

# **B.A. COLLEGE** OF ENGINEERING & TECHNOLOGY

#### JAMSHEDPUR

(Approved by AICTE, New Delhi and Ministry of Science and Technology, Govt. of Jharkhand and Affiliated to Kolhan University/ Jharkhand University of Technology, Ranchi)

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# PROSPECTUS

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For downloading online forms visit our website : www.bacet.ac.in,

"Education is a tool to know and control yourself, to relate with nature and society, to serve nation and to build universal output."

----Dr. S. Radhakrishnan

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We at BACET firmly believe to preach and act collectively so that the education becomes not only a key to success in life but also a lasting impact in the lives of our students.

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#### MESSAGE FROM THE

# CHAIRMAN



Dear young friends and aspiring engineers,

Greetings!

I thank you for your interest in BA College of Engineering & Technology (BACET), Jamshedpur, Jharkhand.

Visualizing the recent technological developments & advancements causing huge demand of skilled technical manpower that will be playing important role in transforming India into a developed country, BA College of Engineering and Technology (BACET) was established in 2007 by it's promoter Bihar Association. BACET is approved by AICTE New Delhi & Govt. of Jharkhand and affiliated to Kolhan University (KU), Jharkhand. From session 2018-19, BACET has come under newly established Jahrkhand University of Technology (JUT), Govt. of Jharkhand, Ranchi.

Entire stakeholders of BACET are working towards vision of becoming a Premier Centre of Technical & Management Studies through excellence in Engineering Education and Research, thereby producing global leaders to meet current and future challenges of industry & society.

BACET campus is spread over 20 acres of land and surrounded by lush green hills having tranquil campus ambience with adequate Wi-Fi facility, modern library, state-of-the-art infrastructures, hands-on lab facilities and computer centre. Students creativity and learning engagement is ensured through organizing varieties of events, participating in celebrating engineering months, connecting with societies & surrounding environment and pursuing their passion by becoming active member of various student's clubs as detailed in the prospectus.

Soft Skill development workshops are organized by engaging professional Management Skill Development agencies for overall personality development of the students and preparing them to face the placement interviews confidently and successfully.

BACET provides skill-based learning environment for students and prepares them as successful technocrats and business leaders of tomorrow. Structured programs are designed to take care of student's overall development by carrying out various exploratory and experimental tasks ensuring that they become industry-ready resource after graduating from BACET.

Separate training & Placement cell works full-time to ensure campus placement of all the students by reputed industries and corporates from within and outside Jharkhand State. Our placement records, as depicted in the prospectus, speaks for itself.

I congratulate all the parents and students for showing interest and preferring BACET to become part of the most vibrant quality education-centric engineering institute. Please feel free to take a look around our campus, soak in the spirit of learning that BACET imbibes and take your dreams to a successful carrier.

I wish all the entrants undertaking admission to BACET all the very best and an enriching experience ahead.

Dr. Shio Kumar Singh Chairman

#### MESSAGE FROM THE

# PRESIDENT



The Bihar Association was formed with the prime objective of addressing the cultural, education and social needs of the citizens of Kolhan zone and its periphery. The first step in this direction that our Association took, was establishing an English medium school, Rajendra Vidyalaya, in the city of Jamshedpur in the year 1970. It was a matter of time before school developed into one of the best institution of education in Jamshedpur. Since then, the school is growing by leaps and bounds. It is affiliated to council for India School Certificate Examination, New Delhi and stand competent for academic excellence including co-curricular activities for all round development of the students.

With the same confidence, we have ventured into field of Higher Technical Education in Jharkhand and established the B. A. College of Engineering & Technology (BACET), Jamshedpur. Our sole purpose of establishing an engineering college in the city was to provide the students of eastern India the opportunity to pursue engineering as an academic subject and as a career.

BACET Jamshedpur answers the ambitions of those who wish to presume a career in engineering. It offers quality engineering education at a reasonable fee structure. It is our mission to transform BACET into a learning place of excellence. We are having five branches— Mechanical Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering, Computer Science Engineering and Civil Engineering. We welcome and invite students and their parents / guardians to use BACET as catalyst in fulfilling their dreams.

B.N. Choudhary President

#### MESSAGE FROM THE

### **Director (in-Charge)'s**

With a global vision and a strong connection between faculty, students and corporate world, B.A. College of Engineering &

Technology (BACET), Jamshedpur, aims for preparing tomorrow's leaders in the technical field. We assure to develop the BACETians confident, vibrant and self-reliant in every sphere. It is my proud privilege to welcome the new entrants aspiring to become creative and innovative engineers at the BACET.

BACET was established in the year 2007 to fulfill the country's large number of qualified manpower requirement by the industries and service related units in tandem with the main focus of Ministry of Human Resources and Development (MHRD), Govt. of India and Department of Science & Technology, Govt. of Jharkhand. The college is approved by All India Council of Technical Education (AICTE), New Delhi, recognized by Ministry of Science & Technology, Govt. of Jharkhand and affiliated to Kolhan University, Chaibasa, Jharkhand. All the infrastructural facilities, including various departmental laboratories and library are established as per the AICTE (curricula) guidelines. The college is committed to impart quality engineering education in Civil Engineering, Computer Science & Engineering, Electrical & Electronics Engineering, Electronics & Communication Engineering and Mechanical Engineering. Apart from these degree awarding disciplines, Basic Science & Humanities department shares the responsibility to provide an adequate foundation in Physics, Chemistry, Mathematics & English (Professional Communication).

Our Campus is designed to educate and train the entrants in diversified dimensions, by following the best standards available in all spheres. Over and above, it will orient one's personality to suit the desired job profile through sustained exposure to extra-curricular activities and personality development modules.

The campus is set in a beautiful landscape with a spectacular view of Dalma hill-range— a highly living environment that encourages interaction and camaraderie. A lush green campus with pleasant and pollution free environment makes the campus conducive to learning. It is with all residential facilities away from the din and bustle of the city but well connected with Jamshedpur and Ghatsila that ultimately makes BACET a unique destination.

The state-of-the-art infrastructure, futuristic Labs, resourceful library, highly qualified and experienced faculty, well-designed hostel, facilities for indoor and outdoor recreation provide the ideal environment for grooming. Our aim is to ensure an all round development of our students and extend job-oriented practical education for complete development.

Jamshedpur is the largest industrial hub in eastern region and one of the largest industrial hubs in India. The students of BACET are getting opportunity to get hands-on training in technical field directly in industries during the engineering programme. This is only possible due to the location of our engineering college at the heart of the industrial town.

The Training & Placement Cell of the college has been arranging and giving opportunities to all students to appear for interview in different companies. Our students have infiltrated into all sectors be it government, private or public to serve the country in various capacities. Our competent faculty helps the students in developing their overall personality to meet the challenges at global level and come out with the optimum solutions.

The excellence in teaching comes from the careful choice of faculty members in which BACET has not made any compromise. It has gone to outreach and fetch scholars across the country to enrich its faculty strength and quality. A group of our brilliant, highly qualified and well experienced faculty members from IITs, NITs and other reputed institutes & universities have made it possible. Our distinguished faculty, with extensive ties to leading engineering and research community, are able to bring the best scientist and engineers into our programs as visiting faculty and guest speakers.

I solicit the constructive support of the parents, being the valued stakeholder to achieve our goal as per the vision of educational excellence. I congratulate the budding engineers who have shown their interests and faith in our college to become future technocrats and scientists for the technical fulfillment of the time. I wish all a very pleasant and fruitful stay in BACET for the coming years. I hope each of the students will utilize their valuable time with sincerity and dedication along with devotion towards all co-curricular activities of the college. I extend once again my hearty welcome to the would-be engineers.

**Director/Principal** 

# **Vision**

Our Vision is to be a Premier Centre of Technical & Management Studies through excellence in Engineering Education and Research, thereby producing global leaders to meet current and future challenges of industry & society.



# Mission

- To empower learners by providing best technical education coupled with leadership and professional skills.
- To provide "Education for Living and Livelihood" as well as "Education for Life" by focusing on the inculcation of human and moral values.
- Enable students for deep learning, rational thinking and flair for entrepreneurship through industry institute interaction.



To develop the skills of original, critical and creative thinking and scientific enquiry in students and encourage a culture of entrepreneurship amongst them & this way they should not have a moto to earn for themselves but they should become a source for others to earn for there forced and batter.

# 📕 About Jamshedpur

Jamshedpur is the first well planned industrial city of India, founded b the Late Jamshedji Nusserwanji Tata and the 32nd largest urban agglomeration in India. It is a matter of pleasure that Jamshedpur has been enlisted in the top 25 cleanest cities of India according to survey Swachh Survekshan 2018 conducted by Government of India.

Jamshedpur as the home to the first private Iron and Steel company of India (sixth largest in the world), Tata Steel is called TATA NAGAR as a result of company significant presence. The bigger co-operate houses like Tata Steel, Tata Motors and thousand other companies like NUVOCO Cement, Telcon, BOC gases, Praxair, Tinplate. It is also home to one of the largest industrial zones of India known as Adityapur Industrial Area which houses more than 1200 small and medium scale industries. This provide a great opportunity to BACET for interacting with the companies and develop student skills as per the companies. Carports

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- CSIR-NML
- XLRI
- IIT-KGP, IIT ISM-D bad, IIIT Ranchi, IIM-Ranchi, BIT Sign, NIFT, HCL



# About the College

B.A. College of Engineering & Technology (BACET) was established in the year 2007 to fulfill the country's large technical manpower requirement, in tandem with the main focus of MHRD, Government of India. BACET is a unit of Bihar Association, Jamshedpur and the institute is affiliated to Kolhan University, Chaibasa, Jharkhand and also to Jharkhand University of Technology, Ranchi. It is approved by AICTE, New Delhi and is recognized by the department of Science & Technology, Government of Jharkhand.

A lush green campus of 20 acres with all residential facilities, located just 22 kms away from the din and bustle of Jamshedpur, but well connected with both Jamshedpur and Ghatshila, makes BACET a unique destination for academics in serenity. Such a tranquil campus ambience with adequate Wi-Fi facility helps our students delve deep into subjects.

In past few years, BACET has registered subsequent progress and development in all aspects, be it academics or administrative. This has improved the quality of academic performance of the students. Departmental labs have been enriched, upgraded and reorganized in due course of time.

BACET is driven by the last golden words of Mahatma Buddha o his disciple Anand – " Appa Deepo Bhavah" (be a light unto yourself) and that is the motto of the college. The college is successively stepping forward to carve out its own niche in the field of technical education.

#### FEATURES OF OUR COLLEGE:

- High standard of education in study.
- Highly experienced and dedicated faculty members.
- Affordable course fee as per Government of Jharkhand Rules and Regulaions.
- Wi-Fi connectivity.

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- 1:1 internet connected with computers with 10mbps speed.
- Extra-curricular activities.
- In-House medical facilities.



# Civil Engineering (CE)

The Department of Civil Engineering started during the year 2010-2011 with the aim of promoting high quality education in the respective field. The department presently has an intake of 60 students per batch with well equipped laboratories. Dynamic, experienced and committed faculties with more accountability are strength of the department.

We welcome students to our Bachelor of Science program in Civil Engineering to innovate, solve problems who will become leaders in their organization.

#### VISION :

To be a centre of excellence in the field of Civil Engineering with the necessary knowledge, skill and attitude of Civil Engineers who can be entrusted by the society to lead a sustainable world with enhanced quality of life.

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#### MISSION :

- To prepare effective and responsible graduate engineers for global requirement by providing quality education.
- To impart sound technical competency to students according to needs of the changing world.
- To provide consultancy to the neighborhood and cultivate the spirit of entrepreneurship.

# **Civil Engineering Laboratory**

The department has the following well-equipped laboratories-

- > Fluid Mechanics lab
- Strength of Material lab
- > Survey Field Work
- > Structural Analysis lab
- > Transportation Engineering lab

- > Geotechnical Engineering lab
- > Environmental Engineering lab
- Concrete Technology lab
- > Open Channel Flow lab
- > Geology lab







### Computer Science & Engineering (CSE)

The Department of Computer Science and Engineering (CSE) was established in the year 2007. It is one of the five departments in B. A. College of Engineering & Technology and administers bachelor's programs in Computer Science and Engineering. The department offers a four year course of B.Tech. in Computer Science & Engineering. Six full-time faculty members provide a comprehensive program that emphasizes algorithms and programming, computer architecture, database and data mining, distributed systems, operating systems and computer networks, and scientific computing.

The Department's many strengths include its high faculty-to-student ratio, state of the art facilities, excellent faculty members, strong focus on undergraduate education, and emphasis on leadership, service, and ethics.

Graduates from the CSE department are recruited by many reputed companies. Graduates take up careers in the computing industry, the finance industry, startup companies, management consulting companies, and government organizations.

#### Vision

- To generate competent professionals to become part of the industry and research organizations at the national and international levels
- To build a strong research and teaching environment that responds swiftly to the challenges of the era

#### Mission

- To teach and prepare liberally educated and skilled software engineers for leadership and professional careers and for advanced study
- A central objective of our program is to contribute to society by advancing the fields of computer science through innovations in teaching and research
- To enhance student knowledge through interactive teaching, global engagement, and experiential learning

# **Computer Science & Engg. Laboratory**

#### **CSE Lab Details**

#### CSELAB-I

- Computer Programming Lab (Turbo C++/GCC)
- System Software Lab (Turbo C++/GCC)
- Computer Graphics Lab (Turbo C++/GCC)
- Software Engineering Lab

#### CSELAB-II

- Object Oriented Programming Lab (Turbo C++/GCC)
- Computer Network Lab (Windows Server 2003/ 2008, Linux)
- System Administration Lab (Linux)
- Internet Lab (HTML, Visual Studio)

#### CSELAB-III

- Relational Database Lab (Oracle 11g)
- Computer Organization Lab
- Language Processor Lab (Turbo C++/GCC, Flex, Bison)

#### CSELAB-IV

- Operating System Lab (Turbo C++/GCC)
- Data Structure Lab (Turbo C++/GCC)
- English Language Lab (OREL DLL Suite)









### Electrical & Electronics Engineering (EEE)

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The Department of Electrical and Electronics, is one of the oldest departments at B.A. College of Engineering & Technology. Established in the year 2007, the department has well qualified; passionate and dedicated staff, most of who are engaged in path breaking research and development.

The Course at the department, is a healthy amalgam of Power Engineering and Electronics; comprehensive and in keeping modern trends of Electrical and Electronics Engineering education. Course pattern at the department is planned to keep the students up to date with the recent trends and shifting technological paradigms, making them industry ready. The department has a ample number of faculty members with various specializations. The average experience of the faculty is very high.

#### VISION

Continuous improvement in domain knowledge and transferable skills to enhance a professional attitude in the department by strategically planning and constantly promoting the electrical engineering education with ethics and conduct to make it learning and responsive.

To attain technical excellence in Electrical and Electronics Engineering through graduate programs and interdisciplinary research related to sustainability in power, energy and allied fields.

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#### TransaMISSION

- To provide technical education that combines rigorous academic study and the excitement of innovation enabling the students to engage in lifelong learning
- To establish Center of Excellence in sustainable electrical energy, smart grids and systems.
- To establish tie-ups with industries and institutions of repute and to foster building up of a wide knowledge base to keep in tune with upcoming technologies.
  - To motivate commitment of faculty and students to collate, generate, disseminate, preserve knowledge and to work for the benefit of society.

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# **Electrical & Electronics Engg. Laboratory**

The Department has the following experimental laboratory facilities:

- Basic Electrical Engg Lab
- > Electrical Measurement and Instrumentation Lab
- Electrical Machine Lab(I&II)
- > Network/Circuit theory Lab
- > Control System Lab

- > Power system Lab
- > Power system Stability Lab
- Power Electronics Lab
- > Switchgear and Protection lab
- Computer Aided Power systems Lab



### **Electronics & Communication Engineering (ECE**

Department of Electronics and Communication Engineering was started in year 2007. The electronics and communication engineering (ECE) department of BACET aims to produce electronics engineering professionals to lead a successful career in industry, pursue higher studies or entrepreneurial endeavors. Electronics and Communication Engineering (ECE) is an advancing field, with new ideas emerging every other second. From mobile phones to fiber optics and remote sensing, there are exciting avenues to explore and create. The laboratories are modernized to reflect the rapid changes in technology. Students, while working on algorithmic development, also have state-of-the art experimental facilities to support the theoretical research.

#### Vision

The main objective of the department is to build strong fundamental knowledge among the students to pursue higher education and continue professional development in Electronics & other field. Also it aims at exposing its students with a multidisciplinary technology spectrum in order to prepare them with a diverse and a competitive career path.

#### Mission

- To educate the students with the state of art technologies to meet the growing challenges of the industry.
- To carry out research through constant interaction with research organizations and industries.
- To equip the students with strong foundations to enable them for continuing education.

# **Electronics & Communication Engg.Laboratory**

The department has the following well-equipped laboratories:

- Basic Electronics Lab
- Solid State Device Lab
- > Linear Integrated Circuits & Application Lab
- > Digital Electronics Lab
- > Electronics Circuit Lab
- Analog Electronics Lab
- > Electronics Instrumentation Lab

- > Microprocessor & Microcontroller Lab
- > Communication System lab
- > Communication Hardware Design Lab
- > Microwave Engineering Lab
- Optical Communication Lab
- Digital Signal Processing
- > Project Lab











# Mechanical Engineering (ME)

The Department of Mechanical Engineering, established in the year 2009, with a vision to carve a distinct niche for itself in the field of mechanical engineering education in Jharkhand, offers a 4- year B.tech. Program The Department is designed to produce competent Engineers who are ready to contribute effectively to the advancement of Mechanical Engineering field.

Strive to achieve Excellencies in class room teaching and practical class practices for skill development to each and every student.

To enhance the partnership with the industries situated in and around Jamshedpur.

Continual effort to achieve seam less organization in the institute.

#### Vision

 To be recognized as a national leader consistently furthering the interest of stake holders for quality education in the field of Design, Automobile, Manufacturing, Thermal, Fluid machinery etc.

#### Mission

- To prepare professionally competent mechanical Engineers by developing analytical and research activities, encouraging the cultural activities, sports activities and stimulate the success full team members of respective fields.
- Involve local villagers to participate in modern technology in the field energy and waste management.

# Mechanical Engineering Laboratory

The Department has the following experimental laboratory facilities:

- > Engg. Mechanics Lab
- Applied thermodynamics Lab
- > Workshop Cum Manufacturing lab
- > Strength of material lab
- > Fluid mechanics lab
- > Fluid machinery Lab
- > Internal combustion engine Lab
- > Refrigeration & Air conditioning Lab

- Heat & Mass transfer Lab
- > Dynamics of machine Lab
- Kinematics of machine Lab
- Material Science Lab
- > M.M.M. Lab
- CAD/CAMLab
- > Robotics Lab (newly installed)
- > Automobile Engg. Lab









# **Basic Sciences & Humanities**

The department of Basic Sciences & Humanities had its inception since the establishment of the College in 2007 and comprises of the faculty of Mathematics, Physics, Chemistry and English.

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Basic Science are fundamental to all engineering and technology studies. The humanities studies have an important role to play as they enable the students to appreciate the social, political and economic impact of technology and consequently how to influence that.

#### **Basic Sciences:**

- Foster the fundamental principles and understanding of science to easily capture the essence of engineering.
- Facilitate to understand the physical laws, the chemical properties and the mathematical requisites to get a precise picture of engineering.
- Enrich minds to design and develop software through sound knowledge of Mathematics and Statistics.

#### **Humanities:**

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- add the human touch and emotions to the world of machines and engines.
- make engineering students think creatively and solve the management & engineering problems effectively.
- strengthen one's ability to communicate, express and understand others at work.
- prepare engineers to fulfill their cultural and civic responsibilities satisfactorily.

The Department of Basic Science and Humanities has experienced, dedicated and highly qualified faculty members who provide a comprehensive knowledge of Applied Mathematics, Applied Physics, Applied Chemistry, Economics and Management, Communication Skills, Environmental and Social Sciences and Human Values to the Engineering students.

Overall, the department provides value-based knowledge and liberal and scientific education to budding engineers so that they can become professionals with a distinct and earmarked competence and outlook to face the challenges ahead in every walk of life.

# **Basic Sciences & Humanities Laboratory**

#### Vision

- · To prepare students for engineering studies.
- · To provide value-based knowledge and scientific education.
- · To make the students linguistically and generally proficient.

#### Mission

- To foster scientific acumen and temper in the budding engineers.
- · To ensure over all development in terms of subjective competence and personality.

#### The Department has the following experimental laboratory facilities:

- Applied Physics Lab
- Applied Chemistry Lab
- Professional Language Lab











### Academic Programmes & Admission Procedure

BACET provides 4-year B.Tech. programme in the following disciplines:

1.	Civil Engineering	30	Seats	Intake
2.	Computer Science & Engineering	30	Seats	Intake
3.	Electrical & Electronics Engineering	30	Seats	Intake
4.	Electronics & Communication Engineering	30	Seats	Intake
5.	Mechanical Engineering	54	Seats	Intake

#### **Eligibility Criteria:**

AICTE Norms for B. Tech 1st Sem.: Students who have passed the higher secondary/ Intermediate examination (10+2) in the science stream with 45% marks in PCM (General Category) or 40% marks in PCM (SC/ST/OBC) and cleared any one of the following competitive examinations are eligible to apply for admission:

· JEE-Mains conducted by the NTA

If any student has not cleared any of the above competitive exams, he/she can apply for direct admission based on his/her higher secondary PCM Marks.

AICTE Norms for B. Tech 3rd Sem. (Lateral Entry): Students who have completed their diploma or B.Sc. with 45% marks and have cleared JCECEB entrance exam are eligible to apply for admission.

If any students have not cleared the above exam, they can directly apply for admission based on their Diploma/B.Sc. marks.



#### **Registration & Admission Procedure**

The application form and prospectus is available at the City office (Rajendra Vidyalaya Premises, Jamshedpur) and College premises (Ghutia, P.O. Barakhurshi, East singhbhum)

A. Prospectus & Processing Fee (One Time)	:	Rs. 1,600/-
B. Admission Fee (One Time)	:	Rs. 2,000/-
C. Tution Fee & Other Charges (Per Semester)	:	Rs. 35,650/-

- The above mentioned fees (A to C) are applicable for all newly admitted students in 1st & 3rd Semester.
- All the fees are aubjected to revision as per Government regulations.
- Semester fees shold be deposited before commencement of each semester.
- At the time of admission, students have to deposit one timefees alongwith one semester fee. (Rs. 3,600 + Rs. 35,650=Rs. 39,250)

### **Academic Achievers**

### We Produce University Topper

This is pleasant to note that BACET is devoted to technical learning with excellent result. The College has registered subsequent progress and development in every aspect of learning process. The teaching guality has improved the academic performance of the students resulting into producing University Topper. Mr. Vivek Kumar Sharma (ME) got the accolade of University Topper in 2015 and this has encouraged both the faculties and students to head towards excellence. The over-all performance of the students has been recorded reasonably improved after Mr. Vivek received the Gold Medal for securing highest marks in the University. His achievement has inspired the students to keep the flag of

BACET high and maintain the continuity of the highest scorer credited to BACET.

This is a very satisfying and cheerful experience to see BACETians at the top of academic and professional performance.

#### बीटेक में बीए कॉलेज ऑफ इंजीनियरिंग के छात्र को मोल्ड मेडल

NEW utital site other stations if वे वाली बहु-राष्ट्रीय कंपनी ब्रिजम्टोन ने चयनित किया था

केंपने में हो पूरे झारखण्ड के समित विष्ठाम के के सम में आगरे मेचा प्रधन कर रहे हैं। विवेश की सोगड मैडल कलित के चेवरमेंन ही एस के थित, प्रथारी निदेशक की एस कोल यहेत यथी प्राप्तापकी ने उन्हें बच्चाई दी है एवं क्रलेज में वज मध्ये लाजे को प्रतित होने की खात करते हैं। ताकि प्रति सर्व करते। a nue restant and the rest



बीए कॉलेज ऑफ इंजीनियरिंग

#### छात्र विवेक शर्मा को सिलेगा गोल्ड सेडल

जमशेदपुर, पांच दिसंबर को प्रस्तावित कोल्हान विश्वविद्यालय के तीसरे दीक्षांत समारोह में घुटिया, जमशेदपुर स्थित बीए कॉलेज ऑफ इंजीनियरिंग एंड टेक्नोलॉजी के मैकेनिकल इंजीनियरिंग ब्रांच के छात्र विवेक कुमार शर्मा को गोल्ड मेडल प्राप्त होगा. बीए कॉलेज में कैंपस सलेक्शन के दौरान विवेक को टायर निर्माण करने वाली बहुराष्ट्रीय कंपनी ब्रिजस्टोन ने चयनित वि



### **Academic Achievers**

### **Our Focus is on Excellence**



AKRAM RAZA Mechanical Engineering (ME) 87.35% (2017-18)



GAUTAM CHAKRAPANI Civil Engineering (CE) 87.15% (2017-18)



MUMTAZ ALAM ANSARI Mechanical Engineering (ME) 84.55% (2017-18)



RAVI KUMAR Mechanical Engineering (ME) 84.55% (2017-18)



ZUBAIR ALI Mechanical Engineering (ME) 82.20% (2017-18)



RITIK RAJ Mechanical Engineering (ME) 82.15% (2017-18)



VIKASH PRASAD KUSHWAHA Electronics & Communication Engineering (ECE) 80.00% (2017-18)



MD AFAQUE HAIDER Civil Engineering (CE) 80.00% (2017-18)



Barun Dutta Mechanical engineering (ME) 85.80 % (2018-19)



Manoj Kumar Mechanical engineering (ME) 82.15 % (2018-19)



Md Anaytullah Mechanical engineering (ME) 80.70 % (2018-19)



Md. Sultan Hussain Mechanical engineering (ME) 81.40 % (2018-19)



Narendra Pratap Yadav Mechanical engineering (ME) 81.25 % (2018-19)



### Alumini Testimonials

"BACET offers a blend of learning and integration of enduring principles. As a Computer Science & Engineering student, it provides a wide arena of the field and thus I get to learn something new with every subject. The entire study environment makes it easy for a student to learn and inculcate the spirit to stand out amongst the talented and hard-working students"...

Thank You."



Computer Science & Engineering Batch: 2010-14



"कॉलेज में बिताए ये मेरे तीन साल मेरे अब तक के जीवन के सबसे बेहतरीन साल है | यहाँ मैं कुछ सबसे बेहतरीन शिक्षको से मिला जिन्होंने मुझे मेरी काबिलियत पे भरोसा करना सिखाया | मेरी हर समस्या के समाधान में तत्पर रहे और जो हमेशा मेरे आने वाले भविस्य में मेरे पथप्रदर्शक होंगे | कुछ बेहतरीन दोस्त बने जिनके साथ मैं कॉलेज जीवन का पूरा आनंद लिया और उनके बिना मेरे कॉलेज की यादें पूरी नहीं होंगी | इन सबके लिए मैं सभी जनो को धन्यवाद ज्ञापित करता हूँ |"...

Raj Shankar Kumar Singh Computer Science & Engineering Batch: 2013-17 (Lateral)

The four years that I spent at B. A. College of Engineering and Technology were the best year of my life. It's difficult to sum up the memories and experience of four years in few lines. I consider myself very lucky for being a part of BACET.

I made really good friends there and many of them are among my best-friends now. The teachers were friendly, approachable and always able to answer my questions"...



S. Meena Computer Science & Engineering Batch: 2013-17



"I am very happy to say that I have done my engineering from BACET. Our College provided us what a student actually needs. Our management supported us for our education and encouraged us when we succeed. Our lecturers guided us like our parents when we struggled. They also gave equal importance for sports, symposium, college day celebration etc. Because of that, we could develop our skills in all streams. We kept our footprints in all the fields.

Our college showed its success in placement. We had many career development classes, seminars, so that we got some ideas about corporate world. We had amazing training for placement. I can say actually we enjoyed a lot, during the training period. In simple words, I can say our BACET is a place to enjoy as well as to succeed in life."...

RASHMI RANI Electronics & Communication Engineering Batch: 2010-14

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"It has been the most interesting 4 years. A beautiful campus location adds up along with supporting faculties and college authorities. It has helped to develop a positive attitude towards my studies and my life."...



Ziaul Hyder Computer Science & Engineering Batch: 2007-11

### **Student's Speak**

BACET has certainly a student friendly campus with absolute discipline and safety. The college is motivated towards effective teaching-learning process with modern infrastructure. There are highly equipped Labs with good deal of practical exposures. There is a practice of complete syllabus coverage, and contents beyond the syllabus are also discussed for learning latest technological trends. BACET has 70+ experienced teaching faculties. Excellent Result, industrial trainings and Placement have given new height to the reputation of the college. Expert talks, industrial training tours, seminars, and workshops are frequently organized for right aptitude development of students. There is 10 Mbps Internet Connectivity with 1:1 connection. The Central Library is equipped with 2500+ Books, 1000+ Online Journals & 150+ Printed Journals. The digital library, book bank scheme, journals and periodicals, e-learning materials are learning resources provided to the students. The students are provided with compulsory soft skills training through highly experienced & trained faculty team. There is separate modern hostel facility for boys and girls with 24 hours water/power supply. The students and staff get the facility of general store, auditorium, bus transportation to nearby cities, canteen, and sports. The college has an air-conditioned state-ofart Conference Hall.

The training and placement cell facilitates the students with proper technical trainings and job opportunities. The cell arranges for internship, training program and placement of students collaborating with leading organizations of the country as a whole. The office liaises with various industrial establishments, corporate houses etc which conduct campus interviews and select graduate students from all disciplines. The Training & Placement Cell provides the infra-structural facilities to conduct group discussions, tests and interviews besides catering to other logistics. The Office interacts with many industries in the country, of which nearly 10+ companies visit the campus for holding campus interviews.

A good number of co-curricular and extra-curricular activities are organized for technical enrichment and personality development of students. The campus is provided with high speed internet through wired and wireless connections.

I find BACET as an abode of technical learning and mean it as a college with homeliness that nurtures the career of the students to find respectful place in professional arena and social life as well.

-Ritik Raj

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-Aditya Kumar

### **Student's Speak**

Education is the most powerful weapon we can use to change the world

#### - NELSON MANDELA

Science is about knowing, Engineering is about doing.

#### - HENRY PETROSKI

I had a dream to graduate as an engineer. I opted BACET as my destination to persue engineering because of its faculty strength, lab set- up, scenic and serene campus, high placement ratio and reasonable fee structure.

BACET has helped massively to build my confidence and pushed me to challenge myself to achieve my goals. BACET is very supportive to their students , providing them with many resources and facilities from access to computers to someone to talk to if one needs help or support. It's a great environment to learn with many quiet study areas , the library being my personal favourite. The college also has a good infrastructure. It includes classrooms , administrative buildings , workshop , computer labs , various departmental labs , separate hostel for boys and girls also etc.

BACET provides extra curricular activities which includes cultural fest, monthly departmental fests, seminars and workshop, industrial training and many more. Apart from the studies, all the activities have helped the students to develop an all rounder personality to survive in today's competitive environment.

I suggest the new entrants to come to this abode of technical learning and make the future bright. I would highly recommend the college to anyone, the support from teacher, ragging free environment, classes to widen knowledge and all the opportunities college have provided have helped me to become a more confident and ambitious student.

- SILKY SANAYA

### Hostel Boarding and Transportation Charges

These charges are applicable only for those students who want to take Hostel or Transport facility and these charges are calculated on the basis of academic session July to June.

- A. Hostel Charges: Rs. 7,500/- per semester + Caution Money of Rs. 5,000/- (one time, Refundable)
- B. Mess Charges: Rs. 3,000/- per month (Four times, food)
- C. Transport Charges : For all non-hosteller students, who ants to take this facilit: Rs. 10,000/- per semester.

#### **Fee Refund Policy**

- A. In case the candidate wishes to withdraw his application before the commencement of classes, refund will be made as per AICTE norms.
- B. No refund of fee will be made after the commencement of the session.
- C. Transportation and hostel charges will not be refunded in the midsession even if the student is not availing the facility.



#### **For Boys**

1st year Boys: Light blue check (code: 75232, Piano Plus P/C) shirt, black trouser, black neck-tie, white socks and black shoes.

**2nd/3rd/4th year Boys:** Light violet check (code: 75226, Piano Plus P/C) shirt, black trouser, black neck-tie, white socks and black shoes.

Shirt [for Boys]: Material: Rs. 160/-, Stitching: Rs. 150/- + Rs. 10/- for logo.

#### **For Girls**

**1st year Girls:** Light blue check(code:75232,Piano Plus P/C) kamiz, black salwar, black dupatta, white socks and black shoes **or** light blue check (code: 75232, Piano Plus P/C) shirt, black trouser, black neck-tie, white socks and black shoes.

2nd/3rd/4th year Girls: Light violet check(code:75226, Piano Plus P/C) kamiz, black salwar, black dupatta, white socks and black shoes or light violet check (code: 75226, Piano Plus P/C) shirt, black trouser, black neck-tie, white socks and black shoes.

Kamiz Material: Rs. 160/-, Stitching: Rs. 100/- + Rs. 10/- for logo (subject to change in market price)

(Stitching cost of salwar and kamiz together will be Rs. 150/- + Rs. 10/- for logo) (subject to change in market price)

College logo will be of different colors for different years.

The upper part of this new-coded uniform (75226 and 75232) and the different colored logo are

available at "Lajwanti Textiles" [in Milkhiram Market, Sakchi or beside Yuvraj Enclave, Dimna.

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### **Rules & Regulations**

#### **HOSTEL RULES**

- The hostel accommodation is provided only during the period of four years of the course. A refundable security amount of Rs. 5000/- will have to be paid on arrival. Once the course is over the student will have to vacate the hostel. Over staying will result in disciplinary action. If any day-scholar student is found to enter in the hostels without prior information/permission of the college authority in day or night, a fine of Rs. 1000/- will be imposed on her/him.
- 2. Each hosteller will get the following:

One cot with mattress, one chair, one study cum computer table, one cupboard, ceiling fan and a tube light fitting. Hostel in charge while allotting the room will hand over these inventories and take a declaration from the student of its safe use and safe custody. In case of intentional damage to any inventory or loss of it, double the cost of items will be charged.

 All complaints regarding repairs/maintenance (Civil, electrical & carpentry) must be entered in the complaint register available with the hostel wardens.

#### MESS

 Any complaints or suggestions about the mess should be taken with the mess committee to the dean, student affairs. The timing for mess is as follows:

Breakfast	:	8:30 AM-9:30 AM
Lunch	:	1:00 PM-2:00 PM
Evening snacks	:	5:00 PM-5: 30 PM
Dinner	:	8:30 PM-9:45 PM

Students should clear the mess dues by the 10th day of every month.

#### **GENERAL RULES**

- Smoking/drinking or consuming any kind of drugs is strictly prohibited in the college/hostel premises.
- 2. The main gate of college will remain closed from 8:00 PM to 7:00 AM. No students will be allowed to go out of campus without prior written permission to the competent authority.
- No visitors are allowed visiting between 9:00 PM to 6:00 AM. Visitors must register at security gate before entering the college campus.
- 4. Overnight guests are not allowed without the permission of hostel in-Charge.
- 5. No Vehicles are allowed in the hostels.
- 6. Any damage caused to the hostel/College property will be recovered from the students.
- 7. Any student found to break the Hostel/College discipline will render herself/himself liable for disciplinary action.
- 8. All students are requested to maintain good ethical behavior at all times in the hostels/College campus.
- The Management/Director/Principal has the right to expel any student if hostel/college rules are not followed due to any act of indiscipline. Indiscipline in any form will not be tolerated.



# & REGULATIONS

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### **Student Guidelines**

- 1. Any misconduct and violation of discipline may cause individual/general fine which is paid by the students. In case of serious incidence, the matter has to be referred to the disciplinary committee. The decisions/findings of the committee, duly approved by the director/Principal/Chairman, shall have binding.
- 2. Students have taken their admissions to have good results and completion of academic curriculum within the four years. To ensure regularity of students in the class and other academic activities, it is desired that students do not remain absent without prior permission from the HOD/Director/Principal
- 3. For outmost use of library books and teaching learning aids, a student must return the library books within the stipulated time period. In case, the book is lost the student must replace it by a new one. Library journals/references books/dictionaries will be issued to the students only for reading purpose in the library only.
- 4. The institution caution money will be returned to the students after completion of the course i.e four year. This is refundable after obtaining no dues from the concern departments.
- 5. Hostel caution money is refundable after obtaining a no dues certificate from institution.
- 6. The student must maintain more than 75% attendance to appear in the End Semester Examinations.
- 7. Smoking/Drinking/Taking tobacco in any location of BACET is prohibited.
- 8. Mobile phones should necessarily be switched off during classroom session, and not allowed during examinations.
- 9. Student should regularly see the communication displayed on the notice boards.
- 10. The ID-Card is a vital document and must be kept properly by the students.

# **Students Creativity & Learning**

A good classroom environment always has some elements of creativity which makes the lessons more interesting and interactive. The right mix of creativity along with curriculum helps students to be innovative and also encourages them to learn new things. Students can grow up as good communicators in addition to improving their emotional and social skills. That's why BACET organizes regularly departmental fests like Electrofest ,Techkriti , Sci-Lit etc. which includes technical paper presentation , project expospeech , poster presentation and expert lectures. on different technical aspects such as power generation, internet of things (IoT), mobile communication, modern mathematics, etc. It also includes Industrial visits and organizing several workshops and seminars on topics like e-waste management , RDM (Recently Developed Materials) , soft skill sessions , etc. Such events help students becoming aware and updated about the development taking in the respective technical field. Through industry expert interaction session students also capture the industrial perspective & needs which finally helps them preparing well as industry ready technorats.



### **Moments of Youthfulness**

The BACETians reflect their merit and talent not only in academic pursuits but also in extra-curricular activities. Here are some captured moments exhibiting their youthfulness and integrated personality.





### Industry Expert's Sessions & Interections



Dr Arvind Sinha Chief Scientist & Head, NML Jsr



Dr C D Singh Steel Chair, Professor, BIT Sindri



Dr Partha Sarathi Mondal Asst. Professor, NIFFT RANCHI



Dr Sandhya Singh Tata Consulting Engineers Ltd.



Dr Shubhankar Basu Asst. Professor, NIFFT RANCHI



Dr Suprabha Nair Principal Scientist, NML JSR



Dr. B N Prasad Principal, Jamshedpur Workers College, Jsr.



Dr. Sabita Mishra HOD, Maths, LBSM College, Jsr



Dr.Surya Kumar Singh Business Development Director, British Steel (UK)



Mr Amrendra Ranjan Chief of Electrical Maintaince, Tata Steel



Mr D M Chowdhary Ex-General Manager (Power), Tata Steel



Mr Ramanand Adhikari AGM, Hindustan Copper Ltd., Kolkata



Mr V N Singh DGM Power Grid Corporation India Ltd.



Anand Dayal IDTR, Jamshedpur

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Dr. Gopal Pathak Vice Chancellor, JUT, Ranchi

#### NL EDUCATION DAY 1<sup>th</sup> November-2017 प्राजेकपण विजयेशनियादी जिसा मिले, विना इसके वढ पूर्ण अधिकार का निवेहन नहीं कर सकता । मोलाना अवल कनाम आव्याद

### **Student's Engagement**

Student engagement has become globally recognised as a key marker for a worthwhile and fulfilling university experience.Based on the research of various Australian and international academic and practical source (Adler & Goggin, 2005; Lyons & McIlrath, 2011; O'Connor 2006; Radloff & Coates, 2009), the is a definition of student engagement:

"Student engagement is the mutually beneficial collaboration between universities, staff, students and community organisations that facilitates active student learning through beneficial participation in a range of activities. Student engagement enables students to make a valuable contribution to their education and make a difference in their community by acquiring lifelong skills, values and understanding."

As a result, BACET emphasises and facilitates the development and sustainability of student engagement initiatives as a key part of their modus operandi. For that they are kept engaged in several general activities through several in-house clubs and pursue their interest passion by becoming part of such clubs.

# Student engagement starts and ends with the students themselves.



## Library

Libraries will get you through times of no money better than money will get you through times of no libraries.

-Anne Herbert

Libraries were full of ideas - perhaps the most dangerous and powerful of all weapons.

-Sarah J. Maas

The BACET library serves as a model of an evolving and dynamic facility in the technical learning. The library, as an established knowledge hub that is conveniently accessible by those associated with the college, has a major contribution in making the BACET'ians up-to-date.

The college has well stocked libraries with a large number of books on subjects related to the courses taught, different magazines, newspapers, general knowledge books, different competitive exam books and many more covering all about 10,000 books.

The mission of our library is to provide comprehensive information to fulfill the needs of the BACET'ians and to support the institute's mission to contribute to society through the pursuit of education, teaching, learning and by achieving the levels of excellence.



# Infrastructure

The different state-of-the-art buildings are divided into the following blocks:

Academic Block : This part contains 25 well-lit and well-ventilated class rooms with modern sitting arrangements. The Engineering Drawing Hall accommodates more than 100 students at a time. The well-furnished Seminar Halls in two numbers have a sitting capacity of more than 200 people in one and more than 50 in the other.

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Laboratories and Workshop : The college has a number of well set-up laboratories in all the engineering branches. The labs are well equipped with modern apparatus and equipments.

Our state-of-the-art workshop is spread over 10000 sq. ft. area and comprises of Foundry, Carpentry, Black Smithy, Welding, Sheet Metal Working, Milling Machine, Lathe, Shaper, Power Hacksaw, and Drilling Machine sections.



# Hostel & Canteen

Hostel & Canteen : There are two in-campus hostel buildings for boys and girls. The rooms are good, sanitized and equipped with all basic amenities. All the hostels have separate messes which provide healthy and nutritious food. There is a separate canteen for all those who do not reside in hostels.

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Faculty Residence and Guest House : There is a block of flats for the out-station faculty members. It contains a separate bungalow for the Principal/ Director. There is a guest house with all sorts of facilities including meals at nominal charges.

**Transportation :** The transportation system provided with nominal charges makes the journey of the students and faculty members easier and convenient. This minimizes the time of traveling and exertion to the students.

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### **Ragging is Banned**

Ragging of any type or dimension is banned on College campus. Anti-Ragging committee and anti-ragging squad keep a vigil on any form of ragging in the College. "Anti- Ragging Legal Awareness" seminar is organized in the college regularly to make beware and prohibit the to indulge in ragging and at the same time to familiarise them of the legal aspects. During the seminar, entire legal authorities of Ghatsila court under the guidance of chief Judicial and District Magistrate address the students and emphasize on promoting and maintaining a friendly and healthy academic environment without indulging in ragging.



As per UGC vide its letter no -F.1-16//2007 (CPC-II) dated June 17, 2009, punishment for participation in/or Abetment of Ragging :

- 1. Cancellation of admission.
- 2. Suspension from attending classes.
- 3. Withholding/withdrawing scholarship/fellowship and other benefits.
- 4. Debarring from appearing in any test/examination or other evaluation process.
- 5. Withholding results.
- 6. Debarring from representing the institution in any national or international meet, tournament, youth festival, etc.
- 7. Suspension/expulsion from the hostel.
- 8. Rustication from the institution for periods varying from 1 to 4 semesters or equivalent period.
- 9. xpulsion from the institution and consequent debarring from admission to any other institution.
- 10. Fine up to Rs. 25,000/-

### All students must fill in the Anti-Ragging Affidavit, each year online at www.antiragging.in or www.amanmovement.org

### Frequently Asked Questions (FAQ)

#### Q1: Why should I take admission in BA college of Engineering and Technology (BACET)?

BACET is a vibrant quality education-centric engineering institute which provides skill-based learning environment for students at its campus. It prepares students as technocrats and business leaders of tomorrow through continuous enhancement of knowledge, skills and capabilities utilizing state-of-the-art infrastructure, lab facilities, modern library, etc. Structured programs are designed to take care of student's overall development by carrying out various exploratory and experimental tasks ensuring that they become industry-ready resource after graduating from BACET. All students are provided with the placement opportunities by industries/companies of repute from within and outside Jharkhand State.

#### Q2. What is specialization of BA college of Engineering and Technology?

BACET has a lush green campus of 20 acres having tranquil campus ambience with adequate Wi-Fi facility, Modern library, state-of-theart hands-on lab facilities and computer centre. Students creativity and learning engagement is ensured through organizing various activities, participating in celebrating Engg month, and pursuing their interest passion by becoming part of students clubs. Separate training & placement cell works whole year for campus placement by reputed industries and corporate. Soft skill development workshops are organized for its students by engaging professional management skill development agencies.

#### Q3. Is the college recognized by the government?

BA College of Engineering & Technology was established in 2007. The College is approved by AICTE New Delhi & Govt. of Jharkhand and is affiliated to Kolhan University (KU), Chaibasa as well Jharkhand University of Technology, Ranchi.

#### Q4. On what basis admission is given OR what is the Eligibility criterion for Admission?

Eligibility Criteria: AICTE Norms for B. Tech 1st Semester : Students who have passed the higher secondary examination (10+2)/ intermediate in the science stream with 45% marks in PCM (General Category) or 40% marks in PCM (SC/ST/OBC) and cleared any one of the following competitive examinations are eligible to apply for admission: (b) JEE-Mains conducted by NTA. If any student has not cleared the above competitive exam, he/she can apply for direct admission based on his/her higher secondary/intermediate PCM Marks. AICTE Norms for B. Tech 3rd Semester (Lateral Entry): Students who have completed their diploma or B.Sc. with 45% marks and have cleared JCECEB entrance exam are eligible to apply for admission. If any students have not cleared the above exam, they can directly apply for admission based on their Diploma/B.Sc. marks.

#### Q5. Whether Hostel Accommodation & Bus facilities are available?

BACET provides both hostel and bus facilities to its students on payment basis. Hostel & Bus charges are applicable only for those students who want to take Hostel or Transport facility and these charges are calculated on the basis of academic session July to June.

#### Q6. Which courses are available at your campus?

BACET provides 4 years B.Tech. programme in the following disciplines:

- 1. Civil Engineering (CE)
- 2. Computer Science & Engineering (CSE)
- 3. Electrical & Electronics Engineering (EEE)
- 4. Electronics & Communication Engineering (ECE)
- 5. Mechanical Engineering (ME)

#### Q8. Whether your institute provides scholarship to the students by welfare department, Govt of Jharkhand to the SC/ST/OBC category students?

Government of Jharkhand has scholarship scheme for students of Jharkhand state. In addition, BACET provides certain scholarship to meritorious students for their outstanding academic performance.

### Q9. Whether resources available in the institute to enhance communication skills?

Humanities wing is actively engaged in teaching 'English for Professional Communication', General Proficiency, Engineering Economics and Human Values papers. It has Language Laboratories to develop communication skills as well. BACET also organizes Soft Skill development workshops for its students by engaging professional management skill development agencies.

#### Q10. What is the fee structure for first year?

Please visit fee structure section.

#### Q11. What are the training & placement opportunities for the students in the college?

BACET has full-fledged Training & Placement department which ensures that all students are provided with the placement opportunities by industries/companies of repute from within and outside Jharkhand State. It also organizes industrial visits and summer/internship programs for its students in reputed industries.



#### **B.A. COLLEGE OF ENGINEERING & TECHNOLOGY, JAMSHEDPUR**

Approved by AICTE, NEW DELHI, Sciene and Technolgy, Affiliated to Kolhan University/Jharkhand University of Technology.Govt of Jharkhand

#### **College Address**

Ghutia, Barakhurshi, (Via- Mahulia) Dt.: East Singhbhum Jharkhand-832304, E: info@bacet.ac.in, admission@bacet.ac.in www.bacet.ac.in City Office Bihar Association, Swarnarekha Link Road Sakchi, Jamshedpur-831001

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Contact us: 9123771267, 9955339035, 7050609040, 0657-2442533