



# OmDayal Group of Institutions

**ENGINEERING | ARCHITECTURE | MANAGEMENT**

AICTE & COA Approved | NAAC Accredited | MAKAUT Affiliated

DEPARTMENT  
OF  
ELECTRICAL  
ENGINEERING

# ELECTRICAL ENGINEERING

Electrical Engineering is one of the most sought after branches by the aspiring engineering students. Incepted in the year of 2018, the department takes the pride of having state of the art labs and a perfect blend of experienced & young faculties. The department aims at producing electrical engineers of global standards capable of addressing real world problems - let the problems be based on electrical machines, power systems, electric drives, measurement of electrical quantities, power electronics, microprocessors, microcontrollers and so on and so forth. Electrical engineering itself is transforming and adopting to the numerous current needs such as increasing complexity of smart grid, mixing of power obtained from different energy sources, wireless power transmission and most importantly incorporation of percentage increase of green energy in the electrical power generation replacing conventional sources. Environmental pollution has made a paradigm shift of roles of electrical engineers. We have electric trains and buses that replaced diesel engines. There are e- Rickshaw, Toto, e- scooty etc. Electric cars that replaced IC engines are no more illusions today.

The department organizes seminars/webinars to update students with latest information of the field, publishes newsletter -'Electro Craft' to showcase achievements, conducts tech fest to touch and feel components and to engineer real life models. Besides, students participate in quizzes, PPT competitions, undergo internships, industrial visits and trainings. Multidirectional efforts focusing students make them industry ready in true sense.

## VISION

To induce and fringe minds of students towards the learning of electrical engineering concepts.

- To bridge gap between the university syllabus and the industry requirement.
- To produce competent Electrical Engineers with a commitment to serve the society.

## MISSION

- To impart high quality technical education and develop Electrical Engineers with a sound theoretical knowledge combined with practical skills in all the areas concerning the discipline.
- To inculcate innovative capabilities and to use technology for the benefit of mankind



**OmDayal Group  
of Institutions**



# DEPARTMENTAL FACULTIES

The department has always been on a progressive path with the support of dedicated, talented, qualified and experienced faculty members who have a strong commitment towards providing quality engineering education. The department also has trained and dedicated supporting staff in the laboratories. The well-equipped laboratory facilities are being constantly upgraded to take care of the technological developments.

## EMINENT FACULTY MEMBERS



### **Prof. (DR.) ARUP SINHA**

**HOD, Electrical Engineering Department,**

is an Electrical Engineer with PhD (Engineering) in Power Systems having more than 27 years of diverse experience in Research, Consulting, Teaching & Industry Operations in Core Utility Industry, Large Engineering & Business Consulting firm and reputed Engineering educational institute/ university in India & abroad.



### **Prof. POULOMI DAS**

Assistant Professor (B.TECH, M.TECH) is having teaching experience of 10 years. She is also pursuing PhD from University of Calcutta.



### **Prof. SWAPAN KUMAR MAJUMDER**

Assistant Professor (A.M.I.E, M.TECH, DOEACC 'A' Level) is having experience of 20 years in industry and 11 years in academics. He worked in specially designed high end power plants and missile technology in Indian Air Force. He was awarded with 'Best Technical Person' by Air Force Station Jaisalmer and was also awarded with 'Chartered Engineer' by IE(I).





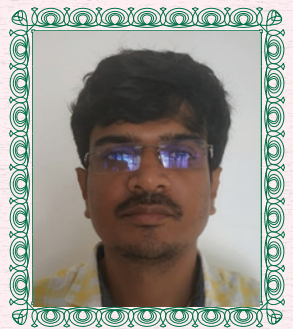
## **Prof. DIPANJAN DATTA**

Mr. Dipanjan Datta, Assistant professor, accomplished M.Tech from Jadavpur University having 7 years of teaching experience in various engineering colleges.



## **Mr. SIDDHARTHA ROY**

Protem Lecturer, graduated from Jadavpur University and has 7 years of industry and teaching experience.



## **Prof. ABHISHEK MANNA**

Assistant Professor (B.Tech & M.Tech) having teaching experience of 7 years and 2 years of Industry experience.



## **Prof. MAINAK MUKHERJEE**

Assistant Professor (B.Tech & M.Tech) having teaching experience of 5 years.



## JOURNAL PUBLICATION

- 1 Poulomi Das, Arpita Das, **“Adaptive Gabor Filtering using Grey Wolf Optimization for Enhancement of Brain MRI”**; IEEE Xplore, INSPEC Accession Number: 20552992, 2021.
2. Poulomi Das, Arpita Das, **“Shift Invariant Extrema based Feature Analysis Scheme to Discriminate the Spiculation Nature of Mammograms”**; ISA Transactions, Elsevier, Vol. 103, pp. 156-165, August 2020.
3. Poulomi Das, Arpita Das, **“A Fast and Automated Segmentation Method for Detection of Masses using Folded Kernel based Fuzzy C-means Clustering Algorithm”**; Applied Soft Computing, Elsevier, Vol. 85, 105775, December 2019.
4. Swarupa Ojha, A D Das, Madhab Roy and Sanjib Bhattacharya, **“Temperature and Frequency Response of Conductivity in Ag<sub>2</sub>S Doped Chalcogenide Glassy Semiconductor”**; Physica B: Condensed Matter 538 (2018) 191–198 (ELSEVIER).

## CONFERENCE PUBLICATION

- 1 Poulomi Das, Arpita Das, **“Design of tumor discrimination techniques to analyze the prognosis of cancer”**; proceedings of Recent Trends in Biomedical Imaging and Applications, organized by Department of Applied Sciences, Indian Institute of Information Technology, Allahabad, during 19th -21st August, 2021.
- 2 Poulomi Das, Arpita Das, **“Adaptive Gabor Filtering using Grey Wolf Optimization for Enhancement of Brain MRI”** proceedings of 2020 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE 2020), organized by IEEE Bangladesh section and IEEE Bhubaneswar subsection, during 26th -27th December 2020.
- 4 Dipanjan Datta, **“Estimation of Mesopic Adaptation Luminance under Different Surrounding Lighting Ambience”**, in 2020 IEEE Applied Signal Processing Conference (ASPCON) from 7-9 Oct. 2020.
- 5 Poulomi Das, Arpita Das, **“Benign and Malignant Tumor Classification of Brain MRI using Machine Learning Algorithm”**, proceedings Advances in Medical Physics and Healthcare Engineering (AMPHE 2020), organized by Department of Physics, School of Basic and Applied Sciences in collaboration with School of Engineering & Technology, Adamas University, Kolkata, during 25th –26th September,2020.
- 7 Poulomi Das, Arpita Das, **“Automatic Detection and Classification of Enhanced Brain Tumor using Machine Learning Algorithm,”** proceedings of International Conference on Computers and Devices for communication (CODEC-2019), University of Calcutta, 19th -20th December, 2019.
- 8 Swapan Kumar Majumder, **“Random grid based visual secret sharing (2,2) & (3,3)”**, in International conference proceedings-ICIEMPS 2019.ISBN: 978-81-942561-2-02,3rd & 24th November, 2019.



## BOOK CHAPTERS

- 1 Poulomi Das, Arpita Das, (2021) **“Automatic Detection and Classification of Enhanced Brain Tumor Using Machine Learning Algorithm”**. Lecture Notes in Networks and Systems, vol 147. Springer, Singapore. 04 February 2021. [https://doi.org/10.1007/978-981-15-8366-7\\_6](https://doi.org/10.1007/978-981-15-8366-7_6).
- 2 Poulomi Das, Rahul Rajak, Arpita Das, **“Application of AI for Computer Aided Diagnosis System to Detect Brain Tumor”**, Chapter-10, Handbook of Research on Disease Prediction Through Data Analytics and Machine Learning, IGI Global, October 2020. [ISBN13: 9781799827429; ISBN10: 1799827429; E-ISBN13: 9781799827436 ; DOI: 10.4018/978-1-7998-2742-9]



# INFRASTRUCTURE

Infrastructure forms the very plinth of modern learning and lab is the integral part of it for engineering studies. The department has diverse labs such as Basic Electrical Engineering Lab, Electric Machine I Lab, Electric Circuit Theory Lab, Analog Electronics, Digital Electronics Lab, Electric Machine II Lab, Electrical & Electronics Measurement Lab, Power System-I Lab, Control Theory Lab, Power Electronics Lab, Power System-II Lab, Micro-Processor and Micro Controller Lab, Design Lab, ELECTRIC DRIVE Lab. Besides, the department has 1400 plus electrical text books, 80 plus e-books, numerous journals and magazines in the library. The college is endowed with seminar hall, modern gymnasium, indoor games facilities, sports room, medical support facilities, boys' and girls' hostels, transport facilities. Further, the college campus is CCTV enabled to enhance safety of the students



**Basic Electrical Engineering Laboratory**



**'Electric Machine- I Laboratory**



**Electric Machine- II Laboratory**

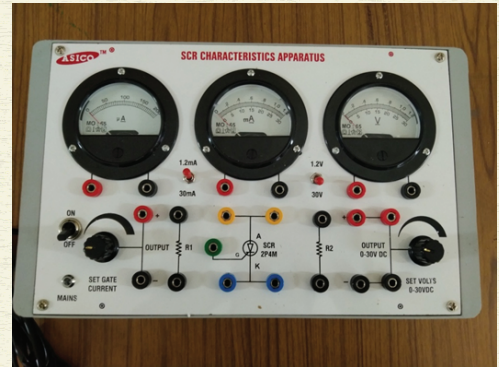


**Electrical & Electronics Measurement Laboratory**





**Basic Electrical Engineering Laboratory**



**Study of the characteristics of an SCR (Power Electronics Laboratory)**



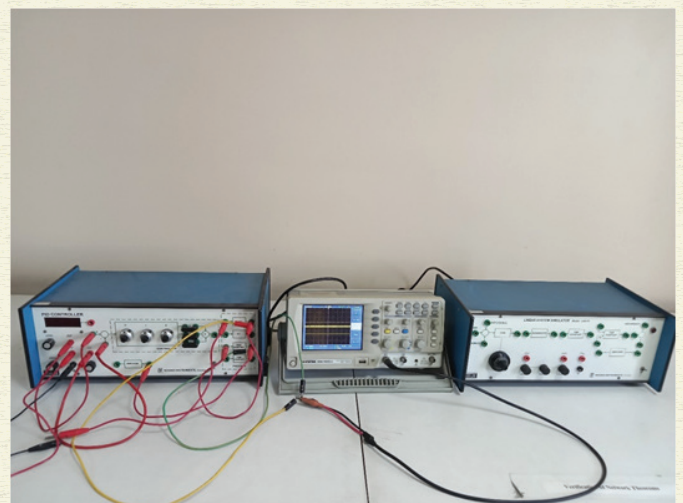
**Power System-I Laboratory**



**Electric Drives Laboratory**



**Control System Laboratory/ Computer Lab**



**Control System Laboratory**





**Library**



**Library**



**Seminar Hall**



**College Bus**



**Hostel**



**Games and Sports**



# EVENTS

## ORGANISED BY THE DEPARTMENT

A webinar has been organized on "**Opting right career path in technology amongst recent global trends**" by our ALUMNI - Ishita Chakraborty (Batch-2013-2017), Associate Member of Technical Staff (AMTS), DXcorr Design Inc and Mrinmoyi Manna, (Batch-2013-2017), VLSI Design Engineer, DXCorr Hardware Technology on 07th May 2022. Mrs. Poulomi Das, Assistant Professor was the coordinator of the event.

The Department of Electrical Engineering presents a webinar on  
**"OPTING RIGHT CAREER PATH IN TECHNOLOGY AMONGST RECENT GLOBAL TRENDS"**

THE WEBINAR WILL BE CONDUCTED BY OUR ALUMNI: <<<<

**ISHITA CHAKRABORTY**  
(Batch: 2013-2017)  
Associate Member of Technical Staff (AMTS), DXcorr Design Inc

**MRINMOYI MANNA**  
(Batch: 2013-2017)  
VLSI Design Engineer, DXCorr Hardware Technology

**Date:** 07.05.2022 (Saturday)  
**Time:** 8PM - 9PM  
**Google Meet:** 900-rxkv-zwz

**COORDINATOR:**  
Ms Poulomi Das, Assistant Professor

**For any enquiries, contact:** +91 94321 57007

+91 81005 00600 | contact@omdayal.com | www.omdayal.com

Department of Electrical Engineering  
is proud to present a webinar on  
**"Energy-efficient indoor lighting design using DIALux"**

**Speaker**  
**Ms Jeenia Dey**  
Assistant Professor,  
Electrical Engineering Dept.,  
Swami Vivekananda Group of Institutions

29<sup>th</sup> April, 2022 | 14:30-15:30 Hrs (IST) | Google Meet

**Coordinator:**  
Mr Dipanjan Datta, Assistant Professor

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ENGINEERING COLLEGE | ARCHITECTURE COLLEGE

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A webinar on "**Energy efficient indoor lighting design using DIALux**" has been organized by the department on 29th April 2022. Speaker of the event was Ms Jeenia Dey, Assistant professor, Electrical Engineering Dept-Swami Vivekananda Group of Institutions. Mr. Dipanjan Datta, Assistant Professor, was the coordinator of the event.

A webinar on "**Internet of Things**" has been organized by the department in association with Ardent Computech Pvt. Ltd. on 26th March 2022 from 2pm – 4pm. Mr. Swapan Kumar Majumder, Assistant Professor was the coordinator of the event.

OmDayal Group of Institutions  
ENGINEERING COLLEGE | ARCHITECTURE COLLEGE

Department of Electrical Engineering,  
presents a webinar on  
**"INTERNET OF THINGS"**  
in close association with  
**Ardent Computech Pvt. Ltd.**

**26th March, 2022**  
**14:00 - 16:00 Hrs (IST)**  
Google Meet

**Convener:**  
Mr Swapan Kumar Majumder  
Assistant Professor

For any queries, contact: +91 79804 95516





The department organized a virtual Alumni Meet on 5th March 2022 on Google Meet at 8pm. Mrs. Poulomi Das, Assistant Professor, was the coordinator. Ms. Pratyusha Das - System Engineer, Infosys (2021 pass out batch) was the speaker of the event

The department organized an online Science Quiz Contest (OMEQUIZZARO-I) for class XI & XII science students on 20th & 21st September, 2020 respectively. 153 students from numerous schools across the state enthusiastically participated in the quiz.

The department organized a webinar on '**Commissioning of Heavy Electrical Equipments and Scope of Electrical Engineers: India's perspective**' with external speaker JWO Joy Shankar Dutta, Senior Project Engineer in BHEL in NCR region on 25th August, 2021.



The department organized a webinar on "**Challenges and opportunities for Electrical Engineers during and in post pandemic situation**" on 30th May, 2020 external speaker Mr. Saibal Kumar Kundu, an Associate Partner in IBM India in a Leadership position of Energy & Utility Department.

A **parent teacher meeting** was organized by the department of Electrical Engineering on 8th February, 2020.

An **industrial visit** was organized for the EE students at West Bengal State Electricity Distribution Company Limited in Bidhannager Salt Lake on 9th February 2020





Department of Electrical Engineering organized **Inter College Technical Quiz Contest 2k19** for the 2nd year students on 31st August 2019



An **Intra-College PPT Presentation Contest-2k19** was held on 16th November, 2019. The ICPPC-2K19 encompassed the world of elemental engineering.



The department of Electrical Engineering organized an **Industrial Visit at substation** of Uluberia industrial growth centre rated 33/11 KV, a property solely under West Bengal State Electricity Development Corporation (WBSEDCL) on 15th June 2019.

Students of Electrical Engineering visited the Canal Top Grid Type Hybrid Solar PV Power Plant located at Gate no.-6, Eco-Park, New Town, Kolkata on 28th September, 2018



# PLACEMENT



**ARNAB GHOSH – 2023 Placed at TCS**

It fills me with immense joy and pride to be able to voice my thoughts before you today as we celebrate the enduring legacy of OmDayal Group of Institutions. Our alma mater has been a beacon of knowledge, growth, and camaraderie, shaping us into the individuals we are today. As alumni, we carry with us not just degrees, but a wealth of experiences, lessons, and memories from our time at OmDayal Group of Institutions.

In the fast-paced and ever-changing world we live in, the connections we forged at OmDayal Group of Institutions are invaluable. Our alma mater's success is mirrored in our individual achievements, and together we can create a legacy that inspires future generations.



**RAJRAJESWARI BAG - 2023 Placed at TCS**

During my time at OmDayal Group of Institutions, I experienced a transformative period that laid the foundation for my career. The rigorous curriculum and dedicated faculty not only imparted technical knowledge but also instilled in me a strong work ethic and a passion for continuous learning. As an Electrical Engineering student, I was exposed to diverse challenges that honed my problem-solving skills and fostered a collaborative spirit. The emphasis on practical applications and industry-oriented projects prepared me well for the demands of the professional world.



**SUSMITA PRAMANIK – 2023 Placed at Indus Towers Limited**

I am expressing my sincere gratitude for the educational experience I received during my time at OmDayal Group of Institutions. Having recently graduated in 2023 with a degree in Electrical Engineering, I can confidently say that my journey at OmDayal Group of Institutions has been nothing short of extraordinary. In this College both the faculty and staff are supportive. Moreover, I am immensely impressed by the comprehensive curriculum offered. It was evident that considerable thought and effort had been invested in designing a program that not only prepares students with the necessary theoretical knowledge but also prioritizes practical skills. The opportunities for internships provided by the college further enhanced my learning experience.



**ALEKHYA SARKAR – 2022 Placed at Infosys**

I would like to express my sincere gratitude for the incredible educational experience I received during my time at OmDayal Group of Institutions. As a recent graduate in Electrical Engineering, I can confidently say that my journey at this institution has been nothing short of extraordinary.

I felt supported by both the faculty and staff, who were always ready to offer guidance and encouragement. I was also deeply impressed by the comprehensive curriculum that was designed with great care and thoughtfulness. The program not only equipped us with the essential theoretical knowledge but also placed a strong emphasis on developing practical skills, which are vital in today's industry.



**ANIRBAN DUTTA – 2022 Placed at Harmon Kardon (Samsung)**

During my journey as a student of OmDayal Group of Institution was eventful and very memorable. We got good infrastructure with a very reasonable course. Very good ambiance to study. Faculties are very knowledgeable and supportive. We explored a different I have got the stepping stone for my future endeavours here.



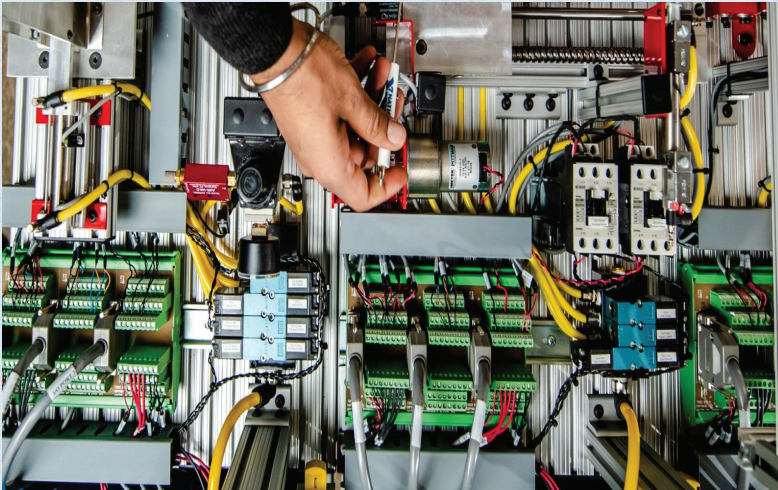
**PRADIP SAMANTA – 2022 Placed at Tech Mahindra**

The EE department of the OmDayal Group of Institutions offers excellent support and practical learning opportunities. Faculties are supportive, preparing students well for careers in technology with industry-relevant Skills.

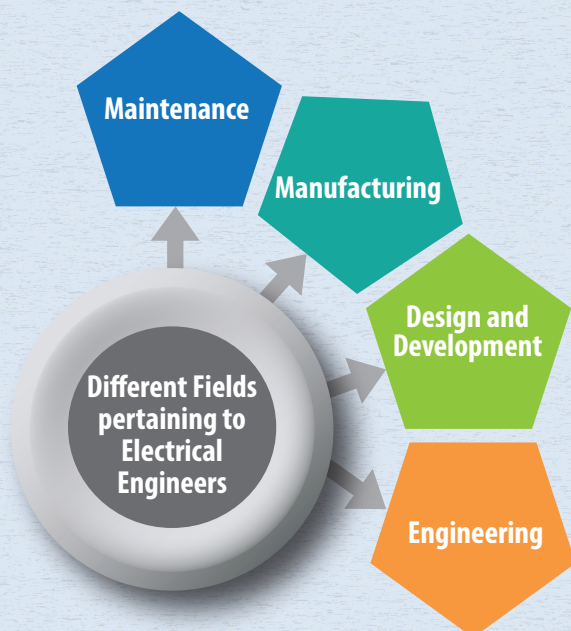


# CAREER PROSPECT AND OPPORTUNITIES

## of Electrical Engineers



Electrical engineers usually work with large-scale electrical systems. Throughout their career, they work on a diverse range of technologies. After attaining the required academic qualification, there are an abundance of electrical engineering job profiles available for them on the basis of their knowledge and interests. An electrical engineer is responsible for designing and developing new electrical systems, test equipment and finds solutions to electrical problems and devices. These engineers work on multiple projects throughout their career. Electrical engineers can find a number of employment opportunities in various different sectors as given below-



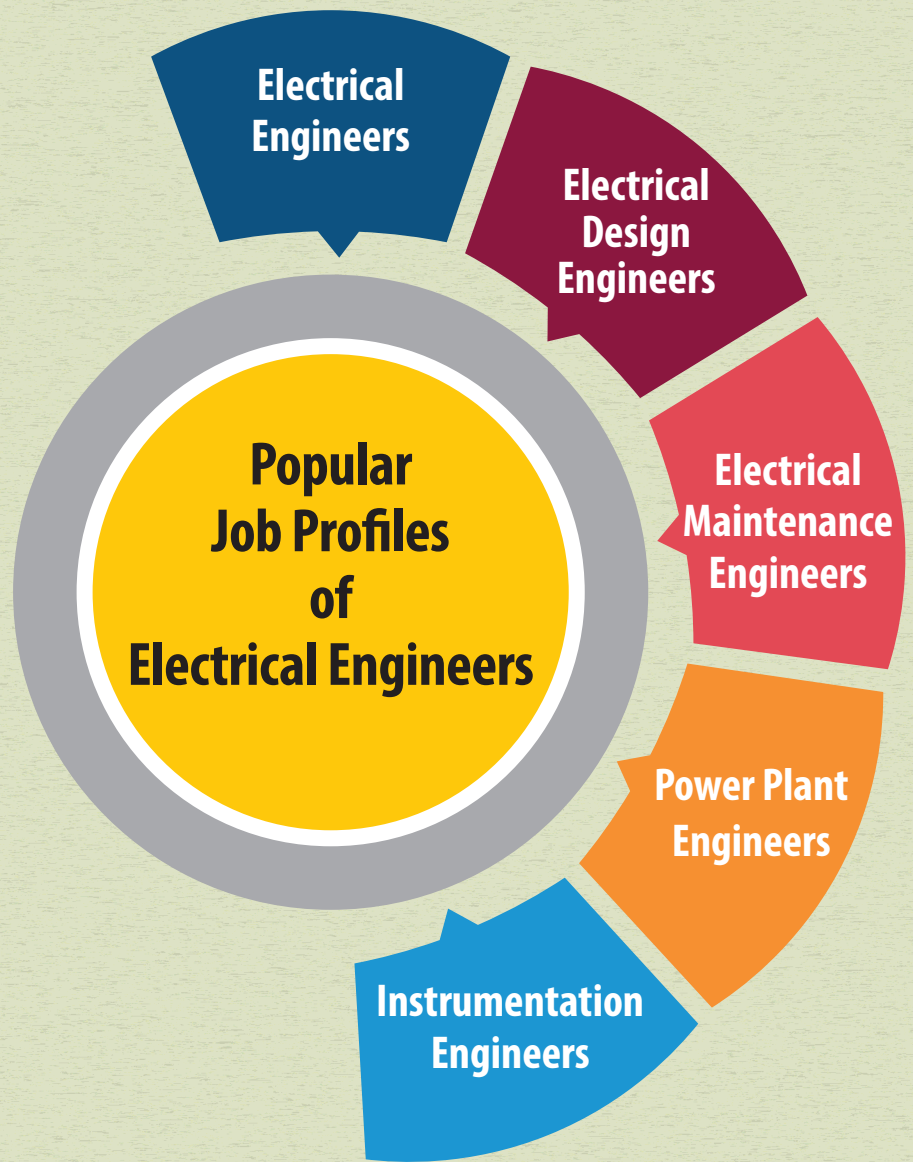
## EMPLOYMENT OPPORTUNITIES OF ELECTRICAL ENGINEERS

- # Electric Power Generating Stations
- # Electric Power Transmission & Distribution Companies
- # Indian Engineering Services
- # Indian Railways
- # Indian Defence
- # VHEL, SAIL, AAI, ISRO, NTPC
- # ONGC, Indian Oil etc.
- # Reliance Power
- # Oil Refineries
- # Solar Industries
- # Lighting Industries
- # Electrical Works Department
- # Siemens Technology Services
- # General Electric
- # Suzlon Energy



## ELIGIBILITY

1. Valid rank in WBJEE or JEE (Main) 2021
2. 10+2 Board Exam – 45% aggregate in Physics, Mathematics along with Chemistry / Biology / Biotechnology / Computer Science / Information Technology / Information Practices / Engineering Graphics/ Business Studies. Candidates must clear Theory & Practical examination.  
40% marks in case of candidates of SC/ST/OBC in the above subjects taken together.
3. Passed in English



## CONTACT US -

### CAMPUS -

Plot No. 38(P), 38(A), 39(P) & 39(A), Uluberia Industrial Growth Centre,  
Near Birshibpur Railway Station, Howrah – 711316, West Bengal, India  
+91 33 71300253 / +91 33 71300254

### CITY OFFICE

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12 Park Street, Kolkata – 700071, West Bengal, India  
+91 33 7130 0211

*For any queries call between Monday to Saturday 10:30am to 6:30pm*