



**ARKA JAIN**  
**University**  
Jharkhand

**NAAC**  
**GRADE A**  
ACCREDITED UNIVERSITY

**AICTE-APPROVED**

**3-Year**

# Diploma in Engineering

**(POLYTECHNIC)**

**SCHOOL OF  
ENGINEERING & IT**



OF EXCELLENCE

**APPLY FOR**

**AJUCET 2026**



# Join Us ON YOUR JOURNEY *To Success!*

## ABOUT ARKA JAIN UNIVERSITY

ARKA JAIN University was established in the year 2017 by the Jharkhand State Legislature under **"The ARKA JAIN University Act"** and is recognized by UGC.

Located in the tribal district Seraikela-Kharsawan, it is the first state private university in the Kolhan region (comprising of three districts) of the state.

First **NAAC 'A'** Grade Accredited State Private University (in the First Cycle) in Bihar, Jharkhand & West Bengal.

The University has its root in the prestigious JAIN Group of Institutions, Bengaluru which has 77-plus educational institutions under its fold.

It is mentored by JAIN (Deemed-to-Be-University), Bengaluru, a NAAC A++ and NIRF Top-100 HEI.

The university has the necessary affiliations, recognitions and memberships from different bodies such as **AICTE, BCI, PCI, INC, JNRC, AIU, ASCO.**





1

### ILLUSTRIOUS LEGACY

ARKA JAIN University is part of the famed JAIN Group of Institutions, Bengaluru and mentored by JAIN (Deemed-to-be-University), Bengaluru

2

### WHAT EMBODIES OUR IDENTITY

NAAC-A Grade Accreditation, Academic Excellence, Diverse Program Options, Industry-ready Graduates – We have'em All!

3

### NAAC A GRADE

Accredited with A Grade by NAAC in the first cycle with a CGPA Score of 3.15 / 4.0

4

### 38TH BEST PRIVATE UNIVERSITY IN INDIA

in THE WEEK-Hansa Research Best Universities Survey 2025

5

### RECOGNIZED IN THE R WORLD INSTITUTIONAL RANKING - GREEN RANKINGS 2026

with the prestigious Titanium+ Band, under the category "Institution of Accelerated Sustainability Impact"

6

### ISO-CERTIFIED

ISO 21001:2018 Certified "Educational Organization Management System" University

7

### AIU MEMBER

Member of Association of Indian Universities

8

### 80+ MOUS

Learn from the best, network with the brightest

9

### ROBUST CAMPUS RECRUITMENT

₹ 23 LPA Highest Package, 3500+ Placements and 750+ Companies visited till date

### RAGGING-FREE CAMPUS

A ragging-free campus that fosters a safe, respectful, and welcoming environment for every student.

# How the Year Unfolds at

## AARAMBH

Beginning of Odd Semester Classes  
for the Non-First-Year Students



Welcome Day Function for  
First-year Students



## Induction-cum-Orientation

and Beginning of Classes  
for First-year Students



## Jain Premier League

Inter-school Annual T-20 Cricket  
Tournament



Beginning of Even Semester Classes  
(Except First Year)



## Aagaz

Annual Cultural  
Fest



## Shikhar

Odd Semester End-term  
Examination (First Year)



The Annual Entrepreneurial  
Conclave



Beginning of Even Semester Classes  
(First Year)



# ARKA JAIN University

## Roo-b-Roo

Fresher's Function for  
First-year Students



## Navotsav

Gandhi / Shastri Jayanti-  
cum-Navotsav Celebration Week



## Roshni

Annual Celebration  
of Light



## Carvaan

Annual Excursion  
Tour

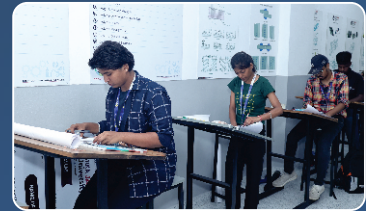


## Runbhoomi

Annual Sports  
Meet



Odd Semester End-term  
Examination (Except First Year)



## Holi Invasion

Annual Pre-Holi  
Bash



## Rukhsat

Farewell to Final  
Year Students



Even Semester End-term  
Examination



# TOP 5

REASONS TO BE A PART OF

## ARKA **JAIN** UNIVERSITY

**1** First NAAC 'A' Grade Accredited State Private University (in the First Cycle) in Bihar, Jharkhand & West Bengal.

.....

**2** Part of the JAIN Group of Institutions, Bengaluru; Mentored by NAAC A++ and NIRF-Top 100 JAIN (Deemed-to-be-University), Bengaluru

.....

**3** Member - Association of Indian Universities (AIU)

.....

**4** 80+ MOUs (International & National) with Corporate and Academic Partners

.....

**5** ISO 21001:2018 Certified "Educational Organization Management System" University

ERSITY



# DIPLOMA IN ENGINEERING (POLYTECHNIC)

The AJU School of Engineering & IT is committed to delivering quality technical education through a curriculum enriched with research, innovation, and strong industry collaboration—preparing students for future-ready careers.

The Diploma in Engineering (Polytechnic) at AJU is a 3-year, full-time program offered across four core disciplines, designed to provide students—post Class X, XII, or ITI—with a robust, job-oriented technical education. Blending theoretical foundations with practical application, the program features a dynamic mix of classroom learning, hands-on laboratory work, industry-driven workshops, seminars, assignments, and research opportunities. With a strong focus on skill development and real-world exposure through industrial visits and placement support, AJU ensures that students graduate industry-ready and innovation-capable.

## QUICK FACTS:

- **ELIGIBILITY FOR DIPLOMA IN ENGINEERING** (Mechanical Engineering, Electrical & Electronics Engineering, Computer Science & Engineering, Mechatronics Engineering) - Passed 10th Std. / SSC examination. Candidate should have a valid score card of entrance exam conducted by Jharkhand Combined Entrance Competitive Examination Board or AJU -Combined Entrance Test (AJUCET)

- **ELIGIBILITY FOR DIPLOMA IN ENGINEERING (LATERAL ENTRY)** (Mechanical Engineering, Electrical & Electronics Engineering, Computer Science & Engineering, Mechatronics Engineering) -

Passed 10+2 examination with Physics/ Mathematics / Chemistry/ Computer Science/Electronics/Information Technology/ Biology/Informatics Practices/ Biotechnology/ Technical Vocational subject/ Agriculture/ Engineering Graphics/ Business Studies/ Entrepreneurship. For **Mechanical Engineering**, Mandatory Subjects at 10+2 level - Physics, Chemistry, Maths. For **Mechatronics Engineering**, Mandatory Subjects at 10+2 level - Physics, Chemistry, Maths. For **Electrical & Electronics Engineering**, Mandatory Subject at 10+2 level - Physics, Maths. For **Computer Science and Engineering**, Mandatory Subject at 10+2 level - Physics, Maths.

OR



10th + (2 years ITI) shall be eligible for admission to Second Year Diploma Course(s) in any branch of Engineering & Technology. Candidate should have a valid score card of entrance exam conducted by Jharkhand Combined Entrance Competitive Examination Board or AJU -Combined Entrance Test (AJUCET)

- **Duration (Polytechnic):** 3 Years | 6 Semester & **Polytechnic (Lateral Entry):** 2 Years | 4 Semesters
- **Degree:** Diploma in Engineering awarded by ARKA JAIN University, Jharkhand

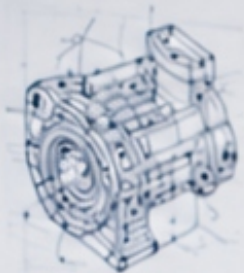
## WIDE SPECTRUM OF POLYTECHNIC SPECIALIZATIONS

<p><b>Mechanical Engineering (ME)</b></p>	<p><b>Learn by doing:</b> Gain hands-on expertise through workshops, advanced labs, and industry-integrated projects—equipping you with practical skills that set you apart in today’s job market. Mechanical Engineering blends the principles of physics and material science to design, analyze, manufacture, and maintain mechanical systems across diverse industries.</p>
<p><b>Mechatronics Engineering</b></p>	<p><b>High-demand, high-tech:</b> A Diploma in Mechatronics Engineering equips you with interdisciplinary skills in mechanical systems, electronics, robotics, and automation—preparing you for high-demand careers in advanced manufacturing and intelligent systems, putting you at the forefront of innovation in a rapidly evolving technological landscape.</p>
<p><b>Computer Science &amp; Engineering (CSE)</b></p>	<p><b>Become a tech problem solver:</b> Master coding languages, programming principles, and real-world problem-solving through hands-on projects and lab work. Computer Science Engineering equips you with the skills to design and develop innovative hardware and software solutions, with a focus on cloud computing and emerging technologies.</p>
<p><b>Electrical &amp; Electronics Engineering (EEE)</b></p>	<p><b>Design, build, innovate:</b> Explore circuits, motors, controls, and embedded systems—paving the way for dynamic careers in Electrical &amp; Electronics Engineering. This discipline focuses on the application of electricity, electronics, and electromagnetism to power modern innovations and intelligent systems.</p>



# MECHANICAL ENGINEERING

DESIGN • ANALYZE • MANUFACTURE • INNOVATE



## SAFETY FIRST

- 1 Wear Safety Glasses
- 2 Keep Machine Guards in Place
- 3 No Loose Clothing / Hair
- 4 Do Not Operate Without Permission
- 5 Keep Work Area Clean



# DIPLOMA

## IN MECHANICAL ENGINEERING

### INTRODUCTION

Diploma in Mechanical Engineering is a 3-year Diploma course that can be pursued by students after class 10th, 12th or ITI. Mechanical Engineering is the branch of engineering concerned with the design, manufacture, installation, and operation of engines and machines and with manufacturing processes. It is particularly concerned with forces and motion.

Mechanical engineering courses include automobile engineering, manufacturing engineering, power plant engineering, thermal engineering, and mechatronics engineering, which is a combination of electrical, computer, and mechanical engineering.

### DESIGN AND CAD/CAM:

- AutoCAD
- CATIA
- Creo Parametric
- SolidWorks
- CNC Programming

### ANALYSIS & SIMULATION:

- Finite Element Analysis (FEA)
- Computational Fluid Dynamics (CFD)

### MANUFACTURING & PRODUCTION:

- Robotics and Automation
- Lean Manufacturing
- Six Sigma
- Industrial Safety

### OTHER VALUABLE COURSES:

- HVAC Systems
- Refrigeration and Air Conditioning
- Renewable Energy
- Project Management



# HIGHLIGHTS OF DIPLOMA IN MECHANICAL ENGINEERING

A Diploma in Mechanical Engineering program is designed to provide students with a strong foundation in terms of the principles and practices of mechanical engineering. Here are some key program highlights:

## CORE CURRICULUM:

- **Fundamental Concepts:** The program covers essential topics like mechanics, thermodynamics, materials science, manufacturing processes, and engineering design.
- **Technical Skills:** Students gain proficiency in using CAD software, operating machinery, and conducting experiments.
- **Practical Training:** Emphasis is placed on hands-on learning through workshops, labs, and projects.

## SPECIALIZED AREAS:

- **Manufacturing:** Students learn about various manufacturing processes, automation, and quality control.
- **Design:** The diploma focuses on developing design skills using CAD software and applying engineering principles.
- **Maintenance:** Students gain knowledge of maintenance procedures, troubleshooting, and repair of mechanical systems.

## EXPERIENTIAL LEARNING:

- **Industry Visits:** Students get opportunities to visit manufacturing plants and industries to gain real-world exposure.
- **Internships:** Many programs include internships that allow students to work in companies and apply their skills.
- **Projects:** Students work on individual and group projects to design, build, and test mechanical systems.

## UNIQUE COURSES

- Advanced Design & Analysis Courses
- Smart Manufacturing & Industry 4.0
- Automotive & Aerospace Specializations
- Energy & Sustainable Engineering
- Specialized Industrial & Management Courses
- Software & Programming for Mechanical Engineers

## HIGHER STUDIES AFTER DIPLOMA IN MECHANICAL ENGINEERING

- If you want better career growth, you can continue with further studies: B. Tech/B.E. in Mechanical Engineering – Direct entry to the 2nd year via lateral entry.
- AMIE (Associate Member of the Institution of Engineers) – Equivalent to a B. Tech degree.
- Short-Term Certification Courses – Specializing in CNC, CAD/CAM, HVAC, Automation, Robotics, etc.

# CAREER OPPORTUNITIES

## CORE MECHANICAL ENGINEERING JOBS (PRIVATE SECTOR)

### (A) DESIGN & DRAFTING JOBS

- CAD Technician – Using software like AutoCAD, SolidWorks, and CATIA.
- Mechanical Draughtsman – Preparing technical drawings for manufacturing.

### (B) MANUFACTURING & PRODUCTION JOBS

- Production Supervisor – Managing the production process in factories.
- Quality Control Inspector – Ensuring products meet industry standards.
- Machine Operator – Handling CNC machines and manufacturing tools.
- Welding & Fabrication Technician – Working in metal industries and construction.

### (C) MAINTENANCE & SERVICE JOBS

- Maintenance Technician – Repairing and maintaining machines in industries.
- HVAC Technician – Installing and servicing heating, ventilation, and air conditioning systems.
- Automobile Technician – Working in automobile service centers and manufacturing plants.

### (D) OIL & GAS, ENERGY, AND CONSTRUCTION JOBS

- Piping Engineer Assistant – Working in oil refineries and construction.
- Power Plant Technician – Maintaining turbines and boilers in power plants.

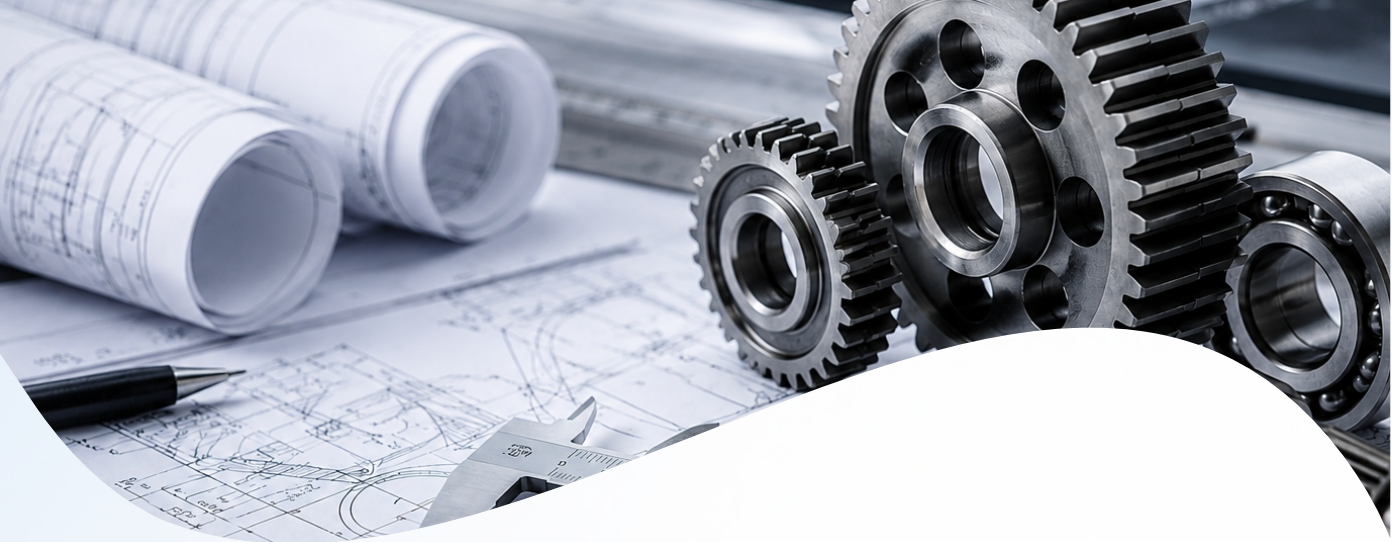
## GOVERNMENT JOBS AFTER DIPLOMA IN MECHANICAL ENGINEERING

- Public Sector Undertakings (PSUs)
- Defence & Police Jobs
- Other Government Jobs

## NON-CORE CAREER OPTIONS

**Beyond the domain of Mechanical Engineering, the following options can be chosen from:**

- Data Science & AI for Engineers – Learn Python, MATLAB, and AI applications.
- Logistics & Supply Chain Management – Jobs in manufacturing & e-commerce.
- Sales & Marketing in Industrial Products – Working for engineering product companies.
- Banking & Government Clerk Jobs – Appear for SSC, IBPS, and state-level exams.
- Entrepreneurship – Start a business in manufacturing, fabrication, or servicing.



# PROGRAM STRUCTURE

## DIPLOMA IN MECHANICAL ENGINEERING

### SEMESTER I

#### GROUP A

Communication Skills in English
Mathematics-I
Applied Physics
Applied Chemistry
Sports and Yoga
<b>PRACTICAL</b>
Engineering Workshop Practice Laboratory
Applied Physics Laboratory
Applied Chemistry Laboratory
Communication Skills in English Laboratory

#### GROUP B

Mathematics -I
Fundamentals of Electrical & Electronics Engg.
Introduction to IT system
Engineering Mechanics
Environmental Science
<b>PRACTICAL</b>
Fundamentals of electrical & electronics Engg. Laboratory
Introduction to IT system Laboratory
Engineering Mechanics Laboratory
Engineering Graphics

### SEMESTER II

#### GROUP A

Mathematics -II
Fundamentals of Electrical & Electronics Engg.
Introduction to IT system
Engineering Mechanics
Environmental Science
<b>PRACTICAL</b>
Fundamentals of electrical & electronics Engg. Laboratory
Introduction to IT system Laboratory
Engineering Mechanics Laboratory
Engineering Graphics

#### GROUP B

Communication Skills in English
Mathematics-II
Applied Physics
Applied Chemistry
Sports and Yoga
<b>PRACTICAL</b>
Engineering Workshop Practice Laboratory
Applied Physics Laboratory
Applied Chemistry Laboratory
Communication Skills in English Laboratory

### SEMESTER III

Mechanics of solids
Thermal Engineering
Engineering Materials
Manufacturing Process
Fluid Mechanics & Hydraulic Machinery
<b>PRACTICAL</b>
Mechanics of Solids Laboratory
Thermal Engineering Laboratory
Manufacturing Process Laboratory
Fluid Mechanics & Hydraulic Machinery Laboratory
Summer Internship-I(3-4 Weeks)

### SEMESTER IV

Fluid Power Engineering
Product Design and Development
Machine Tool Technology
Measurements & Metrology
Heat & Mass Transfer
Essence of Indian Knowledge Tradition
<b>PRACTICAL</b>
Heat & Mass Transfer Laboratory
Machine Tool Technology Laboratory
Measurements & Metrology Laboratory
Machine Drawing Laboratory

### SEMESTER V

Theory of Machine
Automation and Robotics
Heating, Ventilation and Air Conditioning (HVAC)
Professional Elective Course-1
Open Elective Course-I
Indian constitution
<b>PRACTICAL</b>
Theory of Machine Laboratory
Solid works Laboratory
Summer Internship-II (4-6 Weeks)
Major Project-I (Project to be carried over to next semester)

### SEMESTER VI

Industrial Engineering & Management
Design of Machine Elements
Program Elective II
Open Elective II
Entrepreneurship and Start-ups
<b>PRACTICAL</b>
Major Project-II
Extra- Curricular/ Co-Curricular Activity

#### PROGRAM ELECTIVE I

Power Plant Engineering
E-Mobility
CAD/CAM
Installation & Maintenance Engineering
Machine Tool Design
Computer integrated manufacturing
Mechatronics
3 D Printing

#### PROGRAM ELECTIVE II

Alt. Source of Energy
Additive Manufacturing
Automation and Industry 4.0
Hydrogen and alternative fuel
Quality control
Tool and Die Design
CNC Technology

#### OPEN ELECTIVE I

Supply chain management
Environmental science and pollution control
Industrial IOT
Cyber security and IPR
Industrial Psychology
Organisational Behaviour

#### OPEN ELECTIVE II

Energy Conservation and Management
Process Planning and Cost Estimation
Total Quality Management
Entrepreneurship and E-Business
Operations Research
Circular Economy

# MECHATRONICS



MECHANICAL



ELECTRICAL



ELECTRONICS



COMPUTER

## SAFETY FIRST

- Wear Safety Glasses
- Follow Machine Rules
- No Loose Clothing
- Do Not Operate Without Permission



AJU

ABUJAH UNIVERSITY

# DIPLOMA

## IN MECHATRONICS ENGINEERING

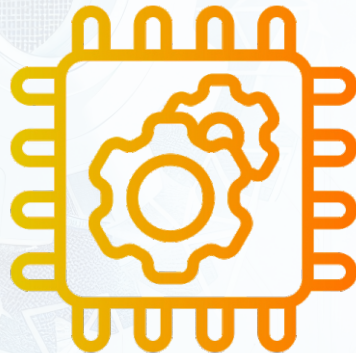
### INTRODUCTION

Diploma in Mechatronics Engineering is a 3 years Diploma course that can be pursued by students who have passed 10th, 12th or ITI. Mechatronics Engineering, which is a newer branch of engineering in comparison to mechanical or electronics engineering, has its origins from these branches only.

The curriculum of mechatronics engineering comprises of a lot of elements from Mechanical, Electronics, Computer Science and Control Engineering. A mechatronics engineer uses principles of electronics, computer science, mechanical to develop systems, machine and solutions that can be applied to improve productivity and efficiency of process/production. Systems developed by them have wide applicability in industries.

### VALUE ADDED COURSE

- Robotics and Automation
- Embedded Systems and Programming
- CAD and Simulation
- CNC Machining and Programming
- 3D Printing
- Data Science and Machine Learning
- Other Relevant Courses
- Industrial Internet of Things (IIoT)
- Cyber-Physical Systems (CPS)



# HIGHLIGHTS OF DIPLOMA IN MECHATRONICS ENGINEERING

A Diploma in Mechatronics Engineering provides students with a strong foundation in the principles and practices of Mechanical and Electronics engineering. Here are some key program highlights:

## CORE CURRICULUM:

- **Fundamental Concepts:** The diploma covers essential topics like mechanics, thermodynamics, materials science, manufacturing processes, and engineering design.
- **Technical Skills:** Students gain proficiency in using CAD software, operating machinery, and conducting experiments.
- **Practical Training:** Emphasis is placed on hands-on learning through workshops, labs, and projects.

## SPECIALIZED AREAS:

- **Robotics:** Students learn about various manufacturing processes, automation, and quality control.
- **Design and Simulation:** The diploma focuses on developing design skills using CAD software and applying engineering principles.
- **Automation:** Students gain knowledge of maintenance procedures, troubleshooting, and repair of mechanical systems.

## EXPERIENTIAL LEARNING:

- **Industry Visits:** Students get opportunities to visit manufacturing plants and industries to gain real-world exposure.
- **Internships:** Internships allow students to work in companies and apply their skills.
- **Projects:** Students work on individual and group projects to design, build, and test systems.

## UNIQUE COURSES

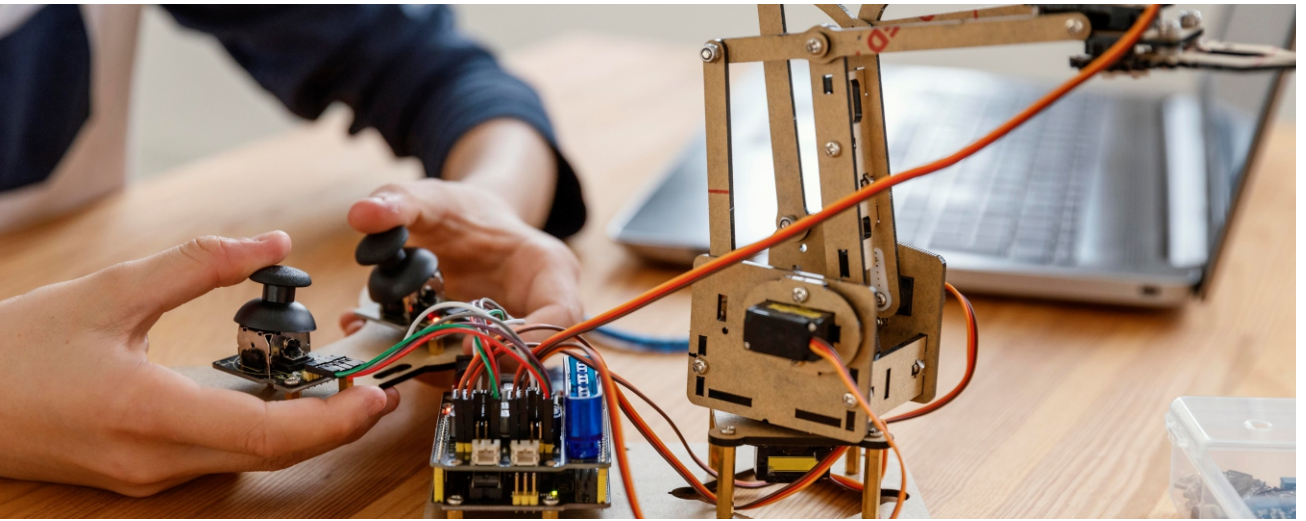
- Robotics design and simulation
- PLC & PCB Design and Fabrication
- Mechatronics System Design
- Automation and Industry 4.0
- Additive manufacturing
- Advanced Manufacturing Systems

## HIGHER STUDIES AFTER DIPLOMA IN MECHATRONICS ENGINEERING

- **Further studies:** B. Tech/ B.E. in Mechatronics Engineering – Direct entry to the 2nd year via lateral entry.
- **AMIE (Associate Member of the Institution of Engineers)** – Equivalent to a B. Tech degree.
- **Short-Term Certification Courses** – Specializing in CNC, CAD/CAM, HVAC, Automation, Robotics, etc.

## GOVERNMENT JOBS AFTER DIPLOMA IN MECHATRONICS ENGINEERING

- **Public Sector Undertakings (PSUs)** – With Exams



## CAREER OPPORTUNITIES

### CORE MECHATRONICS ENGINEERING JOBS (PRIVATE SECTOR)

#### (A) DESIGN & SIMULATION

- CAD Technician – Using software like AutoCAD, SolidWorks, and CATIA.
- Mechanical Draughtsman – Preparing technical drawings for manufacturing.

#### (B) ROBOTICS ENGINEER

#### (C) MAINTENANCE & SERVICE JOBS

- Maintenance Technician – Repairing and maintaining machines in industries.
- Automobile Technician – Working in automobile service centers and manufacturing plants.

### NON-CORE CAREER OPTIONS

#### Beyond Mechatronics Engineering:

- Data Science & AI for Engineers – Learn Python, MATLAB, and AI applications.
- Logistics & Supply Chain Management – Jobs in manufacturing & e-commerce.
- Sales & Marketing in Industrial Products – Working for engineering product companies.
- Banking & Government Jobs – Appear for SSC, IBPS, and state-level exams.
- Entrepreneurship – Start a business in manufacturing, fabrication, or servicing.

### LABS

- PCB Design and Fabrication Laboratory
- Robotics & Industrial Automation Laboratory
- Programmable Logic Controller Laboratory
- Analogue and Digital circuits Laboratory
- Fluid Power Engineering & Practice Laboratory



## **PROGRAM STRUCTURE**

### **DIPLOMA IN MECHATRONICS ENGINEERING**

#### **SEMESTER I**

##### **GROUP-A**

Communication Skills in English
Mathematics-I
Applied Physics
Applied Chemistry
Sports and Yoga
<b>PRACTICAL</b>
Engineering Workshop Practice Laboratory
Applied Physics Laboratory
Applied Chemistry Laboratory
Communication Skills in English Laboratory

##### **GROUP-B**

Mathematics -I
Fundamentals of Electrical & Electronics Engg.
Introduction to IT system
Engineering Mechanics
Environmental Science
<b>PRACTICAL</b>
Fundamentals of electrical & electronics Engg. Laboratory
Introduction to IT system Laboratory
Engineering Mechanics Laboratory
Engineering Graphics

#### **SEMESTER II**

##### **GROUP-A**

Mathematics -II
Fundamentals of Electrical & Electronics Engg.
Introduction to IT system
Engineering Mechanics
Environmental Science
<b>PRACTICAL</b>
Fundamentals of electrical & electronics Engg. Laboratory
Introduction to IT system Laboratory
Engineering Mechanics Laboratory
Engineering Graphics

##### **GROUP-B**

Communication Skills in English
Mathematics-II
Applied Physics
Applied Chemistry
Sports and Yoga
<b>PRACTICAL</b>
Engineering Workshop Practice Laboratory
Applied Physics Laboratory
Applied Chemistry Laboratory
Communication Skills in English Laboratory

### SEMESTER III

Mechanics and Metrology
Fluid Power Engineering & Practice
Theory of Machines
Analogue and Digital Circuits
Control System
<b>PRACTICAL</b>
Mechanics and Metrology Laboratory
Fluid Power Engineering & Practice Laboratory
Theory of Machines Laboratory
Analogue and Digital circuits Laboratory
Summer Internship-I (3-4 Weeks)

### SEMESTER IV

Microprocessor and Microcontroller
Power Electronics
Manufacturing Process
Industrial Automation
Sensors and Transducers
Essence of Indian Knowledge Tradition
<b>PRACTICAL</b>
Manufacturing Process Laboratory
PCB Design and Fabrication Laboratory
Microprocessor and Microcontroller Laboratory
Power Electronics Laboratory

### SEMESTER V

Programmable Logic Controller
Robotics
Embedded system & IoT
Program Elective I
Open Elective I
Indian constitution
<b>PRACTICAL</b>
Programmable Logic Controller Laboratory
Robotics & Industrial Automation Laboratory
Summer Internship-II(4-6 Weeks)
Major Project-I (Project to be carried over to next semester)

### SEMESTER VI

Industrial Equipment Maintenance
Additive manufacturing
Program Elective II
Open Elective II
Entrepreneurship and Start-ups
<b>PRACTICAL</b>
Major Project-II
Extra- Curricular/ Co-Curricular Activity

#### PROGRAM ELECTIVE I

Advanced Manufacturing Systems
Computer Integrated Manufacturing
Advanced Control Systems
Mechatronics System Design
E-Mobility

#### PROGRAM ELECTIVE II

Embedded System & IOT
Artificial Intelligence
Process Control
Measurement and Instrumentation
Power System Operation and Control
Automation and Industry 4.0

#### OPEN ELECTIVE I

Cyber Security
Fundamentals of Management
Computer Programming – Python and Data Base
Product Design and Development
Installation & Maintenance Engineering
Machine Tool Design
Organisational Behaviour

#### OPEN ELECTIVE II

Product Design and Developments
Operations Research
Applied Mechanics
Energy Efficiency and Audit
Mobile communication
Process Planning and Cost Estimation
Hydrogen and alternative fuel

# COMPUTER SCIENCE & ENGINEERING



STRUCTURES



ALGORITHMS



DATABASES



NETWORKS

CODE.  
BUILD.  
INNOVATE.



# DIPLOMA

## IN COMPUTER SCIENCE & ENGINEERING

### INTRODUCTION

The Diploma in Computer Science and Engineering (CSE) is a 3-year full-time program designed to equip students with fundamental and advanced knowledge in computer systems, software development, networking, and emerging technologies.

This course is open to students who have completed Class 10th, 12th or ITI and aim to build a solid foundation in programming, data structures, cloud computing, cybersecurity, artificial intelligence, and machine learning.

Throughout the duration of the diploma, students will gain hands-on experience through laboratories, projects, and industry-relevant internships, making them job-ready and prepared for the ever-evolving IT industry.

### STAY AHEAD WITH VALUE-ADDED COURSES

To ensure that the CSE Diploma students stay ahead of technological advancements, the Department offers a variety of value-added courses. These courses supplement the core curriculum and provide students with knowledge in emerging and futuristic technologies, preparing them for cutting-edge careers. Some of these value-added courses include:

- Artificial Intelligence (AI) and Machine Learning (ML)
- Data Science and Big Data Analytics
- Cloud Computing
- Block chain Technology
- Cyber security and Ethical Hacking
- Internet of Things (IoT)
- Robotics and Automation
- Mobile App Development
- DevOps and Continuous Integration/Continuous Deployment (CI/CD)
- Augmented Reality (AR) and Virtual Reality (VR)
- Software Development Methodologies (Agile, Scrum)
- Ethical AI and Responsible Technology
- Advanced Database Systems

# HIGHLIGHTS OF DIPLOMA IN COMPUTER SCIENCE & ENGINEERING

A Diploma in Computer Science and Engineering provides students with a strong theoretical foundation and practical skills essential for a career in the IT industry. Below are the key highlights of the program:

## CORE CURRICULUM:

- **Programming & Software Development:** Gain expertise in Python, C, Java, and Web Technologies.
- **Data Structures & Algorithms:** Learn fundamental and advanced data structures, algorithm design, and problem-solving techniques.
- **Database Management Systems (DBMS):** Understand SQL, NoSQL, and database optimization techniques.
- **Operating Systems & Computer Networks:** Learn about Linux, Windows OS, networking protocols, and cloud computing.
- **Cybersecurity & Ethical Hacking:** Explore security protocols, encryption, network security, and ethical hacking practices.
- **Artificial Intelligence & Machine Learning:** Hands-on experience with AI/ML models, deep learning, and natural language processing.

## TECHNICAL SKILLS DEVELOPMENT:

- **Software Engineering Practices:** Learn Agile methodologies, DevOps, and version control with Git & GitHub.
- **Web & Mobile App Development:** Master frontend (HTML, CSS, JavaScript) and backend (Node.js, React, Flutter, and Android development).
- **Cloud Computing & Virtualization:** Work with AWS, Google Cloud, and Microsoft Azure.
- **Embedded Systems & IoT:** Learn about IoT devices, microcontrollers, and edge computing applications.

## EXPERIENTIAL LEARNING:

- **Industry Visits:** Exposure to leading tech companies, startups, and networking opportunities.
- **Internships & Live Projects:** Gain practical experience with internships and industry-sponsored projects.
- **Workshops & Hackathons:** Participate in coding bootcamps, hackathons, and innovation challenges.
- **Capstone Project:** Develop a real-world IT solution as part of the final-year project.

## UNIQUE COURSES

To stay ahead in the industry, this diploma offers specialized courses:

- Full-Stack Development
- Competitive Programming & Problem-Solving
- Artificial Intelligence & Deep Learning
- Cybersecurity & Ethical Hacking
- AWS, Azure, Google Cloud Certification Courses
- Data Visualization & Business Intelligence

These specialized courses help students build domain expertise and enhance job prospects in top technical firms



## CAREER OPPORTUNITIES

A diploma in CSE opens up diverse career paths in the IT sector, software development, cybersecurity, and data science. Some key career opportunities include:

### CORE IT JOBS

- Software Developer – Design, develop, and maintain software applications.
- Web Developer – Create and manage websites using HTML, CSS, JavaScript, and frameworks.
- Database Administrator – Manage and optimize databases for businesses.
- Network Engineer – Configure and secure network infrastructures.
- Cybersecurity Analyst – Protect organizations from cyber threats.
- Cloud Computing Engineer – Work with cloud services like AWS, Google Cloud, and Azure.
- Mobile App Developer – Build Android and iOS applications.

### GOVERNMENT JOBS

- Public Sector Undertakings (PSUs) – Opportunities in BHEL, ONGC, ISRO, DRDO, and more.
- Railways (RRB JE, ALP) – Junior Engineer roles in Indian Railways.
- Defense Sector – Roles in the Indian Army, Navy, and Air Force under technical entry schemes.
- Banking & Government Exams – Appear for SSC, IBPS, and other state-level competitive exams.

### HIGHER STUDIES AFTER DIPLOMA

- B. Tech/B.E. in Computer Science & Engineering (Direct entry to 2nd year via lateral entry).
- AMIE (Associate Member of the Institution of Engineers) – Equivalent to a B. Tech degree.
- Specialized Short-Term Certifications – AI, Cybersecurity, Cloud Computing, Full-Stack Development, etc.



## PROGRAM STRUCTURE

### DIPLOMA IN COMPUTER SCIENCE AND ENGINEERING

#### SEMESTER I

##### GROUP-A

Communication Skills in English
Mathematics-I
Applied Physics
Applied Chemistry
Sports and Yoga
<b>PRACTICAL</b>
Communication Skills in English Laboratory
Applied Physics Laboratory
Applied Chemistry Laboratory
Engineering Workshop Practice Laboratory

##### GROUP-B

Mathematics -I
Fundamentals of Electrical & Electronics Engg.
Introduction to IT system
Engineering Mechanics
Environmental Science
<b>PRACTICAL</b>
Fundamentals of electrical & electronics Engg. Laboratory
Introduction to IT system Laboratory
Engineering Mechanics Laboratory
Engineering Graphics

#### SEMESTER II

##### GROUP-I

Mathematics -II
Fundamentals of Electrical & Electronics Engg.
Introduction to IT system
Engineering Mechanics
Environmental Science
<b>PRACTICAL</b>
Fundamentals of electrical & electronics Engg. Laboratory
Introduction to IT system Laboratory
Engineering Mechanics Laboratory
Engineering Graphics

##### GROUP-II

Communication Skills in English
Mathematics-II
Applied Physics
Applied Chemistry
Sports and Yoga
<b>PRACTICAL</b>
Engineering Workshop Practice Laboratory
Applied Physics Laboratory
Applied Chemistry Laboratory
Communication Skills in English Laboratory

### SEMESTER III

Computer Programming
Scripting Language (Python)
Introduction to DBMS
Digital Logic Design
OOAD Through UML
<b>PRACTICAL</b>
Computer Programming Laboratory
Scripting Languages (Python) Laboratory
Introduction to DBMS Laboratory
OAD Through UML Laboratory
Summer Internship-I (3-4 Weeks)

### SEMESTER VI

Data Warehousing and Mining
E-Commerce Technology
Program Elective II
Open Elective II
Entrepreneurship and Startups
<b>PRACTICAL</b>
Major Project-II
Extra- Curricular/ Co-Curricular Activity

### SEMESTER IV

Computer hardware & networking
Operating Systems
Data Structures Through C
Software Engineering
Internet of Things
Essence of Indian Knowledge Tradition
<b>PRACTICAL</b>
Computer hardware & networking Laboratory
Operating Systems Laboratory
Data Structures Through C Laboratory
Internet of Things Laboratory

### PROGRAM ELECTIVE I

Mobile Application Development
Natural Language Processing
Java Programming
Data Visualization Techniques
Data Analytics using R

### PROGRAM ELECTIVE II

Software Process & Project Management
Information Security
Ad hoc & Sensor Networks
Human Computer Interaction
Data Communication and Computer Network

### SEMESTER V

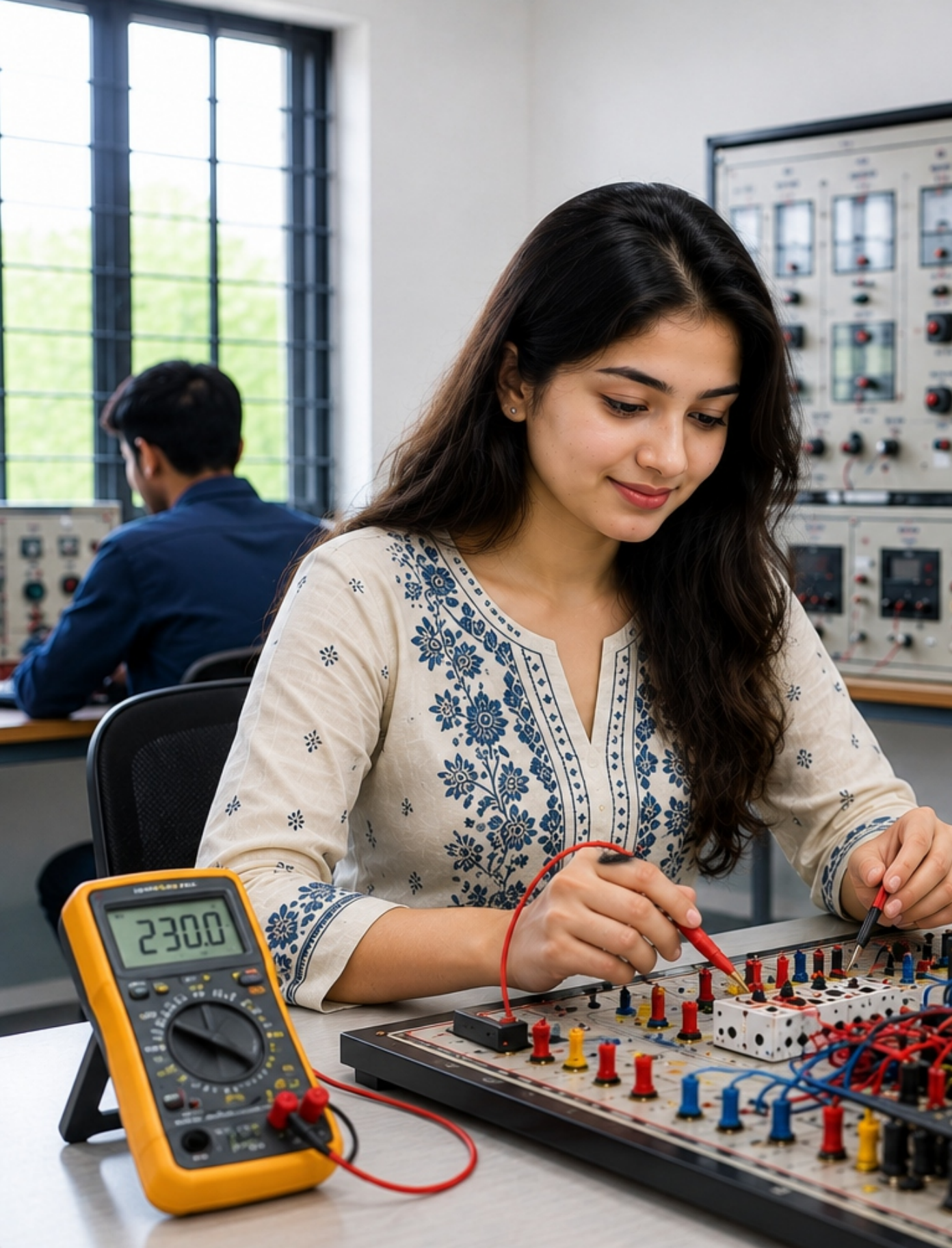
Introduction to e-Governance
Web Technologies
Introduction to AI & ML
Program Elective I
Open Elective I
Indian constitution
<b>PRACTICAL</b>
Web Technologies Laboratory
Program Elective-1 Laboratory
Summer Internship-II (4-6 Weeks)
Major Project-I (Project to be carried over to next semester)

### OPEN ELECTIVE I

Software Testing Methodology
GIS & Remote Sensing
Cognitive Computing
Cyber Forensics
Organisational Behaviour

### OPEN ELECTIVE II

ICT( Information and Communication Technology)
Cloud Computing
Parallel Computing
Privacy Preserving Data Publishing
Expert Systems



# DIPLOMA

## IN ELECTRICAL & ELECTRONICS ENGINEERING

### INTRODUCTION

The Diploma in Electrical & Electronics Engineering (EEE) is a three-year technical program designed to provide students with fundamental knowledge and practical skills in electrical systems, electronics, and power management. This course is open to students who have completed Class 10th, 12th or ITI.

Diploma in EEE prepares students for careers in industries such as power generation, automation, telecommunications, and electrical maintenance.

### STAY AHEAD WITH VALUE-ADDED COURSES

To complement the core curriculum, recent and futuristic value-added courses are offered, ensuring that students remain at the forefront of industry trends. These include:

- Industrial Automation & PLC Programming
- Electrical CAD (Computer-Aided Design)
- Renewable Energy Systems
- Electric Vehicle (EV) Technology
- Internet of Things (IoT) for Electrical Applications
- Embedded Systems & Microcontroller Programming
- Electrical Safety & Energy Audit
- High Voltage Engineering & Testing
- Drone Technology & Wireless Communication
- Robotics & Automation



# HIGHLIGHTS OF DIPLOMA IN ELECTRICAL AND ELECTRONICS ENGINEERING

- Industry-Focused Curriculum – Covers core electrical concepts, power systems, electronics, and automation.
- Hands-on Training – Practical exposure in electrical wiring, circuit design, and industrial automation.
- Modern Laboratories – Equipped with PLC, microcontrollers, power electronics, and electrical machines.
- Internships & Industrial Visits – Real-world experience in power plants, manufacturing units, and R&D centers.
- Skill Development – Training in Electrical CAD, PLC programming, IoT, and Renewable Energy Systems.
- Value-Added Certifications – Options for Electric Vehicles, Robotics, Energy Auditing, and High Voltage Systems.
- Career-Oriented Approach – Strong placement support in power generation, automation, and electrical industries.
- Higher Education Pathway – Direct entry into B. Tech/ B.E. in Electrical & Electronics Engineering.

## CAREER OPPORTUNITIES

### CORE ELECTRICAL & POWER SECTOR

- Electrical Technician – Maintenance & troubleshooting of electrical systems
- Power Plant Operator – Managing and monitoring power generation
- Substation Technician – Working in electrical substations & grid management
- Energy Auditor – Assessing and optimizing power consumption

### AUTOMOTIVE & ELECTRIC VEHICLE (EV) INDUSTRY

- EV Charging Infrastructure Technician – Setting up & maintaining EV charging stations
- Battery Management System (BMS) Engineer – Working on electric vehicle batteries
- Automotive Electrical Technician – Handling vehicle electronics & wiring

### ELECTRONICS & COMMUNICATION SECTOR

- Embedded System Technician – Working with microcontrollers & IoT
- Telecom Technician – Maintenance of communication networks
- Instrumentation Engineer – Handling sensors & automation in industries

## UNIQUE COURSES

- Electric Vehicle (EV) Technology
- Renewable Energy & Smart Grid Technology
- Industrial Automation & Robotics
- IoT & Embedded Systems for Electrical Applications
- High Voltage Engineering & Power Transmission
- Electrical Maintenance & Troubleshooting

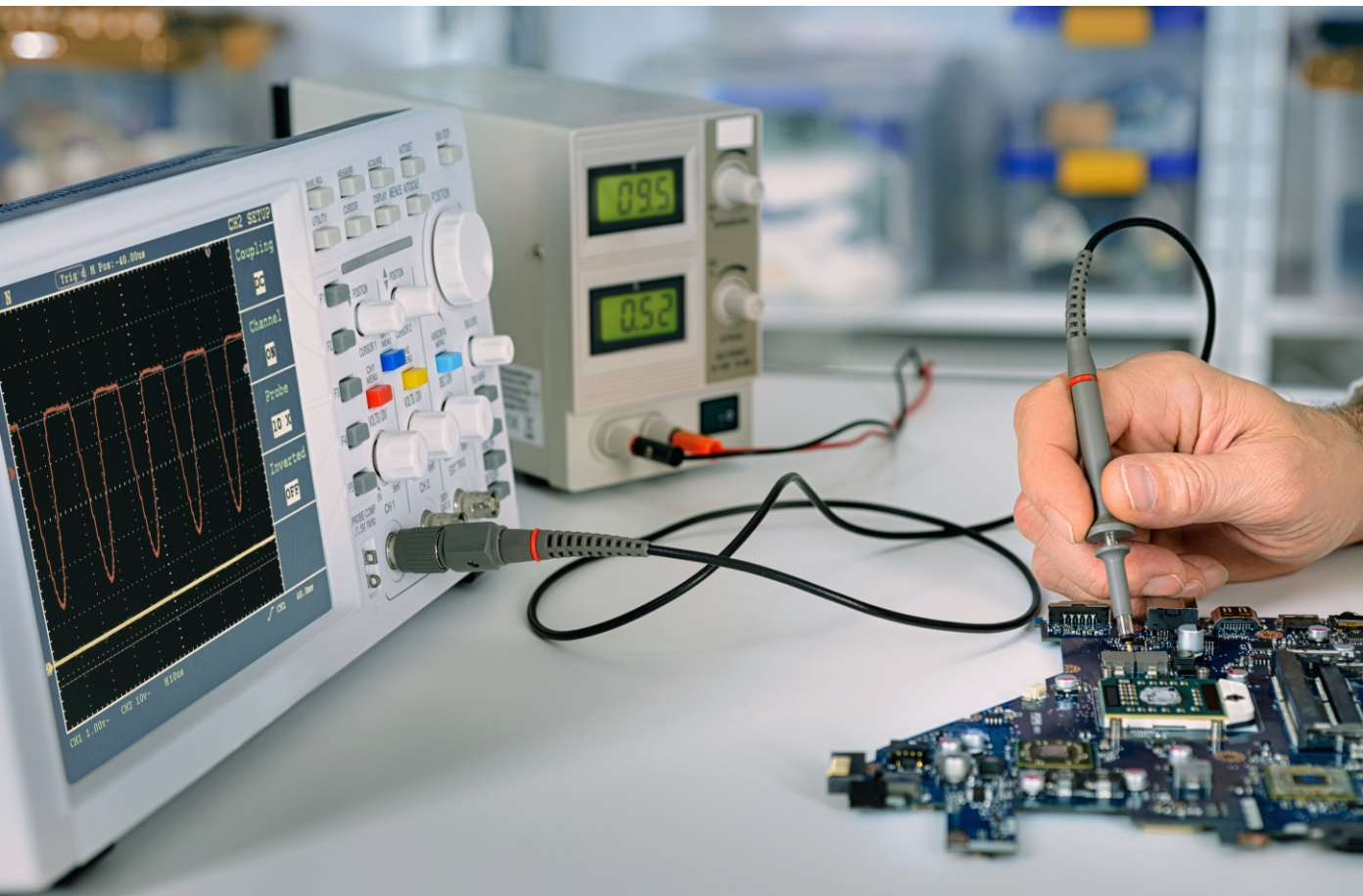
## CONSTRUCTION & INFRASTRUCTURE IT & NETWORKING SECTOR

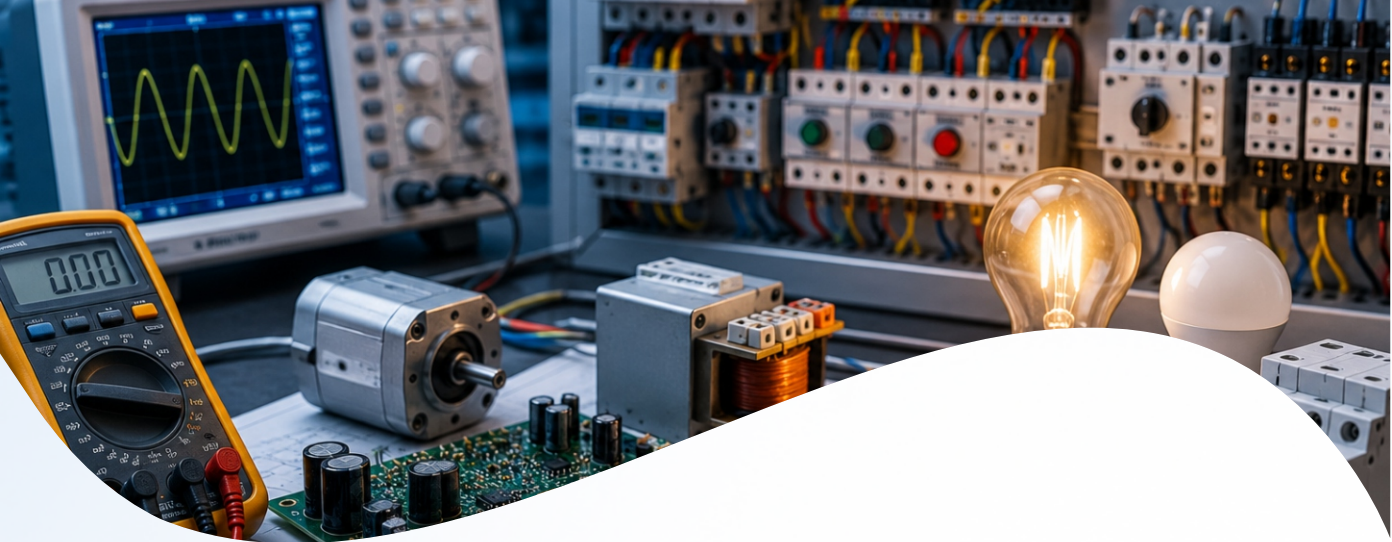
### GOVERNMENT JOB OPPORTUNITIES

- Power & Energy Sector
- Railways & Metro Rail Jobs
- Public Works & Infrastructure (PWD & CPWD)
- Defense & Security Forces
- Public Sector Undertakings (PSUs)

### HIGHER STUDIES & ENTREPRENEURSHIP

- Further Studies:
- B. Tech/ B. E in Electrical & Electronics Engineering
- Specialization in Power Systems, Renewable Energy, or Automation
- Start Your Own Business





## PROGRAM STRUCTURE

### DIPLOMA IN ELECTRICAL & ELECTRONICS ENGINEERING

#### SEMESTER I

##### GROUP-A

Communication Skills in English
Mathematics-I
Applied Physics
Applied Chemistry
Sports and Yoga
<b>PRACTICAL</b>
Engineering Workshop Practice Laboratory
Applied Physics Laboratory
Applied Chemistry Laboratory
Communication Skills in English Laboratory

##### GROUP-B

Mathematics -I
Fundamentals of Electrical & Electronics Engg.
Introduction to IT system
Engineering Mechanics
Environmental Science
<b>PRACTICAL</b>
Fundamentals of electrical & electronics Engg. Laboratory
Introduction to IT system Laboratory
Engineering Mechanics Laboratory
Engineering Graphics

#### SEMESTER II

##### GROUP-A

Mathematics -II
Fundamentals of Electrical & Electronics Engg.
Introduction to IT system
Engineering Mechanics
Environmental Science
<b>PRACTICAL</b>
Fundamentals of electrical & electronics Engg. Laboratory
Introduction to IT system Laboratory
Engineering Mechanics Laboratory
Engineering Graphics

##### GROUP-B

Communication Skills in English
Mathematics-II
Applied Physics
Applied Chemistry
Sports and Yoga
<b>PRACTICAL</b>
Engineering Workshop Practice Laboratory
Applied Physics Laboratory
Applied Chemistry Laboratory
Communication Skills in English Laboratory

### SEMESTER III

Network Theory and Analysis
Electrical Machine I
Electrical and Electronics Measurement
Analog Electronics
Generation, Transmission and Distribution
<b>PRACTICAL</b>
Network Theory and Analysis Laboratory
Electrical and Electronics Measurement Laboratory
Electrical Machine I Laboratory
MATLAB
Summer Internship-I (3-4 Weeks)

### SEMESTER IV

Digital Electronics
Power System
Switchgear and Protection
Control System
Electrical Machine II
Essence of Indian Knowledge Tradition
<b>PRACTICAL</b>
Digital Electronics Laboratory
Switchgear and Protection Laboratory
Electrical Machine II Laboratory
Control System Laboratory

### SEMESTER V

Microprocessor & Microcontroller
Fundamentals of Power Electronics
Electric Traction
Professional Elective Course I
Open Elective Course I
Indian constitution
<b>PRACTICAL</b>
Microprocessor & Microcontroller Laboratory
Fundamentals of Power Electronics Laboratory
Summer Internship-II(4-6 Weeks)
Major Project-I (Project to be carried over to next semester)

### SEMESTER VI

Electrical Estimation & Costing
Entrepreneurship and Start -ups
Professional Elective Course-II
Open Elective Course II
Electrical Utility Engineering
<b>PRACTICAL</b>
Extra- Curricular/ Co-Curricular Activity
Major Project-II

#### PROGRAM ELECTIVE I

Electric Vehicles and its Charging Infrastructure
Electrical Testing & Commissioning
Industrial Drives
PLC & SCADA
Mobile communication

#### PROGRAM ELECTIVE II

Energy Efficiency and Audit
Industrial Instrumentation and Condition Monitoring
Sensor and Transducer
Communication Technologies
Wind Power Technologies

#### OPEN ELECTIVE I

IOT and Application
Project Management
Artificial Intelligence & Machine Learning,
Economic Policies in India
Data Analytics Method

#### OPEN ELECTIVE II

Hydrogen and alternative fuel
E-Mobility
Renewable Energy
Operations Research
Introduction to E-Governance
Optimization Techniques

# LEARNING BY DOING

## PROJECT & APPLICATION-BASED LEARNING

At the School of Engineering & IT, Diploma in Engineering is designed around practical application, technical skill development and industry readiness. Learning is driven through hands-on laboratory sessions, workshop practices, industry-oriented assignments, mini projects and real-world problem-solving activities.

Students gain experiential learning opportunities through modern laboratories, technical workshops, industrial visits, internship exposure and project-based assignments that strengthen conceptual understanding while developing professional competencies required in the engineering sector.



## AARAMBH – STUDENT INDUCTION PROGRAM

Aarambh is a structured induction programme designed to help Diploma students smoothly transition into technical education. The programme familiarizes students with the engineering learning environment, laboratory practices, professional ethics, institutional culture and career pathways. Through interactive sessions, team-building activities, technical awareness programmes and mentorship initiatives, students develop confidence and a strong foundation for their academic journey.

## LIBRARY

The Central Library provides Diploma students access to a rich collection of technical books, manuals, journals, e-resources and digital learning platforms. Equipped with modern learning facilities and academic support services, the library enables students to strengthen technical knowledge, improve problem-solving skills and stay updated with emerging engineering trends.



Live Projects & Practical Assignments



Industrial Training & Internship Exposure



Workshop-Based Learning



Skill Development & Prototyping



Industrial Visits & Field Exposure

# INTEGRATED MODE OF TEACHING & LEARNING

At ARKA JAIN University, Diploma in Engineering follows an application-oriented and industry-integrated approach that combines theoretical concepts with extensive practical exposure to develop competent technical professionals.

**PRACTICAL LEARNING & INDUSTRY EXPOSURE** - Hands-on training, laboratory sessions, workshop practices, industrial assignments and field-based learning help students understand engineering concepts through direct application and experiential learning



**WORKSHOPS, SEMINARS & INDUSTRY INTERFACES** - Regular workshops, technical seminars, expert interactions and industry engagements expose students to emerging technologies, industrial processes and professional work environments.



**INTERACTIVE LEARNING (ONLINE & OFFLINE)** - A balanced blend of classroom teaching, digital learning resources, simulations and practical demonstrations enhances conceptual clarity and student engagement.



**EXPERT TALKS & CAREER GUIDANCE SESSIONS** - Sessions by industry professionals, technocrats and academicians provide valuable insights into technological advancements, industry expectations and career opportunities.



**PRACTICAL CASES & PROBLEM-SOLVING APPROACH** - Students are encouraged to analyze practical engineering challenges and develop solutions through project work, laboratory experimentation and collaborative learning.



**EXHIBITIONS, TECHNICAL EVENTS & INNOVATION ACTIVITIES** - Technical exhibitions, project showcases, innovation challenges and skill competitions provide opportunities for students to demonstrate their creativity, technical competence and problem-solving abilities.



**TECHNICAL CLUBS & LEARNING FORUMS** - Technical clubs, peer-learning forums and collaborative activities encourage teamwork, leadership, innovation and continuous learning beyond the classroom.

This integrated approach ensures that Diploma students develop strong technical foundations, practical competencies, professional skills and industry exposure, preparing them for higher education as well as successful careers in engineering and technology.



MoU Signing with the Board of Practical Training (BPT), Eastern Region, Ministry of Education, Government of India, for the implementation of the Apprenticeship Embedded Degree & Diploma Programme (AEDP).

# 20+

## INDUSTRY & INSTITUTIONAL MOUS

Leveraging 20+ strategic industry and institutional collaborations of the School of Engineering & IT, our Diploma students benefit from enhanced industry exposure, hands-on learning opportunities and professional development initiatives.

# PLACEMENTS HIGHLIGHTS



**275+**

SELECTIONS



**35**

DUAL OFFERS



**11**

TRIPLE OFFERS



**22+**

COMPANIES  
RECRUITED



HIGHEST PACKAGE

**5.5** LPA

(18 SELECTIONS)



AVERAGE PACKAGE

**2.5** LPA



HIGHEST SELECTIONS

**53**

(SELECTIONS)







SRISHTI



ARJANI BAKHS



JAID



ADITYA TIWARY



HARSH ANAND



HARSHIT SHARMA



ASHLEY RUFFINA TUDU



KIRAN MAHATO



PATHASARTHI SEN



KALI



VIJAY PRAJAPATI



SWAYAM NANDA



ADITYA TIWARY



UJJWAL DIKSHIT



VISHNU RAJAK

# PLACEMENTS 2025-26 SNAPSHOT

*Building Careers. Creating Futures*



ASHISH KUMAR



SANDEEP MURMU



DHIRAJ KUMAR



AMIT YADAV



TANISH KUNDU



ROHIT HEMBRAM



DALJEET SINGH



RISHANT KUMAR SINGH



SAGAR PAUL



SANDEEP MAHATO



SHUBHAM KUMAR



RISHANT KUMAR SINGH



JAID



AAKRITI SHARMA

## OUR DIPLOMA STUDENTS ARE

Career Ready Industry Ready Future Ready

# PLACED IN NUMBERS. RECOGNIZED FOR QUALITY

Consistent substantial recruitment by prominent companies reflects the strength of our training and placement ecosystem.

**JGI** ARKA JAIN University Jharkhand

NAAC GRADE **A**

THEWEEK

RANKED 38<sup>th</sup> ALL INDIA UNIVERSITY RANKING (PRIVATE UNIVERSITY CATEGORY)

ISO

CONGRATULATIONS!

**53 STUDENTS PLACED IN MNC**

**Hitachi Astemo**

DIPLOMA ME - 28    DIPLOMA EEE - 25

Kudos to Team Diploma, Training & Placement Dept., Faculty & Student Placement Coordinators for this Feat!



arkajainiversity    arkajainiversity    1800 - 1200 - 200

**JGI** ARKA JAIN University Jharkhand

NAAC GRADE **A**

CONGRATULATIONS!

**31 STUDENTS (23 ME, 8 EEE)**

Diploma in Mechanical | Electrical & Electronics Engineering

Placed in **FIAT INDIA**

As Diploma Apprentice Trainee (DAT) at Pune



arkajainiversity    arkajainiversity    1800 - 1200 - 200

**JGI** ARKA JAIN University Jharkhand

NAAC GRADE **A**

THEWEEK

RANKED 38<sup>th</sup> ALL INDIA UNIVERSITY RANKING (PRIVATE UNIVERSITY CATEGORY)

ISO

CONGRATULATIONS!

**21 STUDENTS PLACED IN MNC**

**qualityaustria central asia**  
Succeed with Quality

DIPLOMA ME - 17    DIPLOMA EEE - 4

Kudos to Team Diploma, Training & Placement Dept., Faculty & Student Placement Coordinators for this Feat!



arkajainiversity    arkajainiversity    1800 - 1200 - 200

**JGI** ARKA JAIN University Jharkhand

NAAC GRADE **A**

**MUVIQ**  
Where Passion Meets Performance  
Muviq India Power Transmission


CONGRATULATIONS!

**8 STUDENTS**

Diploma in Mechanical Engineering

Placed in **Muviq India Power Transmission** Package **2.76 LPA**

As Diploma Engineer Trainee (DET) at IMT Manesar



arkajainiversity    arkajainiversity    1800 - 1200 - 200

RENOWNED COMPANIES RECRUIT OUR DIPLOMA IN ENGINEERING STUDENTS

HIGHEST PACKAGE – ₹5.5 LPA



AND MANY MORE...

# OUR ALUMNI : LEADING THE CHARGE, SHAPING THE FUTURE.



ADARSH KUMAR  
DIPLOMA ME

TVS MOTOR COMPANY LTD.



ANAND KUMAR  
DIPLOMA ME

TATA CUMMINS



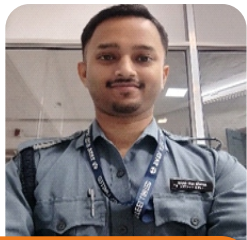
GAURAV KUMAR  
DIPLOMA ME

TATA ELECTRONIC



LUCKY KUMAR  
DIPLOMA EEE

TATA MOTORS



AKASH MALAKAR  
DIPLOMA ME

TATA STEEL LIMITED



ADARSH KUMAR  
DIPLOMA ME

TVS



RAMAN  
DIPLOMA EEE

EXIDE



RAHUL KUMAR  
DIPLOMA EEE

EXIDE



SUMIT KUMAR SAH  
DIPLOMA ME

TATA HITACHI  
CONSTRUCTION MACHINERY



ABHISHEK DUBEY  
DIPLOMA ME

WIPRO PARI



AKASH KUMAR SINGH  
DIPLOMA ME

HAIER



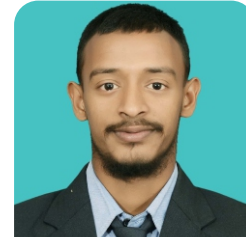
BABUL HALDER  
DIPLOMA EEE

HITACHI ASTEMO



SUKUMAR KUMBHAKAR  
DIPLOMA ME

TATA STEEL TECHNICAL  
SERVICES LIMITED



RAM PRASAD GORAI  
DIPLOMA EEE

HAIER



DHANJEET KUMAR SINGH  
DIPLOMA ME

MADRAS ENGINEERING



RAHUL MUKHERJEE  
DIPLOMA CS

WIPRO TECHNOLOGIES



# POLYTECHNIC ADVANTAGES @ AJU

- MOUs with TATA Motors, TPSDI, NTF, IDTR, IBM, OP Jindal University, Raigarh; Sigma HTS LLP, Reflex & Allen and others for technical training, internship and placement support
- Facilities include Library, Well-equipped Class rooms, Labs, Seminar Hall, Auditorium & Cafeteria
- Focus on Experiential learning through yearly Excursion, Educational Tours, Industrial Visits, etc.
- Teaching Pedagogy: Workshops, Guest Speaker Sessions, Group Learning, Industrial Visits
- Personality grooming opportunity through public speaking club Toastmasters International AJU Chapter
- Interdisciplinary approach to learning & program delivery
- Excellent Placement Record (90% placement for 2023 and 2024 graduated batches. 275+ placements for 2025 batch)

**SCHOLARSHIP**

Please refer to scholarship section on our website

# LABS AVAILABLE:

- Workshop
- Fluid Mechanics & Machinery Lab
- Strength of Material Lab
- Surveying Lab
- Applied Physics Lab
- Applied Chemistry Lab
- Electrical Machine - 1 & 2 Lab
- Testing & Maintenance of Electrical M/C Lab
- Refrigeration & Air Conditioning Lab
- Power System Lab
- Power Electronics Lab
- Heat & Mass Transfer Lab
- Mechanical Measurement Lab
- Fundamental of Electrical & Electronics Lab
- Introduction to IT Lab
- Microprocessor & Micro controller Lab
- Electrical Circuit & Network Lab
- Control System Lab
- Analog Electronics Lab
- Digital Electronics Lab
- Electrical Measurement Lab
- Engineering Mechanics Lab
- Signal & System Lab
- Metrology & Quality Control Lab
- I/C Engine Lab
- Mechanical Vibration Lab





① To determine the mechanical efficiency of an air compressor  
② To conduct a test on various heads of given centrifugal pump  
③ To conduct a test on various heads of given reciprocating pump  
④ To conduct a test on various heads of given gear pump  
www.jgc.ac.in

# CENTRE FOR CAPACITY BUILDING AND HUMAN RESOURCE DEVELOPMENT (CCHRD)



## BUILDING CAPACITY. DEVELOPING SKILLS. CREATING LEADERS.

The CCHRD aims to enhance the skills and capabilities of students, faculty, staff members, and external stakeholders.

### PURPOSE OF ESTABLISHMENT:

The CCHRD is dedicated to fostering growth and development through targeted capacity-building initiatives for the students. Further, it aims to create a supportive environment for continuous learning and professional advancement for faculty and staff members as well as external stakeholders

### BENEFITS OF ESTABLISHMENT:

- **Skill Enhancement for Students** : Providing specialized training, courses and workshops to equip students with industry-relevant skills and competencies.
- **Professional Development for Faculty and Staff** : Offering professional development and faculty development programs to enhance teaching methodologies, research capabilities, and administrative efficiency.
- **Support for External Stakeholders** : Engaging with industry partners and community members fostering collaboration, and sharing expertise in the form of management development programs.
- **Resource Hub** : Serving as a central resource for accessing the latest knowledge, tools, and techniques in various fields of study and practice.
- **Career Advancement** : Facilitating career growth and opportunities for all participants by bridging the gap between academic knowledge and practical application.

### CCHRD: A HUB FOR CAPACITY BUILDING & HOLISTIC SKILL DEVELOPMENT, CREATING EXCELLENCE THROUGH

- Student Development Programs
- Management Development Programs (MDPs)
- Outbound Training & Experiential Learning Exercises
- Industry Visits
- Capacity Building & Skill Development Workshops
- Dialogue with Leaders Series
- Corporate Mentoring
- Digital Literacy Initiatives
- Career Readiness & Interview Preparation
- Industry-Driven Skill Development Workshops
- Mental Well-being Support
- Data Analytics Training
- Foreign Language Learning
- Competitive Examination Preparation

### OUTBOUND TRAINING FOR EXPERIENTIAL LEADERSHIP & TEAM DEVELOPMENT

The Centre for Capacity Building and Human Resource Development (CCHRD) regularly conducts outbound training exercises designed to blend fun with experiential learning beyond the classroom environment. These structured outdoor activities aim to strengthen teamwork, leadership qualities, and self-confidence while enhancing physical fitness and mental resilience. Through engaging, interactive, and problem-solving-based challenges, students develop practical skills, adaptability, and a collaborative spirit—preparing them for real-world professional demands in a dynamic and holistic manner.



## MoU with Markhub24, a cognitive marketing intelligence and learning platform





**CARVAAN** " An educational trip of experience and knowledge for students"

Students of TATA MOTORS PRAGATI-2 BATCH 2022-25 (Diploma Mechanical and Electrical Engineering) during excursion trip to PURI, ODISHA



**CELEBRATING EVERY MILESTONE**

From fresh beginnings to memorable farewells and unforgettable adventures, the Diploma in Engineering experience is defined by a vibrant blend of learning, friendship, and campus celebrations.



**FAREWELL CEREMONY OF PRAGATI 2 BATCH OF TATA MOTORS AT MTC, TATA MOTORS**

Passing Out Ceremony of the First Batch of TATA Motors Pragati Batch 1 held at TATA Motors Skill Development Center at Tata Motors premise



# INDUSTRIAL VISITS- DIPLOMA



PAULTECH SOFTWARE SERVICES



NEOTECHNIQ ENGG PVT LTD



NEOTECHNIQ ENGG. PVT LTD



RKFL PLANT-5





ZF CVCS INDIA LIMITED



IDTR JAMSHEDPUR



BEBCO GAMHARIA



TATA CUMMINS JAMSHEDPUR



PAUL TECH SOFTWARE PVT LTD



AASHIRWAD OLDAGE HOME SAKCHI (Social Visit)



SUDISA FOUNDRY JAMSHEDPUR



JAMNA AUTO CHANDIL



## **NINE ENGINEERING & IT STUDENTS AWARDED THE PRESTIGIOUS TATA CUMMINS SCHOLARSHIP 2025–26**

A Very Warm Morning To All !!!

Dear Dr. Charu Madam,

I am highly Delighted while writing this E-mail!!.

This is in reference to Mail sent to you Friday, September 19, 2025, for the awareness Session for Scholarship.

*This year 9 students got selected!!! What a Performance !!*

*Journey from 1 student in 2024 to 9 in 2025 is really matter of Proud for all us.*

*Heartful Kudos to You, Dr.Ashwani, Rakhi mam and all Direct and Indirect Support from Your University, Pl cascade my Thanks to all of them.  
Let celebrate this, some time !!*

Keep Informing TCL Plant head, Cummins Leadership team !!

Best Regards,  
Narendra Kumar  
Indirect Purchase  
TATA Cummins Ltd -Jamshedpur.





# TATA CUMMINS

## NURTURING BRILLIANCE SCHOLARSHIP RECIPIENT



**ARIB SHAMIM**  
BATCH: 2024-27 | Diploma in CSE



**DIPLOMA STUDENTS AS WINNERS IN THE TATA CUMMINS PROJECT COMPETITION 2025, HELD AS PART OF THE MANUFACTURING MONTH CELEBRATION**



### SAIF RAHMAN

CSE | BATCH: 2025-28

Selected as



Google Student  
Ambassador

**FULLY-SPONSORED  
6-MONTH INTERNSHIP  
AT MUMBAI**



### ABHIRAJ KUMAR

EEE | BATCH 2025-28

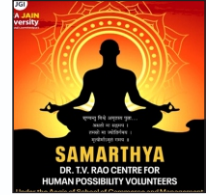
Runner-Up in Kabbadi  
League Season 2,  
organized by Koderma  
District Kabbadi  
Association.



Diploma 1st-year students (Batch 2025-28) secured 2nd place in the Quiz Competition at Swadeshi Mela 2025. Trophy awarded by **MR. BABULAL MARANDI** the first Chief Minister of Jharkhand.

# COMMITTEES, CENTRES, SOCIETIES, STUDENT CHAPTERS/ BRANCHES, CELLS, CLUBS, UNITS, COUNCILS

## 1. CENTRES



## 2. COMMITTEES

- INTERNAL COMPLAINTS COMMITTEE

## 3. CELLS

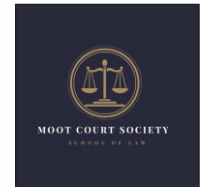
- INTERNAL QUALITY ASSURANCE CELL
- ANTI RAGGING CELL
- STUDENT GRIEVANCE REDRESSAL CELL
- EQUAL OPPORTUNITY CELL
- ADMISSION FACILITATION CELL
- INDUSTRY INSTITUTE INTERACTION CELL
- TRAINING & PLACEMENT CELL
- RESEARCH AND DEVELOPMENT CELL
- AJU NYAY SAMARTHAN CELL – LEGAL AID & AWARENESS CELL (SCHOOL OF LAW)



## 4. COUNCILS



## 5. SOCIETIES



## 6. UNITS



## 7. CLUBS



## 8. STUDENT CHAPTERS/ BRANCHES



# ADMISSION PROCESS

## OFFLINE MODE

- Collect the Application Form, and Prospectus by paying the application fee, ₹1000/- (General Category) or ₹500/- (SC/ST Category) from
- City Office : D-28, Danish Arcade, Opp. Asian Inn Hotel Dhatkidih, Jamshedpur – 831001, Jharkhand  
or  
University Campus : Opp. Kerala Public School, Mohanpur Gamharia, District Seraikela-Kharsawan Jharkhand – 832108
- Submit the duly-filled application form along with the supporting documents and applicable fees at the City Office or University Campus.

## ONLINE MODE

- Fill out the online application form by visiting: [www.arkajainuniversity.ac.in](http://www.arkajainuniversity.ac.in)
- Pay the application fee online: ₹1000/- (General Category) or ₹500/- (SC/ST Category)
- Download and submit the duly-filled application form at the City Office or University Campus.
- After document verification by the University Admission Officer, proceed with the payment of the applicable fees to confirm admission.

# CONTACT DETAILS

☎ 📞 7371037371 | ☎ 0657-2220285 | 2312007

**Admission Office :** D-28, Danish Arcade, Opposite Asian Inn Hotel, Dhatkidih, Jamshedpur - 831001

**Campus Address :** Opp. Kerala Public School, Mohanpur, Gamharia, District Seraikela Kharsawan, Jharkhand - 832108

**Apply Online:** [www.arkajainuniversity.ac.in](http://www.arkajainuniversity.ac.in)

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