 YEARS (4 SEMESTERS)

### M.Tech in Civil/Mechanical/Electrical & Electronics Engineering

Passed Bachelor's Degree or equivalent in the relevant field. Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying examination.

## DOCTORAL PROGRAMS

AS PER UGC NORMS

### Ph.D. in Civil/Mechanical/Electrical & Electronics Engineering

Master's Degree from any AIU/UGC/AICTE recognized University /Institutions or any other qualification recognized as equivalent thereto in the fields of study notified from time to time by the University. A minimum of 55% marks or CGPA of 5.5 on a 10-point scale in the qualifying examination (50% marks or CGPA of 5.0 on a 10-point scale for SC/ST candidates).



# Research & Development

*Looking for a place to conduct cutting-edge research and advance your academic career? Look no further than our Institution where we offer top-notch research facilities and a wealth of research opportunities across a variety of disciplines.*

## *Research Facilities:*

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Research facilities at College of Engineering, COERU, include modern laboratories, libraries, research centers, and specialized software and tools that enable our researchers to conduct high-quality research and generate impactful insights.

1. Dedicated Research and Innovation labs, Several specialized advanced labs.
2. An Intellectual Property Rights (IPR) cell to help our students.
3. Institute Innovation cell (IIC) that provides guidance to research-oriented students.
4. A 'Do-It-Yourself (DIY)' platform for hardware-related projects/research.
5. Incubation Center to assist budding entrepreneurs in developing their businesses and solving problems associated with it.
6. COERU publishes Two International Journals in Engineering and Management fields.
7. Centres of Excellence in all emerging technologies that give students an opportunity to experiment through advanced infrastructure and equipment.
8. Renowned research mentors to assist the student in their research activities.
9. Tie-ups with other research labs such as CBRI, Design and Innovation Centre, IIT Roorkee, etc.
10. Collaboration with International Universities and Colleges for collaborative research activities.

## *ACTIVITIES THAT FUEL RESEARCH AT COERU*

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1. Each student writes a research paper every year; these are compiled and published in National and International Journal Research Journal or Conferences.
2. Faculty members are not only encouraged, but entrusted to publish papers in reputed International Journals like SCI, Scopus, UGC and more
3. Students and faculty are motivated to file Patents.
4. COERU funds Innovative Research Projects.
5. Monetary appraisals are given to faculty and students who bring in research grants and publish research papers.

## *Research Outcomes:*

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The faculty members are involved in intensive Research, which can be seen from last year's statistics.

Paper Published in Journals **55+**

Paper Published in Conference **30+**

Patents Published **20+**

# Innovation and student projects

## Do It Yourself

Under the Project Based Learning Pedagogy, the University guides the young talents to convert their dreams into reality for Innovation and Advanced Technology in the field of IoT, Artificial Intelligence , Digital Intelligene, Drone Engineering and Robotics Engineering. It provides mentoring and technical support to each student in project implementation.

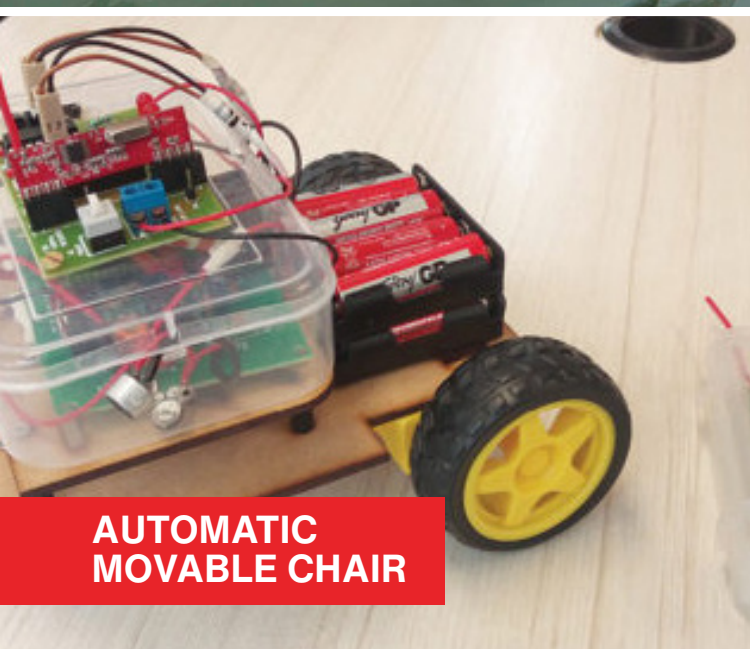
## Selected student projects



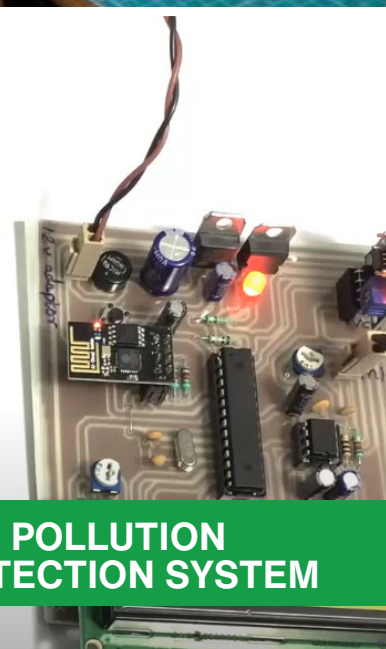
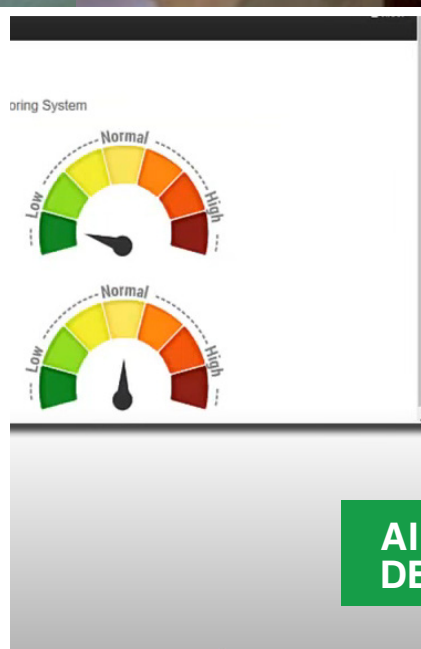
**WATER POLLUTION  
DETECTION SYSTEM**



**LIGHT CONTROL SYSTEM  
THROUGH GLOVE**

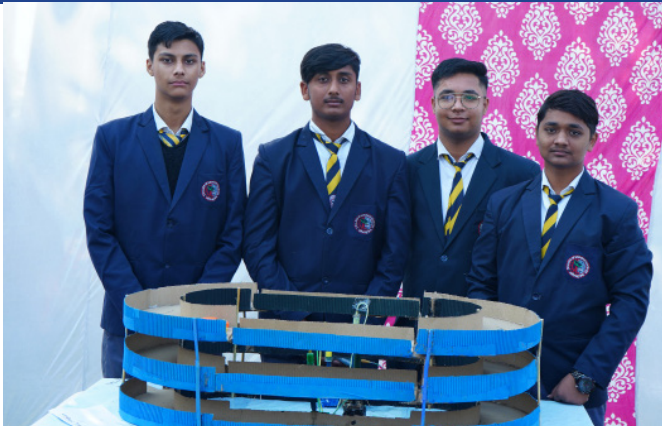


**AUTOMATIC  
MOVABLE CHAIR**



**AIR POLLUTION  
DETECTION SYSTEM**





### *Vertical Car Parking*

This project deals with manufacturing of a prototype of Vertical Car Parking System. This system can be used in cities to reduce the problem of unavailability of land for parking.



### *Earthquake Resistance Building*

This project was around creating health awareness among rural areas. It was an effort along with SKF NGO in the activities around rural areas was conducted



### *Design and Fabrication of Monowheel Bike*

A monowheel is a one-wheeled single-track vehicle similar to a unicycle. Instead of sitting above the wheel as in a unicycle, the rider sits either within the wheel or next to it. The working model of the monowheel was fabricated and tested.



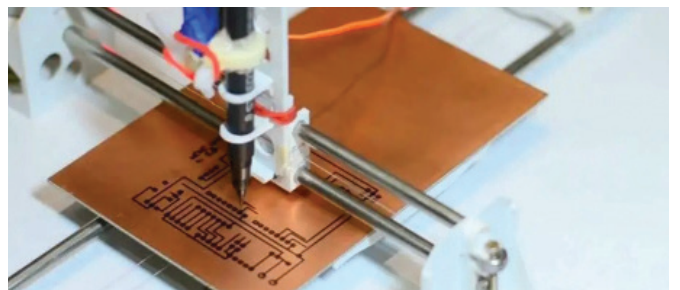
### *Vertical Take-off Landing Hybrid Amphibian Vehicle*

The main concept behind the Vertical Take-off Landing Hybrid Amphibian Vehicle (VTOL HAV ) is to combine the capabilities of traditional drones in a single unit. The design is made such that the drone should be able to cover the land or water terrains first and if it requires to take an aerial flight, it should transform into a Quadcopter and continue its mission.



### *MPPT-Based Solar Tree Using IOT*

A solar tree is a structure or artwork digging photovoltaic technology on a single pillar, like a tree structure. Each panel is at an inclination angle of  $22.5^\circ$  towards south-east direction. An MPPT solar hybrid inverter is used to yield the maximum solar energy which will be stored in the fast-charging solar battery.



### *CNC Mini plotter machine*

Mini CNC plotter machine is described as it is based on Arduino controller and CNC shield. CNC is computer numerical control machine. G codes are preparatory Function.

# Placements

Employability is at the heart of everything we do at COER University. We think outside the classroom to ensure our students graduate as confident and career-ready individuals, prepared to make a difference in their chosen field. Our students will not only achieve a qualification but leave campus equipped with life-changing skills. Our graduates are motivated, self-confident, digitally aware, enterprising individuals who are making an impact on the world stage.

*“Join COER’U’s vibrant community of successful alumni with impressive career trajectories, placed among the Fortune 500 and top 1% of Indian companies.”*

## Highlights

HIGHEST PACKAGE **9LPA**

AVERAGE PACKAGE **4LPA**

## Testimonial (Placements)

I am truly grateful for the opportunities, support, and resources that College of Engineering Roorkee has provided me, enabling me to embark on a promising career path.

**Karan Tiwari**  
B.Tech-ME

“I am Placed In Goldplus Glasses Pvt Ltd at the position of GET Hot end Roorkee and i am Very thankful to our college Management supporting always and also very thankful to our faculty and placement cell management.

**Avadhesh Singh Yadav**  
B.Tech ME

## Top Recruiters



Cognizant

HCL



Tech Mahindra

Infosys



upGrad

vivo



daffodil



sopra steria



and many more...

# Incubation and Entrepreneurship

## Objectives

*Cultivating the spirit of Entrepreneurship*

*Strengthening three kinds of professional qualities  
(Leadership, Risk Taking, Teamwork)*

*Expanding Ways to Employment*

*Bearing a part in Quality-Oriented Education*

## Incubation Partner

Startup  
Uttarakhand



***Bharat Verma***

Founder and Director  
Warehow Technologies  
Pvt. Ltd.



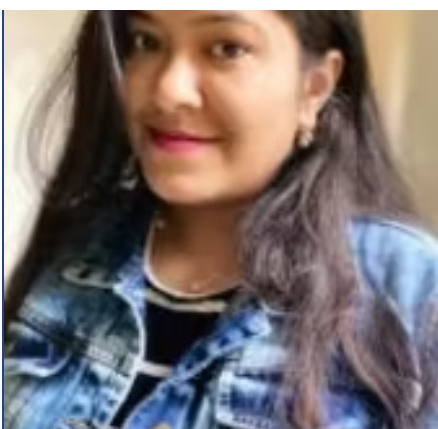
***Sonu Kr Baunsla***

Founder  
SBG Stores



***Ankit Khandelwal***

Co-Founder  
Ginger Webs Pvt. Ltd.



***Deepti Agrawal***

Founder and Director  
Codestore



***Shivendra Dudpuri***

Founder & Director  
Delhi Web Studio



***Kshitij Jain***

Founder  
KN Infinity Developers

# College of Engineering

## About

The Department of Civil Engineering facilitates students in an intellectually stimulating environment. Its laboratories are equipped with excellent and advanced equipments and provide all required facilities for advanced research in specific fields of Civil Engineering. The curriculum includes practical training, project work, expert lectures, and more. It is staffed with highly qualified and enthusiastic faculty members with diversified fields of specializations, coming from reputed institutions like IITs, NITs, etc. The faculty members continue to strive hard by exploring new frontier knowledge, imparting the latest technical knowledge to the students, and conducting high research. Apart from classroom teaching, emphasis is given on performing experiments in labs, Live Projects and Industrial Visits. The students get placed in premier Indian and multinational core Civil Engineering companies and go on to attain prestigious positions. Many of our students are also pursuing Master/Doctorates from NITs/IITs and abroad universities.

## Program USPs

Laboratories with advanced equipment

Advanced curriculum

State-of-the-art infrastructure

Live projects

## Offered Programs

- ⊗ **Diploma in Civil Engineering - 3 Years**
- ⊗ **B.Tech. in Civil Engineering with minor in Construction Technology - 4 Years**
- ⊗ **M. Tech in Structural Engineering - 2 Years**
- ⊗ **Ph.D. (Full time / Part time)**

## Lab-Resources

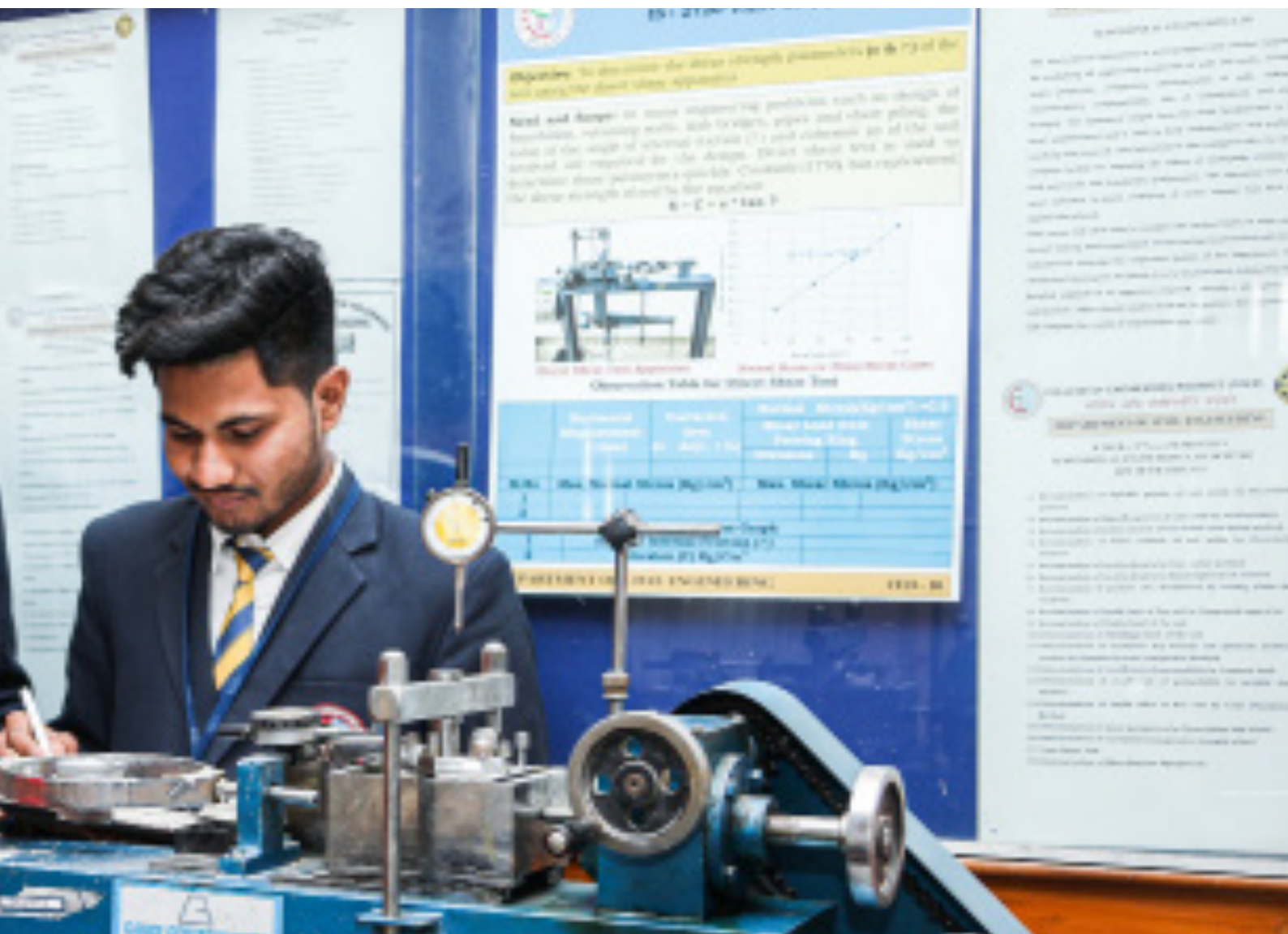
The laboratories of the CE Department are well equipped with excellent and advanced equipment. Labs Include;

- ⊗ Survey Lab
- ⊗ Building Material Lab
- ⊗ Environment Lab
- ⊗ Transportation Lab
- ⊗ Hydraulics Lab
- ⊗ Geotechnical Lab
- ⊗ Structure Lab
- ⊗ COE- Advanced Surveying Lab
- ⊗ Building Planning and Architecture Lab/ CAD Lab



## Value Added Programs

- ① Computer H/W, S/W & Network Troubleshooting
- ① Basics of AUTOCAD
- ① Building Information Modeling using Autodesk REVIT Software/ AutoCAD 3D
- ① Modeling and Simulation of Structures Elements using STAAD.PRO(I)
- ① Modeling and Simulation of Structures using STAAD.PRO(II)
- ① Seismic Analysis of Buildings Using SAP2000 Software
- ① Analysis and Design of Structures using ETABS
- ① Advance Surveying Techniques (GNSS and Advance Surveying using DGPS)
- ① Construction Engineering



## About

The Department, besides being piloted by elite faculty, what sets it apart from the flock is the laboratories - one of the best equipped in the country. The syllabus is reviewed regularly to incorporate the cutting-edge technologies prevailing in the field from time to time. The Department has justifiably provided itself with the quality of its academic programs and is keeping pace with the latest developments in engineering education. It endeavors to produce confident professionals tuned to real-time working environments. It offers an excellent academic environment with a team of highly qualified faculty members to inspire the students to develop their technical skills and inculcate the spirit of teamwork in them. The syllabus emphasizes core mechanical domains like Production, Design, and Thermal Engineering.

## Program USPs

DIY Labs

Research Oriented  
Atmosphere

Industry Oriented  
VAPs

More than 90%  
Placements



## Offered Programs

- **Diploma in Mechanical Engineering - 3 Years**
- **B.Tech. in Mechanical Engineering (4 Years) with minor in**  
**1. AI & ML 2. Electric Vehicle**  
**3. Industrial Automation & Robotics**
- **M. Tech in Energy Engineering (Energy Engineering) - 2 Years**
- **Ph.D. (Full time / Part time)**

## Lab-Resources

The Department has fully equipped and modern Laboratories supervised by experienced faculty members. There are trained technicians to help students in performing the experiments.

- Fluid Mechanics Lab
- Applied Thermodynamics Lab
- Metrology Lab
- Theory of Machine and Design Lab
- Fluid Machinery Lab
- Heat and Mass Transfer Lab
- Refrigeration and Air Conditioning Lab
- CAD/CAM Lab
- Automobile Engg. Lab
- Mechanical Workshop

## *Value Added Program*

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- ① Auto CAD- 2D
- ① Green Manufacturing Techniques
- ① Solid works
- ① Programmable Logic Controller
- ① Industrial Automation-1 (Hydraulics)
- ① Industrial Automation-2 (Pneumatics)
- ① Refrigeration and Air Conditioning
- ① Technical Aptitude

## *Departmental Achievements*

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1. Four patents and ten research papers were published in 2022 in International / National Journals.
2. Four books and book chapters were published last year.
3. Three startups registered in 2022.



## About

The department of Electrical and Electronics offers a comprehensive and extensive course combined with excellent infrastructural facilities. Besides being piloted by elite faculty, the department boasts of its laboratories - one of the best equipped in the country. The Electrical & Electronics Engineering department has been producing exceptional academic results on a consistent basis ever since its inception. The various labs and workshops encompass the vital aspects of Electrical & Electronics Engineering viz, Electrical Machines, Power systems, Control systems, Electric Drive, Power Electronics, Network Labs. Industrial visits and educational tours are regularly conducted as an integral part of the curriculum to familiarize the students with the industrial environments, working conditions and recent industrial developments.

## Program USPs

Publishing Patents

Government  
Funded Projects

Centres of  
Excellence

Educational  
Tours

## Offered Programs

- **Diploma in Electrical and Electronics Engineering - 3 Years**
- **B.Tech in Electrical and Electronics Engineering with minor in Smart Grid - 4 Years**
- **M. Tech in Power Systems (Power System) - 2 Years**
- **Ph.D. (Full time / Part time)**

## Lab-Resources

- Hydraulics system Lab
- Pneumatics system Lab
- Basic Electrical Engineering Lab
- Power system Lab
- Control system Lab
- Electric Drive Lab
- Electrical Machine Lab
- Network Lab
- Electrical Measurement Lab
- Power Electronic Lab
- Project Lab
- Virtual Lab
- Programming Lab
- Switch Gear Protection Lab





# Department of *Electrical & Electronics Engineering*

## *Value Added Program*

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- ① Basics of Electrical Engineering
- ① Introduction to PLC
- ① Computer hardware and networking
- ① Industrial Automation Pneumatics
- ① Programming with MATLAB
- ① Industrial Automation Hydraulics



# Infrastructure-Academics and Campus

## Auditorium

The University's central auditorium is enormous and acoustically built. The facility is well-furnished, air-conditioned and equipped with a sophisticated projector and audio systems with Internet access.



## Cafeteria

The University has two campus cafeterias offering an abundance of good cuisine. One may have wonderful foods at an extremely fair price. You may readily find a variety of dining options, from local cuisine to fast food.

## Medical Facility

The University campus has a well-equipped Health center that can take care of common health problems and provide immediate care in case of medical emergencies. A cab/ambulance is always available on campus in case of unanticipated emergencies. The university health centre is staffed 24 hours a day by a team of physicians and medical assistants



## Departmental Store

A departmental store at the University premises offers a wide range of consumer goods, including stationery items, gift items, sporting goods, toiletries, and other essential goods required by the students.

## Library

The Library is in the area of 1120 Sq. meter with 200 seating capacity. It is completely computerized and uses bar coding system access through ERP with RFID Identity cards facility.



## *ATM Facility*

The students can access the University's ATM 24x7 for their immediate cash requirements and other essential financial transactions. It is equipped with CCTV surveillance to ensure their safety.



## *Admin Block*

The University's administrative block is a well-designed and spacious building that houses the vast offices of the entire Top-Management team, an Account Department, HR section, a review board room with video-conferencing capabilities, a reception, a corporate zone and a conference room.

## *Academic Block*

The Academic Blocks of the university are prepared with well-lit and well-ventilated classrooms equipped with smartboards, wall cupboards and whiteboards.



## *Hostel*

Hostel rooms are spacious, semi-furnished and available on single/double occupancy. Indoor games are available in all the hostels. Common Basketball Courts, Volleyball Courts, and Café are available in vicinity of all hostels.



## *Eminent Personality visited us*

1. **Dr. Madhuri Bartwal**, Padma Shri Awardee 2022
2. **Mr. Manoj Sarkar**, Broze Medalist – Tokyo Paralympic 2020
3. **Sh. Ashok Kumar**, DGP, Uttarakhand
4. **Dr. Kumar Vishwas**, Famous Poet
5. **Vandana Kataria**, Star Hockey Player, Team India
6. **Dr. K K Pant**, Director, IIT Roorkee
7. **Minakshi Khati**, Aipan Girl – Uttarakhand
8. **Amit Hooda**, Star Kabaddi Player
9. **Anil Joshi**, Founder, HESCO



- 10. **Leonoid Popok**, Faculty, KUBSAU
- 11. **Sunanda Sharma**, Famous Classical Singer
- 12. **Rajat Chauhan**, Standup Comedian, TedX Speaker
- 13. **Gargi Kar**, Mrs. India 2020 (Queen of Substance)



**POLAND Panel - ETBI 2023,**  
Wroclaw University of Science and Technology, Poland

- 14. **Anna kowalska Pyzalska**, Professor
- 15. **Prof. Rafal Weron**, Professor
- 16. **Dimitris Sotrios**, Professor
- 17. **Yash Chawla**, Professor
- 18. **Katarzyza Weron**, Professor



# Opportunities for Amazing Campus Life







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**UNIVERSITY**  
FORMERLY KNOWN AS UETR



[www.coeruniversity.in](http://www.coeruniversity.in)

## CONTACT US



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