











BIT Sindri was founded in 1949 and now includes a total of ten academic departments. With more than 500 acres of land, the college has a huge infrastructure. It is considered one of India's oldest government technical colleges. It is known for the high caliber of its staff and students who graduate from its undergraduate and postgraduate programs. More than 34000 quality engineers have graduated over the previous five decades and are offering their knowledge and experience to the advancement of our society in the fields of Technology and countless other far-reaching aspects. The institute boasts a large number of alumni.

The institute has also developed a reputation for its innovative short-term courses developed in with NASSCOM partnership and **ISRO** throughout the years. BIT Sindri was linked with Bhave University till 2017 at institutional level. From 2018 onwards. institute has been associated with Jharkhand University of Technology (JUT), Ranchi, whose foundations were laid by Shri Pranab Mukherjee, the former President of India. The All India Council of Technical Education has given its approval to all courses. The institute was established to train international-caliber technical people who would serve as technological leaders in an independent india.

# **VISSION**

To maintain a dynamic balance between corporations and campuses by generating high-quality frontline human resources for industry and society who will contribute to the nation's development through excellence in technical education and research.

# **MISSION**

To develop high-quality frontline human resources that will logically, economically, and ethically serve the nation.

To develop knowledge-based technological upliftment and service through a strong connection between industry and campus.

To make every student's aspirations come true by guiding them toward their dreams by recognizing their abilities and ensuring necessary support.







## Message from the Director

B.I.T. Sindri, Dhanbad is a prestigious Engineering College in Jharkhand, operating under the Department of Technical, Higher Education, and Skill Development of the Jharkhand government. It is an AICTE-approved and NBA-accredited institution. The college has produced numerous global leaders in the fields of engineering and research since its founding in 1949, thanks to its particular flair and soul.

Our Institute is known throughout the country for its distinguished history of serving as the alma mater of some of the country's brightest and most successful torchbearers, distinguished faculty, meritorious students, well-equipped classrooms and laboratories, and, most importantly, continuous monitoring and revised programs, all of which have helped us to be ranked among the country's top institutions.

The Training and Placement Cell of the college has done an outstanding job of cultivating students' careers by providing them with beneficial activities and healthy competitive programs in a variety of industries. It has been critical in bridging the gap between industrial and academic understanding. I commend the TPO and its members for taking on such a monumental and important assignment in the interest of student career developement.

We pledge to work for a better future, and we want to continue to receive various honors and praises from the entire nation for our progress towards the pinnacle.

## From the desk of Training and Placement Officer

#### Dear Recruiters,

#### Greetings from Placement cell, B.I.T. Sindri

As the world moves into the second decade of the twenty-first century, India, as the leading developing country, requires a large number of diligent, hardworking, and technically proficient engineers. B.I.T. Sindri, one of the country's premier institutions known for its high teaching standards and cutting-edge research programs, satisfy these need and produces tomorrow's frontline makers.

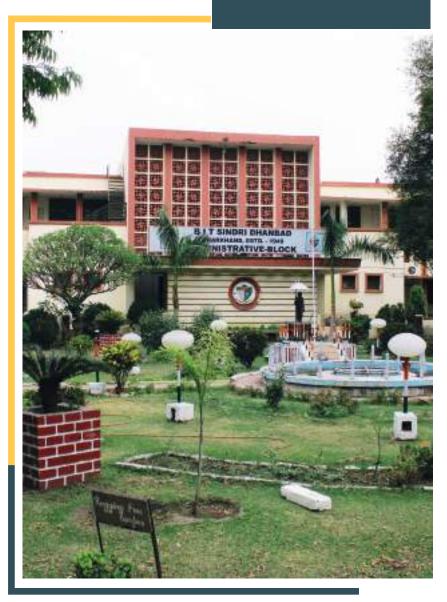
The institution's motto has always been to foster excellence and perfection in all areas, and we strive to instill these values in our students. We expose our students to a variety of activities and topic areas while honing their interpersonal skills to develop them as future leaders in their fields.

The training and placement cell of the institute urges to provide a platform for interaction between college students and the corporate sector so that both can discover the ideal fit based on their needs and expectations. Our students are among the best students picked from the Joint Entrance Examinations, and they are an impeccable group of tomorrow's forefront leaders.

Despite the Covid-19 pandemic, our prior placement sessions saw an increase in the number of placement offers and internships available to our students. Even in such a difficult situation, our students' remarkable accomplishment reflects the caliber of the students and the institute . We strive to deliver the greatest hospitality and services to organisation seeking positions with us. To set the relationship between firm and the university , we offer pre placements talks and online webinars at the convenience of the companies.

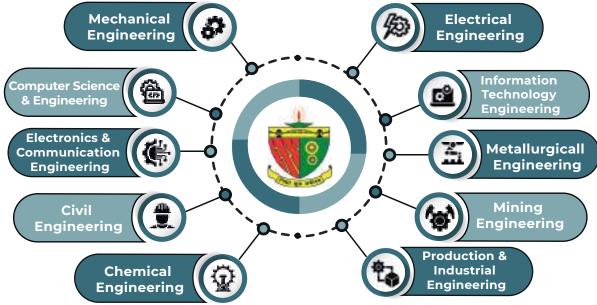
I assure you that your expectations will not only be met, but exceeded significantly, and I would like to take this opportunity to invite you to BIT Sindri placements.





# **Departments** at **B.I.T. Sindri**

1949, the institute began as an engineering college with only two disciplines: Electrical and Mechanical engineering. With improved infrastructure and an alumni network, the Institute gradually incorporated new disciplines of engineering and esearch. The Institute now has ten departments that offer undergraduate, post-graduate, and doctorate programs. The departments have elicited a large number of research papers and high-quality frontline human resources that have made a substantial contribution essential infrastructure, such as labs, conference rooms, and dedicated R & D offices.



# **MECHANICAL ENGINEERING**

The Mechanical Engineering department at our institute was established in 1949, along with the institute's inception. The department offers a four-year B.Tech degree program with an annual intake of 115 students. The two-year postgraduate program leading to a M.Tech degree is also available with specializations in Heat Power Engineering and Machine Design. The postgraduate program admits 35 students annually. The department consists of 35 highly knowledgeable professors that have excellence in their fields. The department is equipped with 12 well-maintained laboratories that cater to the requirements of both undergraduate and postgraduate programs. Some of the essential labs include Strength of Materials, Applied Mechanics, Heat Engine, Hydraulics, A erodynamics, Heat and Mass Transfer, Solar Energy, CAD/CAM lab, etc. The department also houses 6 vast workshops that includes units for Carpentry, Smithy, Foundry, Casting, Welding, and Sheet Metal Shop.



- Heat Engine Lab
- Hydraulics Lab
- CAD/CAM Lab
- Robotics Lab
- Solar Energy Lab
- Material Testing Lab
- Casting Workshop
- Welding Workshop
- Smithy Workshop

- Heat Transfer Lab
- Automobile Lab
- Vibration Lab
- Aerodynamics Lab
- EV Lab
- Machine Lab
- Carpentry Workshop
- Fitting Workshop
- Sheet Metal Workshop

# **ELECTRICAL ENGINEERING**



The Department of Electrical Engineering was established in 1949, the same year when the institute was born. The department offers a four-year B.Tech degree course with an annual intake of 104 students, and an 18-month postgraduate program with an annual intake of 23 students, leading to an M.Tech degree with specializations in Control System and Power Systems.

With a team of 27 experienced professors, the department provides excellent teaching and guidance to its students. The department is responsible for managing an electrical substation and maintaining a 14 Km distribution line of the BIT campus. This not only provides students with hands-on experience but also serves the institute's power requirements.

The department's laboratories are well-equipped and cater to both undergraduate and postgraduate programs. The department also offers an Electrical Workshop that provides practical training to students.

- Control System Lab
- Network Theory Lab
- Electrical Machine Lab
- Measurement and Instrumentation Lab
- Power System-1 Lab
- Basic Electrical Engineering Lab
- Electrical workshop

- Microcontroller Lab
- Microprocesso Lab
- Power Electronics Lab
- Power System-2 Lab
- Computational Lab
- Simulation Lab

# **METALLURGICAL ENGINEERING**



The department of Metallurgical Engineering, BIT Sindri was started in 1956. Since its inception, the department has been a blazing furnace for academic education, cutting-edge research and industrial practices, hence, building and shaping world-class metallurgists. To address various industrial problems and improve industrial practices, "ALCHEMY" was introduced in 2013. It being a monthly seminar includes technical paper presentations and exhaustive exchange of knowledge among students and professors, which improves presentation and oratory skills of the students. In 2015, When the world of metallurgy was facing formidable challenges

both in their density and complexity, our cooperative professors and enthusiastic students laid the Genesis of "DHATVIKA". An annual Metallurgical fest of BIT Sindri, which aims to promote and foster a collaborative bridge between different sectors of the Metallurgical Fraternity. The department offers a four year B.Tech degree program course with an annual intake of 60 students. The two year postgraduate program is also offered leading to an M.Tech degree course with specialization in Metallurgical & Materials Engineering and Nano-Technology under a knowledgeable and highly qualified team of professors comprising of 8 faculty members. The annual intake in the postgraduate program is 30. The department has well equipped laboratories and workshop facilities. The department provides diversified internships and R&D opportunities, It also organizes various workshops and interactive seminars to enhance the industrial knowledge and exposure of the students. The department caters to all possible aspects of the Metallurgical domain, hence, making the students' Industry ready.

- Metallography Lab
- Corrosion Lab
- Heat Treatment Lab
- X-Ray Diffraction Lab
- Mineral Engineering Lab

- Metallurgical Analysis Lab
- Foundry Lab
- MTK Lab
- AAS Lab
- FRF Lab

- Material Characterisation Lab
- Instron Lab
- Physics Of Metal Lab
- Nano-Technology Lab
- Extractive Metallurgy Lab

# COMPUTER SCIENCE & ENGINEERING



The Department of Computer Science and Engineering in BIT Sindri started in 1987. In 1991, our first batch completed its B.Tech from this department. It seeks to be on the cutting edge and generate highly skilled, successful, and productive graduates from the Department of Computer Science and Engineering. It offers a four-year B.Tech course with an annual intake of 43 students. It also offers Ph.D. courses in which there are currently eight students. The subjects provided by the department in Ph.D. are Computer Networks, Artificial Intelligence, Machine Learning, and Soft Computing Security.

Seven professors guide and provide us with immense knowledge. The department provides us with all the facilities, equipment, and resources that are helpful for us in the present and the future. The department furnishes the students with various areas to explore. Some of them are Algorithms & Complexity, Artificial Intelligence, Computer Graphics, Computer Networks, Computer Vision, Database Systems, Web Technologies, Machine Learning, Data Mining, Operating Systems & Formal Verification, Programming Language, and Compilers. .

- Computer Architecture Lab
- Computer Networks Lab
- DBMS Lab

- Software Engineering Lab
- Operating System Lab
- Advance Programming Lab
- Artificial Intelligence Lab
- Compiler Design Lab
- DAA Lab

# INFORMATION TECHNOLOGY ENGINEERING



BIT Sindri provides a four-year B.Tech degree course in Information Technology, established in 2001. It is the most emerging and the latest addition to the elite branches of BIT Sindri. This department provides technically competent and highly skilled human resources for the industry and society through excellence in quality education and research in the field of information technology.

Twelve professors look after the total annual intake of 50 students. They help us to apply appropriate knowledge of information technologies and employ methodologies to help the students to achieve their goals and objectives. This department deals with computer software, hardware, and involving other programming languages.

This department provides various fields to explore. Some of them are Operating Systems, Database Management Systems, Computer Networks, Java Programming and Web Designing, Data structures, Design and Analysis of Algorithms, and Data analytics.

- Computer Architecture Lab
- Computer Networks Lab
- Software Engineering Lab
- Artificial Intelligence Lab
- Compiler Design Lab

- DBMS Lab
- Compiler Design Lab
- Operating System Lab
- Advance Programming Lab
- FLAT Lab

# ELECTRONICS AND COMMUNICATION ENGINEERING

The Department of Electronics and Communication Engineering was established in 1957. Since then, it has never turned back and has always added glory to the institution. The outstanding alumni of this domain have left their remarkable footprints in today's industrial sphere and the department is hopeful that the upcoming students will also strive to bring laurels to the institute. The department offers a four-years of B. Tech degree course with an annual intake of 62 students and is currently involved in providing Ph.D. degree to 14 students. The department has a team of 13 experienced professors who aim to provide serious academic pursuit and encourages radical and original thinking to pave way for innovative ideas. The department has 14 laboratories which are well equipped and cater the needs of the students to gain the hands-on experience.

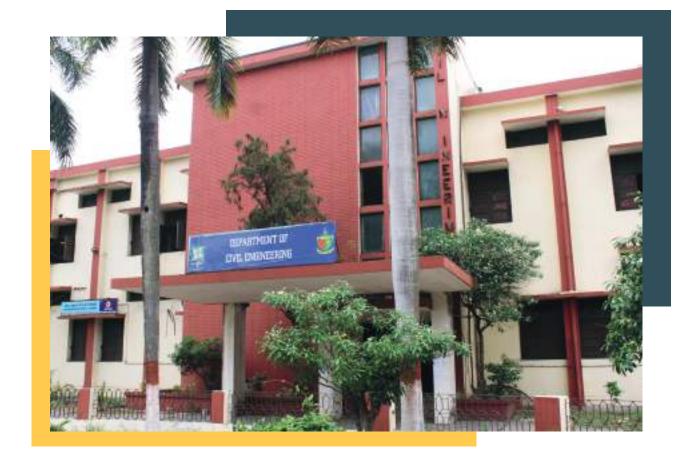


- Basic Electronics Lab
- Analog Electronics Lab
- Analog Comm. Lab
- Digital Electronics Lab
- Optical Fiber Comm. Lab
- Microwave Eng. Lab
- Microprecessor Lab
- Microcontroller Lab

- Antenna Design Lab
- Simulation Lab
- VLSI Design Lab
- IOT Lab
- CEDT/Project Lab
- DSP Lab
- Digital Comm. Lab

### **LAB FACILITIES**

- Adv. Structural & M.O.S Lab
- Concrete Lab
- Geology Lab
- Soil Mechanics Lab
- Building Material Lab
- Geodesy and Surveying Lab
- Hydraulics & W.R.E. Lab
- Environmental Engg. Lab
- Computer Lab
- Surveying Lab



# **CIVIL ENGINEERING**

The Department of Civil Engineering has been a part of BIT Sindri since 1957. Over the years, the department has grown tremendously, and is now recognized as one of the major engineering departments in the country. The department offers UG & PG courses with Soil mechanics, Foundation Engineering and Structural engineering as specialization. The department also offers adequate facilities for R&D work and thus provides a vital impetus in growth of the state. It has developed strong links with the building and construction industry and academia, within the country. The students of the department actively pursue R&D under the guidance of faculty members funded by the state government. Besides high quality teaching and instruction at both UG and PG levels, the department is actively involved in basic and applied research. With its multifaceted faculty, it provides technical advisory support through various R&D projects and consultancy to infrastructural industry, academic and research institutions. At present, the department has a strength of 112 students under the assistance of 18 faculty members.

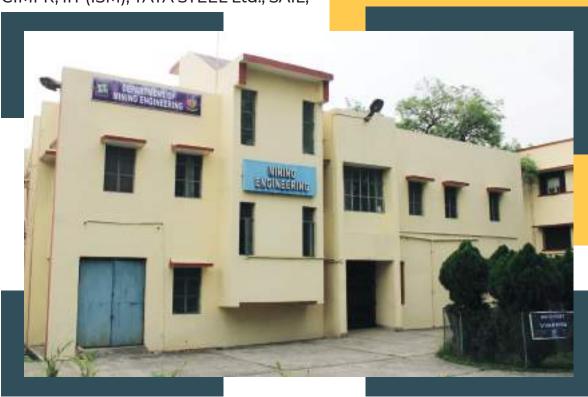
# MINING ENGINEERING

The Department of Mining Engineering, BIT Sindri was started in the year 1975 by the Government of Bihar, keeping in view the vast and large variety of mineral reserves in the state of Bihar (now Jharkhand). There was also an urgency to cater to the need for a large number of trained and skilled mining engineers in the 1970s as natural consequences of the nationalization of the mineral industries. The department was started with an initial intake of 25 students in a four years degree course which was subsequently approved off late, enhancing to 49 students per year by AICTE, New Delhi.

Since the inception of the department, it has contributed, through its well-trained and efficient products and experienced faculty members, in a very positive way in the areas of coal and non-coal mining concerning their management, planning, research, and development. The department has the unique locational advantage of being in the middle of the country's prominent coal mining companies as well as various institutions and research organizations of national and international reputation such as BCCL, CCL, ECL, CMPDIL, CIMFR, IIT (ISM), TATA STEEL Ltd., SAIL,

NML, etc. The department is privileged to take the benefit of the presence of such big and illustrious organizations through regular interaction of industry experts with students as well as faculties.

- Mine Environment Lab
- Mine Surveying Lab.
- Mine Ventilation Lab
- Mining Machinery Lab
- Rock Mechanics Lab
- System Lab
- Geology Lab



# CHEMICAL ENGINEERING

The Department of Chemical Engineering, established in 1956, is one of the oldest disciplines at BIT Sindri. It is considered a premier centre for Chemical Engineering in India by industries as well as academia. The department offers a four year B. Tech. Degree course and Postgraduate program of M. Tech. with specialization in Chemical Plant Design. It has experienced and qualified faculties, associated with numerous industrial projects to promote research and development. The department has several well-equipped laboratories such as Unit Operations Lab, Process Control Lab, Petroleum Refinery Engineering Lab, Plastic Technology Lab, Process Engineering Lab, Chemical Engineering.

- Fluid Mechanics Lab
- FluidizationEngineering Lab
- Thermodynamics Lab
- Process Control Lab
- Petroleum Refinery Lab
- FluidizationEngineering Lab
- Process Engineering Lab
- Unit Operations Lab
- Computer Lab



### LAB FACILITIES

- Project Lab
- Work study & Ergonomics Lab
- Theory of metal cutting & forming lab
- Modern manufacturing Lab
- Metrology Lab
- Advance Manufacturing Lab
- Advance Welding Lab
- Center of Excellence Facility (Siemens Lab)
- Optimisation Lab/Computing Lab
- FMS Lab
- CNC and Robotics Lab



# PRODUCTION AND INDUSTRIAL ENGINEERING

The Department of Production and Industrial Engineering, first in Asia, was started in the year 1955. The department has established links with the industries, R & D organizations, consultancy organizations and academic institutes in the region in furtherance of the cause of manufacturing engineering. A multidisciplinary academic program comprises 60 intakes to the four year B.Tech. program and 18 intakes to the two-year M.Tech program with specialization in Production Technology and Management. The objective of Department is to prepare the manpower that is well equipped with quantitative techniques of management decisions coupled with the knowledge of recent and newly developed technology, computer applications. Most of the students, who graduate from the department, end up taking leading positions in industry, academia, business and government organisations in both India and abroad. The department has faculty strength of 10 who are actively engaged in R & D and have a large number of publications. The department houses over 11 different lab facilities among which Project Lab, advance manufacturing Lab, advance welding Lab, CNC and Robotics Lab are equipped with cutting-edge technology. The Department also provides Center of Excellence Facility which offers skill development courses, Internships, Research and Development assistance and Industrial consultancy services across various sectors.

# BIT SINDRI NBA ACCREDIATION



The National Board of Accreditation (NBA) is one of the two major bodies responsible for accreditation of higher education institutions in India. The National Boardof Accreditation (NBA), India was initially established by AICTE (All India Council of Technical Education) in the year 1987. NBA in its present form is an autonomous body from 2010 has the aim of Assurance of Quality and Relevance of Education, especially of programmes in technical disciplines.

NBA has established well defined guidelines, parameters and criterias for accreditation. These are in line with the best international practices and oriented to assess the outcomes of the programme. BIT Sindri established in 1949 is recognized as one of the oldest Government technical institutes of independent India. The institute is now controlled administratively by the Department of Science and Technology, Govt. of Jharkhand, Ranchi and academically it is affiliated to Jharkhand University of Technology, Ranchi for conducting examinations and awarding degrees. All courses are approved by All India Council of Technical Education and most of the undergraduate programs are accredited by the National Board of Accreditation, New Delhi. NBA accreditation has been provided to Mechanical, Civil, Electrical, Chemical, Metallurgy and Production & Industrial department of BIT Sindri.

The accreditation by NBA carries a label of recognition for its education quality which are evaluated periodically with the purpose that they are on par with the international best practices.

# Through accreditation, the following purposes may be served:

- Constant support and advice to technical institutions in the maintenance and improvement of their quality.
- Using Outcome-based Education (OBE) as a metric, NBA measures student's outcomes based on their knowledge, skills, and attitudes which improves students performance overall and make them employment-ready.
- Enabling an institution to state publicly that it has voluntarily accepted independent inspection and has fulfilled all the requirements for satisfactory operation and maintenance of quality in education.

# The purpose and impact of accreditation is summarized below:

- 1. Better recognition and increased credibility for institutions
- 2. Improves student enrollment in terms of quality and quantity.
- 3. Helps the institution in securing necessary funds.
- 4. Enhances employability and provides greater opportunities.
- 5. Helps in recognition of degrees and mobility of graduates and professionals.
- 6. Helps create sound and challenging academic environment in the Institution.

# BIT SINDRI NIRF Ranking



NIRF ranking speaks a lot about quality of education in the institute, academics, curriculum and overall scenario which people takes in high regards and this builds a trust. Thus ultimately giving a placement boost by drawing company's attention.

On the other hand students seeking to take admission also look for rankings of the institute, making it easier for them to choose the institute of their choice. The National Institutional Ranking Framework (NIRF) is a methodology adopted by the Ministry of Education, Gov ernment of India, to rank institutions of higher education in India. The Framework was approved by the MHRD and launched by Minister of Human Resource Development on 29 September 2015. Depending on their areas of operation, institutions have been ranked under 11 different categories - overall, university, colleges, engineering, management, pharmacy, law, medical, architecture, dental and research. The Framework uses several parameters for ranking purposes like resources, research, and stakeholder perception. These parameters have been grouped into five clusters which broadly cover "Teaching, Learning and Resources," "Research and Professional Practices." "Graduation Outcomes." "Outreach and Inclusivity," and "Perception" and these clusters were assigned certain weightages. The weightages depend on the type of institution. Recently our college Birsa Institute of Technology, Sindri (BIT Sindri) performed outstandingly and secured 251-300 rank band NIRF ranking under engineering category the India Ranking 2022. for

## STUDENT ACTIVITY



Hackathon and Coding Club or HnCC is the official club of BIT Sindri with a motto to inculcate a coding culture among students. HnCC organizes various national and college level events related to Web development, App development, back-end development, Game development, Machine learning, Deep learning, Artificial Intelligence, and Open source. The member here collaborates with AWS, GDG Ranchi, CodeChef chapter, and conducts Tech Fest(Developer of the year), Hacktoberfest Celebration, Technical workshops/webinars, etc.



Model club is an organization that is inherently associated with the diffusion of science and technology. They organize workshops, seminars, guest lectures, invited talks, and various events including a mega Tech-fest (Sandhan). From organizing various webinars on topics like DSA, Machine learning, etc. to national level hackathon (nav ujiwal e-innovation hackathon).



SAEINDIA BIT SINDRI is a collegiate club of BIT SINDRI. It provides a platform to students for learning and innovating real engineering skills and encourages them to participate in different automotive events across India. Over the period of the last I year, students took part in various virtual events and brought Laurence to the college. Team WONDERS 2.0 and TEAM XSURGE participated in SAENIS EFFICYCLE 2021 & EFFIQUE 2021 respectively and secured ranks of AIR 8 and AIR 5. Also, teamBLITZKRIEG participated in the virtual of SAE e-BAJA 2022.



Sarjana is the editorial board of the official institute magazine and the student media body of BIT Sindri. Sarjana being a student media body, helps to nurture a credible relationship between the institute and the students. The Sarjana magazine is devoted to the art of writing. It provides a platform for the students and professors to exhibit their emotions and ideas, promoting literary interests among BIT's engineering brethren. Some of our events include Hindi Pakhwada, Kalrav, and an annual Creative Writing Competition.



The Google Developer's Student Club, BIT SINDRI, welcome students from all cultures and diversities to grow and learn together. The Club organize resourcefully webinars, seminars, tech talks, ted talks, and various other intersecting workshops. The major idea is to create innovative projects for the betterment of the local community.



Prayaas India, an initiative by students of BIT Sindri, for educating and thereby, uplifting the lesser privileged section of the society. They organize RAINBOW as their annual literary mega event. Prayaas India has built a fully wifi-based computer lab with the help of its strong alumni base. Whilst educating the needy Prayaas also contributes to the society with the various events like blood donation camp, books donation, fun activities, etc

# **CODING CULTURE**

Although computer programming was once seen as an elite skill for the selected few, it's now viewed as an essential aptitude for 21st-century learners and is becoming a key module of many curriculums at colleges. Coding, which involves the basic operations of computer programming, has recently seen a rise as an in-demand skill in the industry. Moreover, India is turning into a digital and start-up hub, and coding skills are just starting the in-demand climb.

The coding culture at BIT Sindri is promoted by TnP cell along with various students body and clubs of the institute. For promoting coding among students, TnP cell organizes various competitive programming contests. Consequently HnCC(Hackathon and Coding Club) organized BITCODE as the monthly CP contest for helping students to compete.

In a nutshell, the premier engineering college of Jharkhand is changing with the times and is leaving no stones unturned in ensuring that the college which has given gems to the nation in core branches will continue doing so in the IT sector also.



# **CENTRE OF EXCELLENCE**

The move to forge ties academic with Simens University follows BIT Sindri's efforts to collaborate with top-ranking institutions of the world. BIT Sindri has also signed a number agreements with domestic institutions and companies like IIT (ISM), Dhanbad, Central institute Mining and Fuel Research (Dhanbad), National Institute of Foundry and Forge Technology (NIFFT) and TATA STEEL.









The Centre of Excellence, established on 5th September 2017 at BIT Sindri by the Department of Higher, Technical Education & Skill Development, Government of Jharkhand with the former Chief Minister Shri Raghubar Das inaugurating the 14 new hi-tech laboratories on campus in assistance with Siemens India, CISCO, Oracle, and Ericson for developing further engineering skills of the students. These laboratories are sophisticated for Product Design and Validation, Advanced Manufacturing, Test and Optimization, Automation, Electrical and Energy Studies, Process Instrumentation, Mechatronics, CNC Machines, CNC Programming, Robotics, Rapid Prototyping, Lift maintenance, Body Repair & Body paintwhich provides opportunity for promising innovations.

### Laboratories

- Advance Manufacturing Lab
   Mechatronics Lab
- Automation Lab
- Automobile Body Paint
- Automobile Body Repair
- CNC Workshop
- PI Lab
- Lift Maintenance

- NC Programing Lab
- Electrical & Energy Study Lab
- Product Design & Validation Lab
- Rapid Prototyping Lab
- Robotics Lab
- Testing & Operation Lab

## PERSUIT OF EXCELLENCE

#### WOM

TATA STEEL conducted the first round of its pioneering scholarship programme WOMEN OF METTLE(WOM).

In which Divya kachyap (Mining Engineering), Shruti Singh (Electrical Engineering), Sonal Singh (Metallurgical Engineering) got selected in Top-50 students nationwide.



#### SIH

6 Students of information Technology department of BIT Sindri were crowned as the winner of SMART INDIA HACKATHON which is a nationwide initiative to solve the pressing problem being faced in our daily lives.



#### **Best Placement Officer**

BIT Sindri's TPO Dr. (Prof.) Ghanshyam was recognized as one of the top 50 TPOs in Higher Education across India by ULektz. He secured first rank in TPO Olympics organized by FirstNaukri.

#### **RANKINGS**

As per the Internshala Annual 2022 report, BIT Sindri ranked first in East Zone and **17th** in the India ranking.

BIT Sindri has got the tag of Band A performer in Atal Ranking of Institutions on Innovation Achievements(ARIIA).

#### **INTERNSHIP**

3 Students from BIT Sindri, had the opportunity to undertake a research internship at DRDO's Defence Metallurgical Research Laboratory (DMRL). 5 Students of BIT SINDRI were selected for the Mitacs Globalink Research Internship in Canada. 17 students from our college got selected for the Summer Research(INSPIRE) Internship conducted by TATA STEEL.

## बीआईटी की विजेता टीम को किया गया सम्मानित



#### **CO-CURRICULARS**

Our team's succeeded in, earning the the title of OVERALL CHAMPION and is an outstanding accomplishment that merits acknowledgment in the largest Geo-Mining event in Eastern India. The team of BIT SINDRI secured the 1st position in the Annual -Techno management fest Concetto'22 organised by IIT(ISM) Dhanbad.

# PAID INTERNSHIPS

On average, more than 70% of students have expressed strong interest in internships, indicating their desire to gain hands-on experience with the subject in a real-world situation. For the year's interns, we have some of the most reputable companies and universities, including:

- · Google
- · Amazon
- Microsoft
- · TATA Steel
- MITACS
- · The Indian Steel & Wire Processing Limited
- · State Bank of India
- · TATA Steel Processing & Distribution Limited
- · TATA Motors
- · CIMFR
- · DRDO
- · BARC
- · PITC
- Adecity
- · EduFeat Private Limited
- Schlumberger
- Wrytin
- · Icy Tales
- · ERIDE
- · CodingNinjas-
- · IOCL
- · Wilco Source
- · Vedantu
- . TSLPL
- · TSUISL
- . Pushkar

Summer Internship is an integral part of B.I.T. Sindri, Dhanbad. This educational initiative aims to connect professional experience with classroom learning. In most cases, the internship programme lasts two months.









































TATA STEEL LONG PRODUCTS































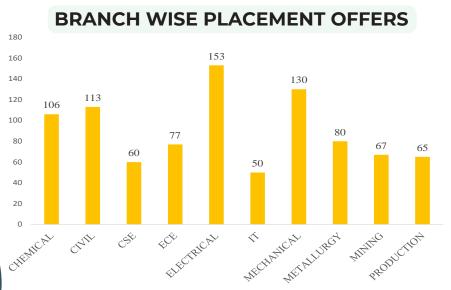
# **TRAININGS**

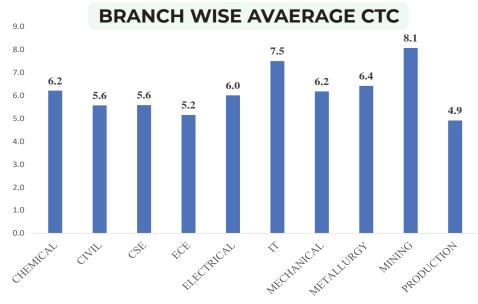
Industrial Tour & Training is an integral part of B.I.T. Sindri, Dhanbad. Industrial visits allow students to learn in a hands-on manner through contact, working methods, and employment practises. It exposes students to current work practises rather than the theoretical knowledge they are given in college classrooms. Our students have been trained by the following prestigious corporation and trainers:

- · Tata Steel
- · Tata Power
- · CIMFER
- · Bharat Coking Coal Limited (BCCL)
- Heavy Engineering Corporation (HEC)
- · BSNL
- · NASSCOM Nac-Tech
- · Indian Railway Locomotives
- · NHAI
- · DVC Maithon
- · BOLT IOT
- · VERZEO
- · Internshala Trainings
- . SAIL
- . ONGC
- . IOCL

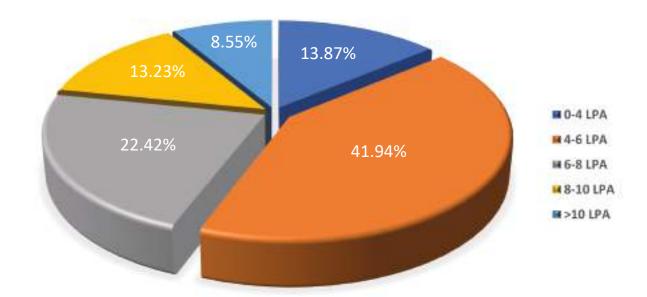
....and many more

# **PLACEMENT STATISTICS**





### **CTC STATISTICAL RECORD**



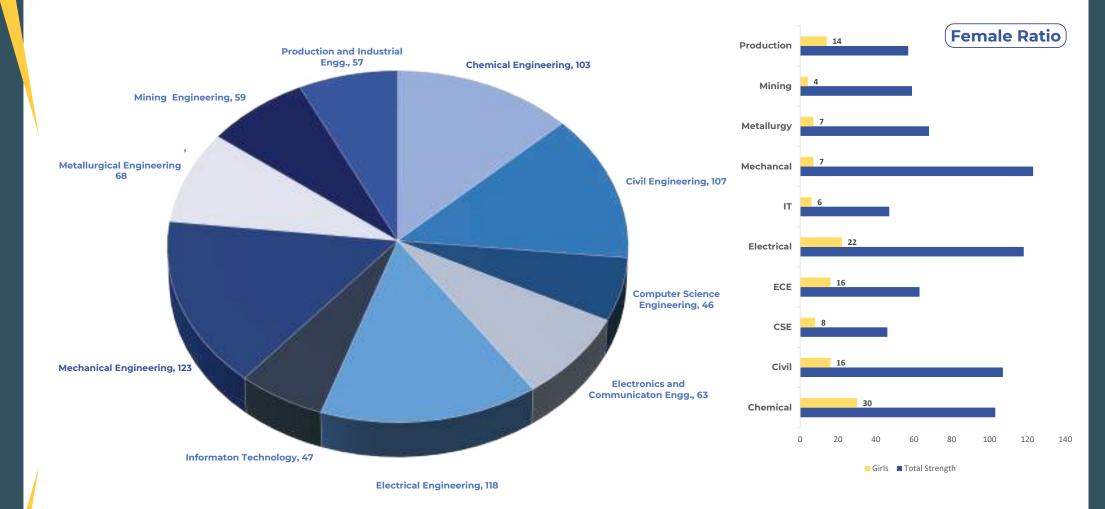


## **PLACEMENT STATISTICS**





# Strength of the Graduating Profile (2020-24)



Branch	Strength	Branch	Strength
Chemical Engineering	103	Informaton Technology	47
Civil Engineering	107	Mechanical Engineering	123
Computer Science Engineering	46	Metallurgical Engineering	68
Electronics and Communicaton Engg.	63	Mining Engineering	59
Electrical Engineering	118	Production and Industrial Engg.	57

# **Placement Process**

The placement season commences in the month of August and extends till May of the following year, i.e. from August 2023 - May 2024.



A **Formal Invitation** with the placement timeline and other relevant information are sent out to the organisations by the Training & Placement Cell, BIT SINDRI to take part in the recruitment process.



The company should fill in the **Job Notification Form(JNF)** which contains basic details of the job opening like job description, requirement, salary etc., and get the JNF verified by emailing Training & Placement Cell or as a hard copy.



After the verification, JNF is **made** available to all the students along with the information furnished by the company for a few days.



Interested and eligible (as per the criteria specified by the organization) students show their willingness to **appear for the recruitment process** of a company via the online portal.



Interested students sign the JNF to appear for the recruitment process. The verified resumes students of these **students become available to the recruiter**. The company has the liberty to shortlist them before the beginning of the placement process.



The company will be allotted slots and dates for conducting Pre-Placement Talk (PPT)/Written Test/Online Test. The student coordinators will help the companies finding a slot of mutual convenience and availability.



Recruiters can **shortlist students** based on their test results or resumes.



The recruiter is supposed to give the **final selection** and await list at the end of the slot in a sealed envelope.



Offer letters are to be sent to the training and placement cell.





### **COMPUTER NETWORK LAB**

The computer networking lab covers network devices, IP configuration, network cables, commands, switch and router configurations, NAT, and interface configurations. Students connect computers in a LAN using switches, routers, and hubs. They configure host IP, subnet mask, and default gateway. They implement network commands, perform initial switch and router configurations, and configure NAT. The lab also includes Ethernet and serial interface configurations, RIP configuration, and setting up a Cisco router as a DHCP server. These activities provide hands-on experience for practical networking scenarios.

### **SOFT COMPUTING LAB**

The soft computing lab explores fuzzy logic and neural networks. Students perform fuzzy logic operations, implement De-Morgan's Law, plot membership functions, and apply Max-Min Composition for fuzzy relations. They also create a fuzzy controller for a washing machine using a FIS. The lab involves generating activation functions for neural networks and demonstrating logical function outputs with McCulloch-Pitts Neural Network. Students also learn pattern classification using the Hebb Net. The lab provides practical experience in soft computing concepts and applications.





### **DATA ANANYSIS AND ALGORITHMS LAB**

The design and analysis of algorithms lab covers topics such as converting infix to postfix strings, operations in a binary search tree, binary and linear search, heap sort, graph algorithms (DFS, BFS, Dijkstra's algorithm), Huffman's algorithm, MST (Kruskal/Prim), sorting algorithms (quicksort, mergesort), matrix chain order, 0/1 knapsack problem, LCS using dynamic programming, and solving the N-queen problem through backtracking with game trees. The lab emphasizes algorithm design, implementation, and efficiency analysis.

#### **OPERATING SYSTEM LAB**

The operating system lab explores hardware and software requirements of various OSs, UNIX system calls for process, file, and I/O management. It includes CPU scheduling policies, file storage allocation techniques (contiguous, linked-list, indirect), and allocation methods (worst-fit, best-fit, first-fit). Students learn about fragmentation calculation, memory compaction, resource allocation graphs, Banker's algorithm, and conversion of graphs. The lab also covers interprocess communication techniques using semaphores to solve problems like the Bounded Buffer and Readers-Writers. Overall, it provides practical experience in OS concepts and operations.





### IT LAB:

The IT Lab at BIT Sindri provides practical training in computer network, covering topics like processor design, memory systems, and system performance. It focuses on hands-on training in networking concepts and protocols. Students gain experience in configuring network devices, designing topologies, and troubleshooting networks. The lab covers areas such as routing, switching, wireless networking, security, and performance evaluation. Practical projects enhance students' understanding and skills in networking.

### **ARTIFICIAL INTELLIGENCE LAB:**

The Artificial Intelligence Lab at BIT Sindri focuses on practical training in the field of artificial intelligence (AI). Students explore various AI techniques and algorithms, such as machine learning, natural language processing, and computer vision. The lab provides access to AI development frameworks, tools, and datasets, enabling students to develop and deploy AI models. Through hands-on projects, students gain experience in building intelligent systems and solving real-world problems using AI techniques. The lab emphasizes critical thinking, data analysis, and algorithmic implementation, preparing students for the exciting field of AI research and development.





#### **DATABASE MANAGEMENT SYSTEM LAB:**

The DBMS (Database Management System) Lab at BIT Sindri offers practical training in the field of database management. Students gain hands-on experience in designing, creating, and managing databases using industry-standard database management systems. The lab provides a platform for students to learn various database concepts, such as data modeling, query optimization, transaction management, and database security. Students get to work with popular database management systems and learn to write SQL queries to retrieve and manipulate data.



#### **DIGITAL SIGNAL PROCESSING LAB**

The DSP (Digital Signal Processing) Lab at BIT Sindri is a specialized facility designed to provide students with practical training and hands-on experience in the field of digital signal processing. The lab may utilize simulation software tools such as MATLAB to simulate and visualize signal processing algorithms.

### **VLSI LAB**

The VLSI Lab at BIT Sindri is a specialized facility designed to provide students knowledge and experience in the field of VLSI design and integrated circuit (IC) fabrication. The lab is equipped with industry-standard electronic design automation (EDA) tools and software used for VLSI design.





### **BASIC ELECTRONICS LAB**

The institute's core course, "Introduction to Electronics," is connected to the Basic Electronics Lab. The basic electronics lab at BIT Sindri typically covers topics such as electronic components, circuit analysis, and basic electronic measurements. Basic analog-digital and mixed-signal electronic experiments are performed in the lab. The fundamentals of electronics are introduced to the students in this lab.

#### **MICROWAVE ENGINEERING LAB**

The Microwave Engineering Lab at BIT Sindri focuses on the study and analysis of microwave components, devices, and systems. The lab provides a range of microwave components and devices such as waveguides, isolators, circulators, directional couplers, attenuators, filters, amplifiers. Students learn about the characteristics and applications of these components in microwave systems.





#### **ANALOG ELECTRONICS LAB**

The Analog Electronics Lab at BIT Sindri is a facility dedicated to providing students with practical training and hands-on experience in the field of analog electronics. This lab focuses on teaching students the concepts and principles of analog electronic circuits and devices.

#### **DIGITAL ELECTRONICS LAB**

Digital electronics is a field of Electronics involving the study of digital signals and the engineering of devices that use or produce them. The lab provides a wide range of digital components such as logic gates, flip-flops, counters, and various integrated circuits (ICs) related to digital electronics.





#### **ANALOG & DIGITAL COMMUNICATION LAB**

The Analog and Digital Communication Lab is a specialized facility designed to provide students with practical training in the field of communication systems. The lab is equipped with workstations or workbenches where students can perform experiments related to communication systems.

#### **IOT LAB**

The IOT Lab has been setup at BIT SINDRI keeping the aims to provide student opportunity to develop IoT example and applications. The lab emphasizes the significance of IoT in various industries, such as smart cities, healthcare, agriculture, transportation, and industrial automation. Students may work on industry-driven projects to gain practical insights and experience in real-world IoT applications.





### **SAE BIT SINDRI**

The **Society of Automotive Engineers**(SAE) is an international professional association of engineers and technical experts in the aerospace, automotive, and commercial vehicle industries. SAE BIT SINDRI is a part of SAE INDIA which comes under SAE INTERNATIONAL. The SAE BIT SINDRI helps to set certain standards which can be used in the automotive industry. They cover a broad range of topics such as vehicle performance, safety, emissions, fuel efficiency, and vehicle communication systems. These standards help ensure that vehicles are designed and manufactured to meet certain quality, safety, and environmental requirements. SAE also organizes conferences, publishes technical papers and journals, and provides

professional development and networking opportunities for its

#### members.

### **EVENTS**

There are various events SAE BIT SINDRI participates, which happens throughout the year and the students practice, study, and research rigorously to compete in such events.

**BAJA** - SAE Baja is a collegiate competition where student teams design, build, and race off-road vehicles. It focuses on engineering, innovation, and teamwork as participants tackle challenging terrains and obstacles.

**SUPRA** - SAE India Supra is a design competition for college students, where teams build and race formula-style race cars. Participants design and manufacture their vehicles, emphasizing engineering expertise, performance, and safety.

**AEROTHON**- SAE India Aerothon is a collegiate design competition that focuses on unmanned aerial vehicles (UAVs). Student teams design, build, and fly their UAVs, demonstrating innovation, technical prowess, and problem-solving skills.

**EFFICYCLE** - SAE India Efficycle is a collegiate design competition where student teams develop and race human-powered three-wheeled vehicles. Participants aim to design efficient, sustainable, and practical vehicles that combine human power with energy-efficient mechanisms.









### **AUTOMOBILE LAB**

The Automobile Engineering Laboratory at BIT Sindri has the objective to give students hands on experience and practical understanding in a variety of automotive engineering topics. The BIT Sindri Automobile Lab is a first-rate facility that gives students practical knowledge and hands-on experience in a range of automotive engineering topics. The lab is built to guarantee that students have access to the cutting-edge tools and technology.

### **MECHANICAL ENGINEERING SOCIETY**

The Mechanical Engineering Society of BIT Sindri, is an organisation works to advance academic excellence, leadership, and professional growth in the discipline of mechanical engineering. The **Indian Society of Mechanical Engineers (ISME)** has granted accreditation to the Mechanical Engineering Society. A variety of programmes and events are planned throughout the year including technical workshops, seminars, guest lectures, and industry visits. which gives students the chance to talk with professionals and learn about the most recent advancements in the sector.





### **SIEMENS IN BIT**

Siemens at BIT Sindri has set up to give students access to the most recent advancements in automation and control systems. The Siemens Lab at BIT Sindri features a group of skilled instructors and engineers that guide and train students in different softwares like **NX, CNC, Additive Manufacturing, CAD-PLM, FEA**, and many more, from which students can learn real-world skills and get practical experience in the lab, which is crucial for their future professions.

### **CAD-CAM LAB**

CAD-CAM Lab at BIT Sindri gives students a practical experience in product design and production utilising computer-aided tools. The lab has the most recent gear and software required for employing CAD-CAM tools to **design, model, simulate, and manufacture** items. It is a top-notch facility that gives students access to the most recent computer gear and software for computer-aided design and production. Students can learn real-world skills and get practical experience in the lab, which is crucial for their future professions in the manufacturing sector.





### **ELECTRIC VEHICLE LAB**

The Electric Vehicle (EV) Laboratory at BIT Sindri has the objective to give students hands-on experience and practical understanding in advancing the field of electric vehicle technology through research and development efforts in engineering topics. By addressing key challenges and exploring innovative solutions, EV labs play a crucial role in the development and advancement of electric vehicles and associated technologies through research, development, testing and educational activities.

### **ELECTRICAL ENGINEERING SOCEITY**

EES is the pioneer of one of the core branches of this institute, which aims to provide all-around professionalism. It promises to promote wide-scale research platforms catering to the technical advancements in the sector, and imparting a conducive atmosphere for budding Electrical Engineers to get acquainted with the industrial whereabouts for insight into the field and also focuses on Sports and cultural events for the overall development of the student. The electrical engineering society also serves as a student-professor-alumni interaction platform, guiding the students to their goals and helping them in different circumstances.





### **MECHATRONICS LAB**

The Siemens CoE in Manufacturing, established in 2017 at BIT Sindri, operates with a primary focus of creating a robust technical education eco-system through its experience in industrial products and services. There are 14 sophisticated Laboratories for Product Design and Validation, Advanced Manufacturing, Test and Optimization, Automation, Electrical and Energy Studies, Process Instrumentation, Mechatronics, CNC Machines, CNC Programming, Robotics, Rapid Prototyping, Lift maintenance, Body Repair & Body paint which provides opportunity for promising innovations.

### **ELECTRICAL SUBSTATION IN BIT**

The BIT Sindri Substation is an electrical substation located in Sindri, Jharkhand, India. It operates at a voltage level of 11kV on the primary side and provides power distribution at 440V on the secondary side. Substation typically consist of various equipment, such as transformers, circuit breakers, switches, and protective devices, to ensure the safe and efficient distribution of electricity. These components help regulate voltage, protect against electrical faults, and enable the transfer of power between different voltage levels.

The BIT Sindri Substation plays a vital role in supplying electricity to the surrounding area, ensuring a reliable power supply for residential, commercial, and industrial consumers in the region.





### **GEODESY AND SURVEYING LAB**

The survey laboratory is equipped with all latest equipments viz levels, tot stations, and GPS receiver sets to carry out survey work. Faculties facilities appropriate understanding of methods of surveying based on accuracy and precision, techniques for measurement of distance, setting offsets, calculating area and volume, also they study the functions of various instruments, their least counts, possible errors, advantages and limitations. Field surveys are also performed for enhancing practical knowledge.

### **GEOTECH LAB & ADV. GEOTECH LAB**

The Soil Laboratory provides academic and research services by performing all laboratory tests required for the analysis and study of soil characteristics and properties. The Laboratory has a facility for conducting tests for determining the index and engineering properties of soil. These tests help to find out the suitabilty of soil for construction purposes.





#### **ENVIRONMENTAL ENGG. LAB**

The Environmental Lab consists of modern and technically advanced instruments needed for physical and chemical analysis of water and wastewater. The laboratory offers excellent facilities for detailed analysis of trace organic contaminants and also has many in-situ facilities and equipment for performing various types of measurements and sampling of receiving and composite water and wastewater. The experiments performed are useful in planning water and wastewater treatment plants and alkalinity, hardness and toxicity of water can be checked.

### **HYDRAULICS & W.R.E LAB**

The hydraulics laboratory is fully equipped with all equipment and experimental setup to study the mathematical technique used for design work understanding the concept of surface profile with hydraulic jump, and for conducting model tests and through this students can very well demonstrate various methods of measuring the flow rates, capacity, and velocity of water in reservoirs, closed pipes and open channel.





### **ADVANCED STRUCTURAL & M.O.S LAB**

The Structure Analysis Laboratory facilitates the determination of the effects of loads on physical structures and their components. The analysis results are used to verify the structure's suitability for use. In the Materials mechanics laboratory students analyze the behavior of structures, metals and timber to check the serviceability of the structure.

### **BMC & CONCRETE LAB**

The laboratory is used to facilitate hands-on learning and is concerned with the testing of construction materials. The lab is equipped with an experimental setup required for the study of the properties of various building materials. Students will be able to Identify and list the various building materials, their properties and symbols. Also they will be able to perform various tests on different materials, cement, Sand, aggregate, etc so that quality materials can be used for construction work.



### INDUSTRIAL PROJECTS IN OUR DEPARTMENT

- Dr. Jitu Kujur & Dr. Nishikant Kisku have worked on consultancy projects like, "Stability test of Warf wall constructed at 5.0 Mtpa NLW Washery at Patherdih and its further strengthening" (Amounting 7.39 Lakh INR), "Investigation for the Quality Check of PQC surface for Four/Two laning with paved shoulders of Govindpur (Rajgunj) Chas West Bengal Border Section of NH-32 from Ch. 0.000 to Ch. 56.889 in the State of Jharkhand" (Amounting 0.5 Lakh INR), Engagement of Consultant for work of Construction of FCI Godown, etc at Shaharghati, Dumka, Jharkhand. reg. (Amounting 14.75 Lakh INR), Work Order for "Technical services for Carrying out Traffic and Axle Load Survey and Report Preparation and Recommendation" for Dumka-Hansdiha Road Package-01 in State of Jharkhanda under ADB Lan 3276-IND (Amounting 1.77 Lakh INR).
- **Prof. Rabindra Kumar & Dr. Sudha Das Khan** have worked on Performance investigation of Nano Coated Steel Rebars in reinforced concrete (Amounting 65 thousand).
- Dr. Abhijit Anand & Prof. Prashant Ranjan Malviya have worked on A probabilistic seismic stability analysis of reinforced mine OB dumped slope. (Amounting 45 thousand).

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#### MINERAL ENGINEERING LAB

The mineral engineering lab, under the supervision of Dr. Nand Kishore, is equipped with:

- Jaw Crusher (Blake -single toggle/ double toggle)
- Ball Mill (Cylindrical)
- Sieve Shaker (Top)
- Weight Balance (Automatic)

#### **DHATVIKA**

DHATVIKA, the **Annual Metallurgical Fest of BIT Sindri**, has been a blazing furnace of academic education, cutting-edge research, and industrial practices since its inception in 2015. This grand event is organized by the Department of Metallurgical Engineering, BIT Sindri.

The world of metallurgy is facing formidable challenges, both in their density and complexity. In response, DHATVIKA aims to promote and foster a collaborative bridge between different sectors of the metallurgical fraternity to address these issues earnestly and on priority. With an impressive display of huge footfall, expert lectures, intense discussions, and healthy competitions, DHATVIKA provides a unique environment for amalgamation of budding and professional metallurgists to come together and share their ideas and innovations.





#### **METALLOGRAPHY LAB**

The metallography lab, under the supervision of Md. Ijhar Hussain, is equipped with:

- Hardson Metallurgical microscope
- Automatic electrolytic polishing cum etching system
- Inverted metallurgical microscope
- Grinding machine

#### **SCANNING ELECTRON MICROSCOPY LAB**

A Scanning Electron Microscope (SEM) is a type of electron microscope that produces images of a sample by scanning the surface with a focused beam of electron. Other processes carried out in the lab are as follows:

- Characterization of materials (metals, plastics, ceramics, glasses)
- Particle analysis and identification
- Failure analysis





#### MINE VENTILATION PLANNING & ENGINEERING LAB

The ventilation division is capable of solving complex work place environment problems in underground mines. Consistent efforts are put in R& D to develop methods and techniques to improve the quality of work place environment for the miners. We have expertise in :

- · Ventilation survey and planning in underground mines.
- · Mine Ventilation and network analysis, etc.

#### **GAS CHROMATOGRAPHY LAB**

Gas chromatography (GC) is an analytical technique used for quantitative and qualitative analysis of chemical components in a sample mixture. The analysis performed by an equipment called Gas Chromatograph. It provides a complete analysis of the gases expected in underground mines. It involves a sample being vaporized and injected onto the head of the chromatographic column.

Principle of Gas Chromatography

- 1.)Gas Regulation and Sample injection
- 2.)Separation
- 3.) Detection and Analysis





#### **SME BIT SINDRI STUDENTS' CHAPTER**

SME BIT Sindri Students' Chapter is a social and technical organisation. It was established on August, 2021 under the global organisation, Society for Mining, Metallurgy and Exploration Inc with the goal of facilitating healthy interaction between mining industry specialists and BIT Sindri students in order to provide possibilities for overall development of student of mining engineering department of BIT Sindri.

#### MINING ANALYTICAL RESEARCH CENTRE & COAL CHARACTERISATION LAB

Introducing Jharkhand's STATE GOVERNMENT'S Premier Coal Characterization Laboratory. Welcome to the state-of-the-art Coal Characterization Laboratory, situated within the prestigious Department of Mining Engineering at BIT Sindri-Dhanbad, Jharkhand. As the first of its kind in the region, our laboratory stands at the forefront of coal testing, analysis, and industrial waste utilization. We are proud to offer a comprehensive range of services, providing accurate and reliable data to meet the coal-related needs.





### **FLUIDIZATION LAB**

In Fluidization Lab, under Dr. Amar Kumar and Mr. Pitho Hansda, we have:

- Mass Flow Controller
- Gas Flow Meter
- Hot Air Cyclone Separator

- Ultrasonicator
- Fluidized Bed

### **CHARACTERIZATION LAB**

For Characterization Lab, under the care of Dr. Ch. V. Raghunath and Mrs. Poornima Pandey, we have:

- Gas Chromatography
- UV Spectroscopy
- Ultrasonic Cleaner
- FTJR Spectroscopy

- Magnetic Stirrer
- Gas Regulator
- PH Meter





### **INSTRUMENTATION AND PROCESS CONTROL LAB**

Additionally in Instrumentation and Process Control Lab, we have:

- Temperature Controller
- Pressure Controller
- Level Controller
- Flow Controller

### **CHEMICAL REACTION ENGINEERING LAB**

Our Chemical Reaction Engineering Lab, under the supervision of Dr. Ch. V. Raghunath, is equipped with:

- Isothermal Batch Reactor
- CSTR (Mixed Flow Reactor)
- Cascade CSTR (MFR in series)
- Coiled PFR
- Long Tube PFR
- Packed Bed Reactor
- Photochemical Reactor (Chiller attached)
- Chemical Reactor Trainer





#### **PRODUCTION & INDUSTRIAL ENGINEERING SOCIETY**

Production and Industrial Engineering Society was formulated to guide students towards industrial management. It has organized numerous webinars, events and Industrial visits to educate and engage the participants to get an in-depth understanding of the scope of advanced materials along with modern and hybrid manufacturing technologies and systems in the context of the current industrial requirements.

#### **METROLOGY LAB**

The metrology lab at BIT Sindri is a well-equipped space that has all the necessary equipment, including an autocollimator, a surface roughness machine, a tool makers microscope, a coordinate measuring machine (CMM), a roll test two-flank inspection measurement machine, and others. This laboratory's goal is to familiarise students with measuring tools, teach them correct measurement practises, and prepare them for application in the real world.





#### **MODERN MANUFACTURING LAB**

The Modern Manufacturing Laboratory of BIT SINDRI gives students hands-on training in a variety of non-conventional machining techniques, including AJM, USM, EDM, ChM, rapid prototyping, etc. It has cutting-edge machinery that students can utilise to develop useful skills, obtain real-world information about unconventional production processes, and prepare for careers in the manufacturing business.

#### **PROJECT LAB**

The Project Lab at BIT Sindri is a well-equipped space with the aim of giving the students actual experience in a variety of disciplines of Production and Industrial engineering. Additionally, it has a **3D printing machine, treadmill, Work study & ergonomics experimental equipments** and a team of knowledgeable professors who lead and coach students in a variety of software programmes, including CAD, Solidworks, NX, Catia, etc.





#### **CNC AND ROBOTICS LAB**

At the CNC and Robotics lab students are taught about programming a robot, comprehend its operating principles, and use it in a variety of applications. It gives users practical experience with **CNC controllers and machines including CNC Lathe and CNC Milling machines**. The incorporation of CAM technology aids in improving the machining design and programming approaches to generate high-quality goods

#### **ADVANCE MANUFACTURING LAB**

The Advanced Manufacturing lab has been setup at BIT Sindri keeping the aims to stimulate the innovation to manufacture smart machines in the capital goods sector. The lab is equipped with multiple CNC based non-traditional and hybrid machining tools. Further, this lab contains a range of sensors and microcontrollers for measuring, monitoring and control different manufacturing processes. The focus of the lab is on both process as well as system level manufacturing solutions.





#### THEORY OF METAL CUTTING LAB

In this Lab, students aim to learn the process of main metal cutting processes and understand the principals of tool geometry, cutting forces, chip formation, and the effects of various cutting parameters on the quality of the machined surface. The lab incorporates capstan and turret lathe, centre lathe, ECM, drilling and grinding etc. Students done this by watching a demonstration of how the machines work and effectively learned the process of metal cutting.

#### **VIRTUAL REALITY LAB**

The Virtual Reality (VR) Lab is the latest addition to Production & Industrial Engg. department. It provides students with practical experience & advanced understanding of concepts like **Welding, Laser Beam Drilling,** etc. through simulation, making use of VR-enabled technology. The Lab provides an **engaging simulated learning environment** to carry out experiments and help students understand concepts and theories with hands-on learning.



# ADAPTING TO RECESSION

The fact cannot be overlooked that the IT sector's recession has inevitably impacted the institute's placement scenario. However, as we have famously heard, "The result you achieve is directly proportional to the efforts you apply"; so we have taken efficient steps to minimize the slips that occurred in previous years.

In the past, we started spreading awareness about quality coding and emphasizing competitive coding. We have deployed special trainers for the students to make them relevant for future encrypted challenges. The institution has regularly been developing a coding atmosphere around its campus through several means, including conducting regular hackathons, providing high accessibility to advanced computer labs, and ensuring availability of Wi-fi in every department, making these things even more feasible. Additionally, these initiatives increase their knowledge, which helps them increase their ranking on several competitive platforms.

The Training and Placement Cell also organizes several mock placement drives that sharpen the overall skillset of students, which predominantly includes their coding knowledge, communication skills, presentation skills, and many more. By constantly monitoring the job market, we provide timely information to students and help them align their career goals accordingly. We believe these steps will not only bring a massive change in the placement scenario but will also help set a record number of placements in the upcoming year.







## PLACEMENT INFRASTRUCTURE



#### **CAREER DEVELOPMENT CENTRE**

BIT Sindri has a dedicated Career Development Centre (CDC) that focuses on providing career guidance and support to its students. The CDC conducts various training programs, career counselling sessions, industrial visits and workshops for the students to develop their employability skills make them industry-ready. The CDC is committed to providing holistic career development support to its students, and helping them realize their career aspirations.

#### **CONFERENCE HALL**

A dedicated conference hall for the recruiters to deliver their pre placement talks and to interact with the candidates which would help them to learn about the company's culture, values, and job opportunities. The hall is spacious, air-conditioned, and equipped with modern audio-visual equipment, making it an ideal venue to conduct seminars and other events.





#### **PRESENTATION HALL**

This hall has the facilities for audio-visual interaction through large screens. This hall has a well-designed space that is specifically tailored to facilitate effective presentations, the layout of the hall is adaptable and flexible allowing for different seating arrangements making the process easy for both recruiter and students.

## PLACEMENT INFRASTRUCTURE



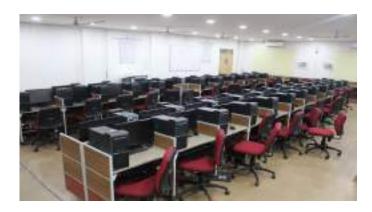
#### **GROUP DISCUSSION HALL**

This hall is specially designed to serve the purpose Group Discussion, it is finished without tables which ensure smooth communication between the members of discussion and the recruiter.

#### **RECRUITER'S FELICITATION HALL**

It has space that is designed to celebrate and honor special events, occasions, and individuals. It has the necessary amenities to accommodate guests comfortably and provides an atmosphere that is conducive to recognize the efforts of the recruiters in the placement process, and also strengthens the relationship between the institute and the recruiting organizations.





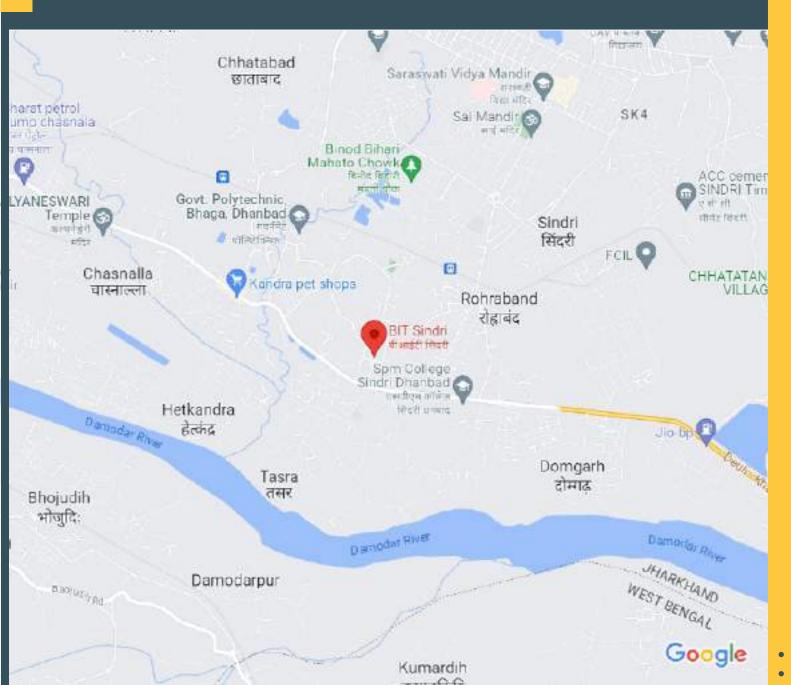
#### **ONLINE EXAMINATION HALL**

Every campus interview starts with the written round. The institute has a large infrastructure of over 200 computers for conducting online tests. The computers have a webcam and are suitable for proctored tests.

## **ESTEEMED ALUMNI**

NAME	DESIGNATION	NAME	DESIGNATION	NAME	DESIGNATION
Dr. D.K. Singh	Director B.I.T. Sindri, Dhanbad	Amarendu Prakash	Chairman, SAIL	Dr. K.P. Singh	President and CEO, Holtec International
Dr. B.S. Sahay	Director, IIM Jammu	Tushar Chakraborty	Director, Deloitte India	Shri Kailash Pandey	President & Cluster Head Hindalco Industries Ltd.
Sonal Shrivastava	Chief Financial Officer, Vedanta Ltd.	Shri Sanjay K Verma	Chairman & Managing Director, MECON Ltd.	Shri Anuj Kathuria	President, J.K. Tyres & Industries
Nitesh Kumar Nirala	Director, Iron, Power & Business, Vedanta ESL	Shri Ashutosh Kumar	CEO, Asian Energy Services Ltd	Shri Ram Naresh Singh	Chairman, Damodar Valley Corporation
Shri Navneet Singh	CEO, ArcelorMittal Digital Consulting Pvt. Ltd.	Shri Rajiv Kumar	President, Operations TATA Steel, Kalinganagar	Shri Ashwini Raina	Deputy. General Manager, Essar Steel
Shri Sushil Thakur	President, Ambuja Cement	Shri Shashi Shekhar	Managing Director Camfil India	Shri Ramesh Jha	Chief Business Officer Adani Power Jharkhand Ltd
Shri S.N. Verma	Chairman, JSEB, Ranchi	Shri Kamal Nath	CEO, Sify Technologies	Shri Amit Roy	Managing Director, Pushkar Techno Pvt. Ltd.
Shri Pankaj Kumar	Secretary, Bureau of Energy Efficiency, Ministry of Power	Shri Prabhakar Lal	Senior Director Capgemini	Arvind Kumar Singh	Director Technical, Projects & Raw Material, SAIL
Shri K.K. Singh	CGM, BSNL, Jharkhand	Provash Ranjan Biswas	Deputy. Director, Ministry of Defence (Govt. of India)	Mr. Ankit Avishek	Senior Specialist (TAG) DE Shaw India Pvt. Ltd.
Mrs. Kiran Narendra	GM (Head) , Operations Driveliness, TATA Motors	Shri Sanjiva Jha	Founder & CEO, BroadArks	Shri Anant Saurabh	AVP - Digital Consulting, TATA Technologies
Shri Vikram Sarin	Executive Vice President Maruti Suzuki India Ltd.	Shri Suresh Jha Ajit	Sr. Scientist, NASA, USA	Shri J.K. Singh	Vice President- Business Head IS & WP Ltd. Ipsum
Shri Subodh Das	Founder & CEO, Phinix LLC	Shri Nirdesh Sinha	Vice President (Head), Flexatherm Expanllow Pvt.	Shri Abhijeet Sarkar	Vice President, Head of EMEA Infosys Healthcare
Shri Arwinder Singh	AVP (Metallurgy and R&D head), Jindal Stainless Ltd.	Shashank Shekhar	Chairman, Cyber Vidyapeeth Foundation	Shri Smita Dutta	VP(Infrastructure), Accenture
Purushottam Thakur	Chief-Generation TATA Power	Shri Sanjay Kumar	Head HR L&T Metro Rail, Hyderabad	Shri A.P. Singh	CEOS, Talwart Infotech Pvt. Ltd
Shri K.A.P Singh	Ex-Director, SAIL	Shri B. Ganguly	Ex- Chariman Cum MD Exide India Ltd.	Shri Sanjay Sinha	GM-BIW Factory TATA Motors
Shri A.K. Jha	Ex-Director (Technical) NTPC	Shri Vibhash Kumar	Former Executive Director, Indian Oil Corporation Ltd.	Shri Rajesh Verma	Assistant Vice President Intellect Design Arena Ltd
Shri Sangeet Sinha	Head-Digital & SVP Tech, ICICI Securities Ltd	Shri B.N. Singh	Ex-CMD, Vizag Steel Plant	Shri R. Vaishapyan	Assistant Vice President Infogain
Shri Alok Kant	Strategic Acc. Management Sigmoid (Great Boston)	Shri Suresh Sinha	Advisor, Project Management and Engineering	Awadhesh Kr. Singh	Asst. Vice President CPC Orient Cement Ltd.
Shri B.K. Barnwal	Ex- Deliver Head (India) TCS	Shri K. Satyanarayan	EX-CMD Engineers India Limited.	Shri Sanjay Sharma	Construction Manager Cheveron Corporation

# **WAY TO BIT SINDRI**



#### **RAILWAYS**

Dhanbad Junction is the nearest Railway Station & is the most important junction of the state as it is connected directly to all major cities of India, via Kolkata, Mumbai, Delhi, Chennai, Bangalore, Nagpur, Pune, Ranchi, Jammu, Raipur, Jaipur, Visakhapatnam, Bhubaneshwar etc. It is well connected to Howrah Junction through over a dozen of super-fast/express/local trains.

#### **AIRWAYS**

Birsa Munda Airport (Ranchi) is well connected with Sindri through NH 32, road distance is 160 km between the two cities. Netaji Subhash Chandra Bose Airport (Kolkata) is 242 km away from Sindri.

#### **ROADWAYS**

Numerous bus/taxi services are available between Ranchi & Sindri. Ranchi is also connected by the Rail route (distance 167 km). It take 3-4 hours from Ranchi to Sindri by road.

SCAN THE QR CODE TO FIND YOUR WAY TO BIT SINDRI



SAMSUNG























Deloitte.

































































**KANTAR** 















































































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