



# OmDayal Group of Institutions

**ENGINEERING | ARCHITECTURE | MANAGEMENT**

AICTE & COA Approved | NAAC Accredited | MAKAUT Affiliated



**NAAC**  
National Assessment  
and Accreditation Council



**INFORMATION BROCHURE**

**2025**

**DEPARTMENT  
OF  
MECHANICAL  
ENGINEERING**



## About Mechanical Engineering

Mechanical Engineering is the oldest and the broadest branch of engineering and also the backbone of all engineering disciplines. It covers a large area starting from agriculture to biomedical industry, primary manufacturing to robotics, automobile to aerospace, conventional to non-conventional power production. Briefly, this branch provides basic human needs and also caters to the demand of the most advanced civilised society.

## Why Career as “Mechanical Engineer” is very exciting and rewarding?

A B. Tech Degree in Mechanical Engineering presents a lot of job opportunities due to vast developments in the fields of Design, Thermal, and Production. A student after completing the Degree in Mechanical Engineering can work in several industries including public and private sectors. With the rapid rate of growth in the industrial sector, the employment potential for Mechanical Engineers is quite high. In the government sector, the freshers can join as Assistant Engineers and go up the ladder as Executive Engineers. A student with a degree in Mechanical Engineering can also find jobs in administrative and managerial positions in government or public sector industries or become a research scholar in Reputed Academic Institutions. The sectors like Non-conventional Energy, Robotics, Aerospace, Agriculture, Automobile, Defence, Chemical, Power plants, Engineering Consultancy Services as well as the Railways recruit Mechanical Engineers on a regular basis.

## Mechanical Engineering @ ODGI

The journey of Mechanical Engineering Department of OmDayal Group of Institutions started in the year 2010 with a sanctioned intake of 60 students. The department offers Bachelor of Technology programme in Mechanical Engineering. It is one of the largest departments in the Institution, with a number of highly qualified and dedicated Faculty Members and experienced Technical Assistants. The department has state-of-the-art laboratory and workshop facilities with sophisticated equipment to provide practical exposure to the students. Since its inception, the department has a wide reputation for the quality of teaching. The events like webinar, seminar, workshop, industry visit, industrial training, and internship are organized for the students. In addition to that, the students are also encouraged to participate in various extra-curricular activities. The students of the department also participate in various technical competitions at the national level. The alumni of this department are working in renowned industries or pursuing higher studies (Ph. D., M. Tech., MBA etc.) from premier institutions in India and abroad.

## Eligibility Criteria for B. Tech

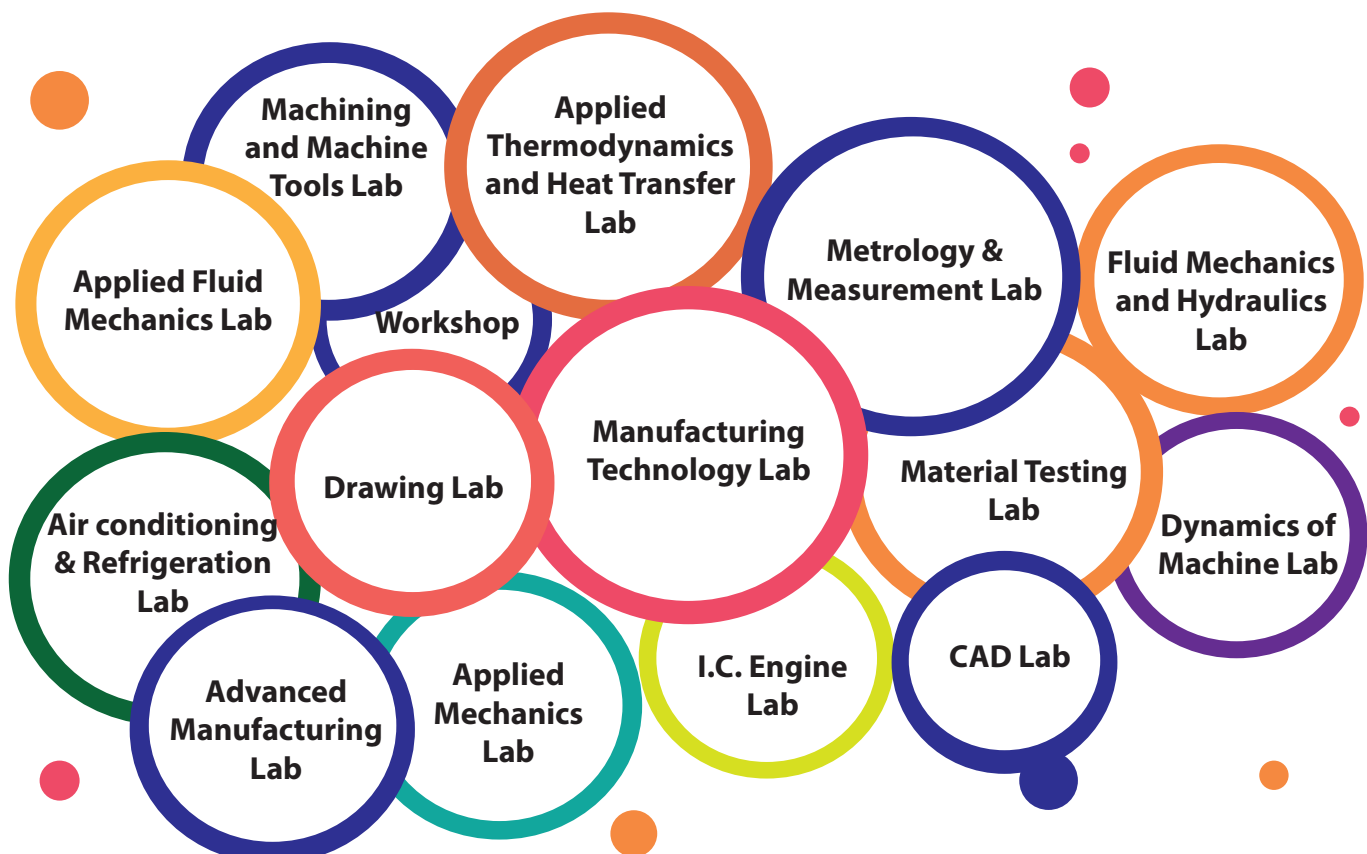
The students who want to pursue B. Tech in Mechanical Engineering need to clear WBJEE or JEE (Main) successfully, and also have to secure at least 45% marks in aggregate (40% marks for SC, ST, or OBC) in Physics, Mathematics with any one of Chemistry/ Biotechnology/ Biology/ Computer Science/ Computer Application/ Technical Vocational Subject as compulsory subjects with individual pass marks in all the subjects in the Board Examination at the 10+2 level. The Diploma holders can also join the B. Tech course directly in the second year. For this, they have to clear the Joint Entrance Examination for Lateral Entry (JELET).



# INFRASTRUCTURE

in the Department Laboratories

The department boasts of the 15 well-equipped laboratories and workshops which impart practical training to the students to supplement their theoretical knowledge.



# CO-CURRICULAR

## Activities

Students Enrichment Programs like Technical Webinars/Seminars/ Workshops/ Quiz Competitions/ Industrial Visits are regularly held in every academic year.

Seminar on overview of Solidworks and 3D Printing



**Q-riosity 1.0**  
Online Quiz Competition  
[17<sup>th</sup> AUG 2020]  
Organized by  
**DEPARTMENT OF MECHANICAL ENGINEERING**  
**Omdayal Group of Institutions**

**INFORMATION**  
**ELIGIBILITY CRITERIA**  
➤ Higher Secondary XII (current batch) and XII (2020 Passed-out batch) Science students  
➤ WRCHSE, CBSE and ICSE

**ATTRACTIVE PRIZES** for all the winners  
**DIGITAL CERTIFICATES** for all the participants

**CONTACT FOR DETAILS**  
Ranjeet Kishu De  
Teacher-In-Charge (Dept of ME)  
Phone: 9832183629  
Ajaykumar Banerjee  
Event Coordinator (Q-riosity)  
Phone: 9851178385  
Email id: omdgoinfo@omdgroupofinstitutions.com  
Website: [www.omdgroupofinstitutions.com](http://www.omdgroupofinstitutions.com)

**INSTRUCTIONS**  
➤ **REGISTRATION** [06.00.2020 - 13.00.2020]  
➤ Visit/open the link below and submit the registration form.  
<https://www.omdgroupofinstitutions.com/qriosity1.0>  
➤ Registration fee: NIL  
➤ **QUIZ TEST** [17.08.2020]  
➤ The login link and the credentials will be sent to the registered email address.  
➤ Log on to the link with your credentials (username and password).  
➤ Read the instructions.  
➤ Attempt the quiz

Q-RIOSITY 1.0:  
Online Quiz  
Competition

Department of Mechanical Engineering, at Omdayal Group of Institutions

A Guide for an  
**Aspiring Mechanical Engineer**  
on Career Choices & Opportunities  
in a Post Pandemic Society

**13<sup>th</sup> June** | at **5 pm** **WEBINAR**

Webinar on A Guide for an Aspiring Mechanical Engineer on Career Choices and Opportunities in a Post Pandemic Society



INQUISITIVE 2020:  
Quiz Competition



# ENGINEERING MODELS

Designed by the Students



**Obstacles Avoiding Robot**



**Portable Drain Cleaner**



**Vapour Compression Refrigerator**



**Power generation from railway track**



**Hands-Free Water Dispenser**



**Solar Greenhouse Dryer**

# INDUSTRY- ACADEMIC

## Interactions

The students of Department of Mechanical Engineering, ODGI, underwent the Industrial Training programs in reputed organizations like



- Meija Thermal Power Station
- The National Small Industries Corporation Ltd.
- Kolkata Metropolitan Development Authority
- Kolkata Port Trust
- Burn Standard Co. Limited
- Betterman Engineers Pvt. Ltd.
- Sintex
- Bhandari Automobiles Pvt. Ltd.
- Tata Steel Ltd.

### Industrial-Academic Activities Partner:



Confederation of  
Indian Industry

Confederation of Indian  
Industry, Eastern  
Region (CII – ER)

### Industrial Training Partner:



perfectice  
#engagetoenhance

### Internship Partner:



Internshala



# RECENT PUBLICATIONS



## JOURNAL PAPERS:



**RANJIT BARUA**, Dolon Kmar Das, “**Experimental Analysis the Forward and Reverse Motion of Three Omnidirectional Wheel Robot (TODWR)**”, Journal of Mechanical Robotics, Vol. 05, No. 03, pp. 12-15, December 2020.



Dolon Kumar Das, **RANJIT BARUA**, Sudipto Datta, “**Influence of Copper Addition on Mechanical Properties and Microstructure of Eutectic Al-12Si-Xcu Alloy Produced Through Powder Metallurgy Process**”, Journal of Advancements in Material Engineering, Vol. 05, No. 02, pp. 23-27, August 2020.



## CONFERENCE PAPER:

**RANJIT BARUA**, Sudipto Datta, Amit RoyChowdhury, Pallab Datta, “**The Advancement of 3D BioPrinting Technology Used as Bio-Manufacturing Process**” Publishing as technical notes at the IEI Technical volume book “**Engineering for Self Reliance and Sustainable Goals**” (35th Indian Engineering Congress, organized by The Institution of Engineers (India), from 18th December to 20th December, 2020.) pp. 1253-1257.

## RECENT PARTICIPATIONS IN WEBINAR/ SEMINAR/ WORKSHOP/ CONFERENCE/ FDPS

### PROF. RANJIT BARUA

Participated in a 5-Day AICTE-ATAL FDP on “**Robotics**” organized by Vidya Academy of Science and Technology, Thrissur, Kerala, from 11th January to 15th January, 2021.

Participated in a 3-Day FDP on “**Advancement in Industrial Automation and Environmental Friendly Manufacturing**” organized by Asansol Institute of Engineering and Management – Polytechnic, Asansol, from 28th December to 30th December, 2020.

Participated in the “**35th Indian Engineering Congress**”, organized by The Institution of Engineers (India), from 18th December to 20th December, 2020.

Participated in a 2-Day National Seminar on “**Ancient Indian Education System**” organized by NITTTTR-KOLKATA, from 11th November to 12th November 2020.

Participated in a 1-Day National Seminar on “**Advances in Machining**” organized by NITTTTR-KOLKATA, 26th September, 2020.

Participated in a 5-Day AICTE-ATAL FDP on “**Additive Manufacturing Technology**” organized by Vasireddy Venkatadri Institute of Technology, Namburu, Andhra Pradesh, from 21st September to 25th September, 2020.

Participated in a 5-Day AICTE-ATAL FDP on “**Green Technology and Sustainability Engineering**” organized by St. Joseph College of Engineering, Chennai, from 7th September to 11th September, 2020.



Participated in IEEE International Conference on **“Convergence in Engineering”** organized by NSEC-Kolkata, from 5th September to 6th September, 2020.

Participated in International Symposium on **“Energy and Sustainable Development: A Gandhian Approach”** organized by IIT-Patna and Aalborg University, Denmark, 7th August, 2020.

### PROF. DEEPANJAN DAS

Participated in the 5-Day Faculty Development program on **“Universal Human Values”** conducted by AICTE from 18th January to 22nd January, 2021.

Participated in the 1-Day webinar on **“Research Facility Training Program”** conducted under SSR of DST-CRG Project on 9th October, 2020.

Participated in the 5-Day Faculty Development program on **“Deeksharambh (Student Induction Program)”** conducted by NIT, Patna from 10th August to 14th August, 2020.

Participated in the 1-Day webinar on **“Mental Health Education in Lockdown”** conducted by Vishisht School of Management, Indore, on 10th May, 2020.

Participated in the 1-Day webinar on **“Personality Development During Pandemic”** conducted by Vishisht School of Management, Indore, on 7th May, 2020.

Participated in the 4-Day Faculty Development program on **“Recent and Future Trends in Technology”** conducted by Guru Nanak Institute of Technology, Sodepur, Kolkata, from 27th April to 2nd May, 2020.

### PROF. SUMIT BHOWMIK

Participated in the **“35th Indian Engineering Congress”** organized by The Institution of Engineers (India) from 18th December to 20th December, 2020.

Participated in the One-Day Webinar on **“Electric Vehicles and Grid Integration of Renewable Energy Systems”** conducted by National Productivity Council (Govt. of India) on 29th August, 2020.

Participated in the One-Day Webinar on **“Effective Management of Digital Footprint”** conducted by National Productivity Council (Govt. of India) on 28th August, 2020.

Participated in the One-Day Webinar on **“Augmented Reality & its Applications”** conducted by McGraw Hill on 5th August, 2020.

## STUDENTS' PARTICIPATION

- National Level **"Awareness Quiz on Consumer Rights"** organized by Department of Commerce, HKBK Degree College, Bangalore on 15th March, 2022.
- **"IP Awareness/Training Program"** under National Intellectual Property Awareness Mission organized by Intellectual Property Office (GOI) on 14th March, 2022.
- Online Training on **"Basic Solar Pump Technician"** conducted by Environment Conservation Society (SwitchON Foundation) from 22nd October to 17th November, 2021.
- Online Course on **"Basics of Geocomputation and Geoweb Services"** conducted by IIRS Dehradun, ISRO & Department of Space, Govt. of India from 25th October to 2nd November, 2021.
- **"11th CII Education Summit"** organized online by Confederation of Indian Industry from 21st October to 22nd October, 2021.
- Two-day short course online **"MPI in Action: Parallelization of Unsteady Heat Conduction Solvers"** organized by IIT Goa NSM Nodal Center for Training in HPC and AI from 2nd October to 3rd October, 2021.
- Online training on **"Solar Pump Technician Workshop"** organized by Environment Conservation Society (SwitchON Foundation) from 13th September to 18th September, 2021.
- Online Course on **"Overview of Web GIS Technology"** conducted by IIRS Dehradun, ISRO & Department of Space, Govt. of India from 21st June to 2nd July, 2021.
- One-day webinar on **"Additive Manufacturing: Reinventing Design and Manufacturing"** organized by McGraw Hill Education on 26th June, 2021.
- Webinar on **"Life Beyond Studies"** organized by Bundelkhand Institute of Engineering and Technology - Jhansi, State Project Implementation Unit - Uttar Pradesh and Super 77 on 13th June, 2021.
- One-day webinar on **"All Journey Start with a 1st Step"** organized by MAKAUT, WB on 8th June, 2021.
- **"National Level Marketing Quiz"** organized by Department of Management Studies, SRM Trichy Arts and Science College, Trichy in June, 2021.

# Alumni Information



## **SOUVIK CHATTERJEE**

Batch:2015

Completed M.Sc and Pursuing PhD from University of Applied Sciences, Wiener Neustadt – Austria (Vienna)



## **MD. YASIR ALI**

Batch:2015

Sr. Engineer at Powermech Project Ltd Plant: Loy Yang Power Station, Melbourne



## **SAYON DEY**

Batch:2015

Pursuing PhD from NIT, Patna after completing Master's from Jalpaiguri Govt. Engg. College



## **RAJU ADHIKARY**

Batch:2015

Assistant HOD of Mechanical Maintenance Dept. at McNally Bharat Engineering Company Limited



## **ARNAB SINGHA RAY**

Batch:2015

Working in Indian Navy



## **SK SAHARUL**

Batch:2017

Working as R&D Engineer at Gem Allied Industries Pvt Ltd



## **SK SHARUK MOHAMMAD**

Batch:2017

Working as Assistant Engineer at Kiswok Industries Pvt Ltd.



## **RAJNISH KUMAR SURYABANSHI**

Batch:2017

Working as Maintenance Engineer at Thermax Limited.



## **DIPANJAN DEY**

Batch:2018

Working as Engineer at Ceratizit India Pvt. Ltd.



## **KOUSHIK DWARY**

Batch:2019

Junior Programmer & Inspector at SMC Pneumatic India Pvt. Ltd., Pune



## **AVITESH KUMAR SINGH**

Batch:2020

Trainee Engineer at Pinnacle Infotech Solutions



## Placement Partner

**tcs iON**

## Top Recruiters



amazon



## 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 -

Queens Mansion, Gate No. 4, 3rd Floor,  
Flat No. 40, 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