

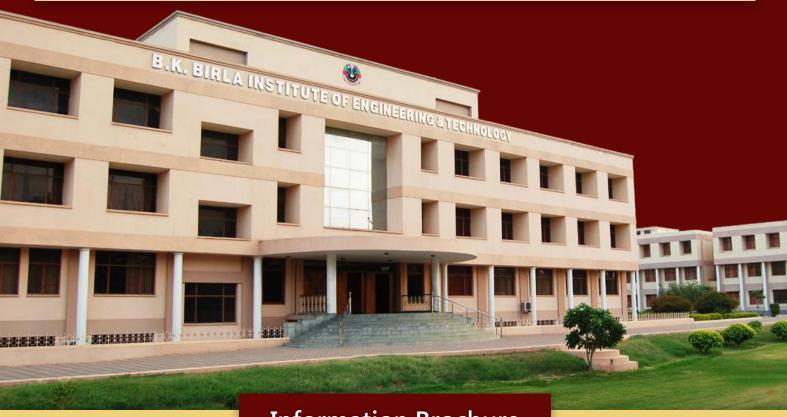
# B K Birla Institute of Engineering & Technology Pilani, Rajasthan

An Industry-Oriented and Application-Driven Institute

Approved by All India Council for Technical Education (AICTE)
Affiliated to Bikaner Technical University (BTU), Rajasthan, India



Category "A" Institute as per QIV declared by Bikaner Technical University for Session 2020-21



**Information Brochure** 

Artificial Intelligence | Computer Science and Engineering
Computer Science and Engineering (Data Science) | Electronics & Communication Engineering
Electrical Engineering | Information Technology | Mechanical Engineering

#### **About BKBIET**

#### **Our Foundation**

B K Birla Institute of Engineering & Technology (BKBIET) is one of the premier industry-oriented and application-driven institutes in India.

BKBIET was established in 2007 by the renowned Industrialist and Philanthropist Late Shri Basant Kumar Birla as the Chairman under the aegis of Shree Krishnarpan Charity Trust.

BKBIET is approved by All India Council for Technical Education (AICTE), New Delhi and affiliated to Bikaner Technical University, Rajasthan, India.



#### **Our Vision**

Excel as an outstanding application- oriented and innovation- driven engineering institute. Inspire future Engineers to apply technology for solving real world challenges.

#### **Our Mission**

Create a platform for igniting ingenuity and path-breaking engineering applications for the India of future.

#### **Our Quality Policy**

The Institution has been true to its commitment in providing quality education in engineering and technology. Our strong alliances with the leading international universities, industries and professional bodies have increased access to latest education, opportunities for engagement and exchange, collaborative research and innovation for our students and faculties. We believe the best way to help students meet challenges is to provide a supportive and enriching environment.

#### **Director's Message**

I heartily welcome students, industry professionals and research institutions to BKBIET.

It gives great pride to mention that BKBIET has achieved an enviable national and international reputation for research, and teaching excellence in a short span of 15 years.

The Institute offers Seven B. Tech Programs (Artificial Intelligence, Computer Science and Engineering, Computer Science and Engineering (Data Science), Electronics & Communication Engineering, Electrical Engineering, Information Technology and Mechanical Engineering) . It aims to groom students into academically strong yet well-rounded personality-based professionals who could adapt themselves to the challenges posed by the ever-changing world and working environments.

Our strength is highly qualified and dedicated faculty members and staff, deeply engaged in research work & scientific collaboration in national & international projects. Our students are very innovative and always eager to learn new concepts; they have demonstrated their capabilities and brilliance in many fields including securing internship in highly reputed international organizations.

In line with our vision and strategy for future, BKBIET will continue to drive for improvement. While reputation is important, we care as much about your individual experience as we do about our position on global scale. Explore the world through our industry-oriented and application-driven programmes.



Dr. Prasanna Kumar S M Director, BKBIET

# Institute at a glance- Infrastructure and Student life

#### **About Campus**

Our students widely tell that one of the best things about studying at BKBIET is the on-campus experience. Our focus on residential living has helped to build a vibrant and diverse community, where one can find like- minded peers and make lifelong friends.

The 7.86 lakh square feet sprawling campus allows students to explore different ideas and ways of learning. It has modern classrooms, fully- equipped laboratories, expansive libraries, Cultural & Creativity Centre, Professional Training & Research Centre, auditoriums, extensive indoor & outdoor sports facilities, gymnasium and Medical Centre.



#### Laboratories

BKBIET offers state-of-art and hi-tech engineering laboratories where students can experiment and implement practically what they have learnt in theory classes . Laboratories at BKBIET:

- Electrical Lab
- DC Machine Lab
- AC Machine Lab
- Digital Electronics Lab
- DSP Lab
- Engineering Physics Lab
- Engineering Chemistry Lab
- Mechatronics Lab

- Computer Lab
- Thermal Engineering Lab
- Power Electronics
- Electric Drives Lab
- Power System Lab
- Analog & Digital Communication Lab
- Microprocessor/Microcontroller Lab
- Instrumentation & Measurement Lab

- Microwave Lab
- · Wireless Communication Lab
- Fluid Mechanics & Machinery Lab
- Measurement & Metrological Lab
- Material Science & Testing Lab
- EDC Lab/Analog Electronics/LIC Lab
- Advance Power Electronics
- · Industrial Electronics Lab

#### Library

BKBIET has one **Issue Library** and two **Reference Libraries**. With adequately-stocked books, periodicals, references, educational CDs/DVDs, national and international journals, covering all aspects of academic studies and research materials, one can also access the National Digital Library. Libraries are airconditioned and Wi-Fi-enabled.

#### **In-campus Hostel and Medical Facilities**

BKBIET has **separate hostels for girls and boys**, with total capacity of 1000 seats

Caring wardens and vigilant  $24 \times 7$  security ensure pleasant stay for students, allowing them to focus on academics.

**In-house Mess** facility, located adjacent to hostels, provides nutritious, hygienic and healthy food.

Even for those who leave their homes for the first time can be reassured that these hostels would eventually turn out to be their home away from home.

There is an on-campus arrangement of regular visit of a physician at **medical center** and a resident medical assistant. For major ailments, students are taken to nearby multi-specialty hospital in Pilani.

# **NCC, Sports and Co-curricular Activities**

**NCC (National Cadet Corps)** provides opportunities to the youth for their allround development with a sense of duty, commitment, dedication, discipline and moral values so that they become able leaders and responsible citizens.

We believe in providing energetic environment for holistic development of students.

**Outdoor sports** facility including Cricket/ Football/ Athletics ground, Basketball court, Volleyball court, Tennis court and in-campus **Sports Complex** for **indoor sports** including Badminton, Table Tennis.

Students are also encouraged to join **in-campus clubs** - Photography, Dance, Music, Drama/Mime etc. Many students also take part in societal development works through various activity groups of the campus.











# **B. Tech Programs Offered at BKBIET**

#### **Artificial Intelligence**

Artificial Intelligence (AI) aims solely at creating intelligent machines. Artificial Intelligence has become a highly important part of the technology industry. Students learn about the core problems of AI which include the programming of computer systems for traits like reasoning, knowledge, perception, problemsolving, planning, learning, ability to move and manipulate objects, etc. Key areas of AI are Machine Learning, Neural Networks, Robotics, Expert Systems, Speech Processing, Natural Language Processing, Gaming, and Planning.

#### Computer Science and Engineering NBA Accredited (2021-24)

Computer Science and Engineering (CSE) has its core in bringing in more innovations into technology while also going beyond the fundamentals. Computer Science and Engineering focuses on theory, algorithms programming languages, Virtualization, networking, databases, software engineering and quality, design of system and application software, cryptography and architectures. It involves various technology trends which are Artificial intelligence, Machine Learning, Cloud computing, Block chain, Cyber Security, Big data, IoT, Augmented and Virtual reality, Robotics and Automation etc.

#### **Computer Science and Engineering (Data Science)**

Data Science is an emerging area and in high demand with tremendous applications. Data Science experts are needed now in almost every sector.

A Data Science Engineer can build career as Data Scientist, Machine Learning Engineer, Application Architect, Business Intelligence Developer etc.

#### **Electronics & Communication Engineering**

Electronics & Communication Engineering (ECE) deals with the broader aspects of engineering such as Digital and Analog design, VLSI, Industrial Electronics, Control System, FPGA, IoT, Embedded System design, Machine Learning, Artificial Intelligence, Wireless Communication, Microwave devices, Plasma Technology, Simulation tools like- Cadence, GHDL, Icarus Verilog, Arduino IDE, Scilab, Xilinx ISE, Quartus, LTspice etc.

#### **Electrical Engineering**

Electrical Engineering (EE) provides students with an understanding in the area of Electrical Power Generation, Transmission and Distribution, Power System Analysis, Machine Design, Power Electronics, Control System, Renewable Energy Technologies (Focus on Islanded/ Grid connected Solar PV System and Wind Power Generation), Smart Grid, Micro-grid, Energy Storage, Fuzzy Logic, Neural Network, Artificial Intelligence and various simulation tools. Professional Training and Research Center of the Institute has advanced Control Panels, Machine Control, Bearing Technologies and latest PLC-SCADA Lab.

#### Information Technology

Information Technology(IT) makes students aware of the various ways computer and telecommunication equipment can be used to store, transmit and retrieve data, encompasses scripts, Networking, encryption and decryption of messages, database design and administration, Artificial intelligence, Cloud computing, Big data, Internet of things, Augmented and Virtual reality, Automation and edge computing.

#### **Mechanical Engineering**

Mechanical Engineering(ME) helps students learn application of techniques of engineering into design, manufacturing and maintenance while also understanding some core concepts such as -Thermodynamics, Mechanics, Mechatronics, IIoT (Industrial Internet of Things), 3D/4D/5D Printing, Robotics, Simulation tools like- 3D CAD, Solid Works, ANSYS, CATIA etc.













# Research & Development, Entrepreneurship, International Collaborations

#### Research & Development (R&D) Division

BKBIET established R&D division towards the formation of intellectual capital by facilitating research culture in the institute to mobilize the knowledge resources available for basic and applied research, support innovative projects and startup solutions. The research area covers all major academic disciplines including multidisciplinary research like MEMS/ NEMS technology, Plasma Engineering, Pulse Power, Bio engineering, Material Science and Embedded systems etc.

# **Birla Professional Training and Research Centre (BPTRC)**

Birla Professional Training and Research Centre (BPTRC) at BKBIET provides the best quality research environment in multidisciplinary engineering and technology fields for various industrial and societal challenges. It facilitates the young students to become job creators with diversified employment opportunities instead of job seekers.

#### **BKBIET Innovation Centre (BIC)**

BKBIET Innovation Centre (BIC) at BKBIET promotes the spirit of research & development, entrepreneurships and startups in the Institute and contribute in Startup India Initiative by Indian Government. It is a budding initiative in line with virtual reality of digital and startup India.

#### E- Cell

E- Cell at BKBIET facilitates the students to be budding entrepreneurs with ready to use office space equipped with all necessary infrastructure, network connectivity and other facilities like meeting room, hi- tech laboratories, extensive computing resources for research and development including high-performance computers etc.

#### **International Collaborations**

To offer our students global exposure, we have also entered into academic collaborations with the following international universities for internships, higher studies, student exchange, faculty exchange, joint research initiatives and publications:

- Universite de Nantes, Polytech, Nantes, France
- INSA de Strasbourg, France
- INSA Rennes, France
- Universite de Haute Alsace, France
- INSA-Rouen Normandie, France
- Universite de Poitiers, France
- EISTI, France
- · EPF School of Engineering, France
- Thammasat University, Bangkok, Thailand
- · Bangkok University, Thailand
- King Mongkut's University of Technology, Thonburi, Thailand
- · King Mongkut's Institute of Technology, Ladkrabang, Thailand

#### **BKBIET International Relations Division (BIRD)**

BKBIET International Relations Division (BIRD) at BKBIET was established in the year 2011, with the objective of encouraging students to embrace global exposure.

BIRD facilitates internships, research options and job opportunities abroad, in the fields of Engineering and Technology, for students after completion of bachelor's degree. Also provides Counselling on higher education, guidance in Visa, and Scholarships formalities

Many scholarships are also available for students through n+ i:

- Eiffel Scholarship
- Pays de Loire Region
- n+i Grants

- Ile-de-France
- Limousin Region
  - Institutional Grant's on Tuition Fees









- Charpak Scholarship
- Picardie Region

## **Training & Placements, Academic Excellence**

#### **On-campus Industrial Training**

At Birla Professional Training & Research Centre (BPTRC), students get trained in the fields of engineering and technology . While becoming industry- ready, students gain exposures in scientific research here.

Internship: Our students undergo industrial training/internship programme in reputed organisations. Students also get benefit also from our collaborations with international Universities (France and Thailand).

#### Training & Placement Cell

Training & Placement Cell continuously works towards developing employability skills in the students. Interactions with leading industry experts are conducted on a regular basis wherein eminent speakers share their experiences with our students. Our training methodology includes presentations, live projects, educational and industrial tours, Seminars as well as Engineering Chapter Activities, Aptitude tests, Extempore, Mock Group discussions and Personal Interview to groom our students.

#### **Placement Highlights**

For the Batch - 2021, more than 95 companies visited with job opportunities. BKBIET students, received more than 130 job offers.

Highest Package: 12 LPA Recruiters above 10 LPA package: 5 Recruiters with 5 - 10 LPA package: 33 Recruiters with 3 - 5 LPA package: 41

For the Batch - 2022, more than 80 companies have already visited with job opportunities so far. Students have received more than 105 job offers and recruitment process is still going on.

Highest Package: 10.4 LPA Recruiters above 10 LPA package: 5 Recruiters with 5 - 10 LPA package: 34 Recruiters with 3 - 5 LPA package: 39

#### **University Toppers**







BKBIET focuses on the holistic development of students with high emphasis on academics and has produced University Toppers.

1st Rank (CSE), 2nd Rank (EEE), 5th Rank (ECE, EEE), 8th Rank (EEE), 10th Rank (EEE) for the session 2019-20.

1st Rank (EEE), 2nd Rank (ME,EEE) 5th Rank (IT), 8th Rank (EEE), 9th Rank (CSE), 10<sup>th</sup> Rank (EEE) for the session 2020-21.











#### Our Recruiters include







































# **Admission Procedure and Eligibility**

# **B. Tech. First Year Program**

BKBIET offers Seven undergraduate B. Tech courses:

Artificial Intelligence	60 Seats
Computer Science and Engineering	120 Seats
Computer Science and Engineering (Data Science)	60 Seats
Electronics & Communication Engineering	60 Seats
Electrical Engineering	60 Seats
Information Technology	60 Seats
Mechanical Engineering	60 Seats



#### **Admission Procedure (REAP/ Direct)**

**CEG** (Centre for Electronic Governance), Jaipur conducts the centralized counselling for admissions to B. Tech 1<sup>st</sup> year programmes through REAP (Rajasthan Engineering Admission Process).

As per CEG REAP, Priority order is, 1st: JEE (Mains) Rank, 2nd: Percentile in class 12th and having Physics and Mathematics, 3rd: Percentile in class 12th and having Physics or Mathematics, 4th: Percentage of Diploma in Engineering & Technology approved by state government.

#### **Eligibility Criteria**

Aspirant must have passed class 12<sup>th</sup> examination with Physics and/or Mathematics as compulsory subjects along with Chemistry/ Computer Science/ Electronics/ Information Technology/ Biology/ Informatics Practices/ Biotechnology/ Technical Vocational subject/ Agriculture/ Engineering Graphics/ Business Studies/ Entrepreneurship (Any of the three) Obtained at least 45% marks (40% marks in case of candidates belonging to reserved category) in the above subjects taken together.

OF

Passed minimum **3 years Diploma examination** with at least **45% marks** (**40% marks** in case of candidates belonging to reserved category) subject to vacancies in the First Year, in case the vacancies at lateral entry are exhausted.

# **Lateral Entry in Engineering Program (LEEP)**

**Lateral Entry in Engineering Program (LEEP)** is a process for **Polytechnic diploma** or **B.Sc. Students (with Mathematics)** to get admission direct in the **2**<sup>nd</sup> **year** of engineering programs in various Technical Institutions of Rajasthan affiliated to BTU, Bikaner and RTU, Kota. BKBIET offers B. Tech LEEP admissions in the following courses:

Artificial Intelligence	Electrical Engineering
Computer Science and Engineering	Information Technology
Computer Science and Engineering (Data Science)	Mechanical Engineering
Electronics & Communication Engineering	

#### **Admission Procedure**

Board of Technical Education Rajasthan (BTER), Jodhpur conducts centralized counselling for **admissions to B. Tech 2<sup>nd</sup> year programmes through LEEP** (Lateral Entry in Engineering Program), on the basis of polytechnic diploma marks or B.Sc. Degree marks.

#### **Eligibility Criteria**

The aspiring candidate must have passed **polytechnic diploma** and/or **B.Sc. degree (with Mathematics)** with at least **45% aggregate marks (40% marks** for candidates belonging to reserved category of Rajasthan State) from the Board of Technical Education Rajasthan (BTER), Jodhpur/ an AICTE approved Institution/ UGC Approved University.

#### **BKBIET Bank Account Details:**

Account Name : BK Birla Institute of Engineering and Technology
Account Number : 153801000110

Bank Name : ICICI Bank

Account Type : Savings
IFSC Code : ICIC0001538

Branch Name : Pilani

### **Scholarships**

To encourage meritorious students, institute provides and help them with following scholarships:

- Sarala Birla Memorial Scholarships
- IJMOT Scholarships
- National Scholarship Scheme
- International Scholarships
- Pragati Scholarship Scheme for girls student
- Tuition Fee Waiver Scheme (TFWS)
- Birla Education Trust, Pilani Scholarships
- Social Justice Empowerment Scheme
- Prime Minister's Special Scholarship Scheme (PMSSS) for J&K and Ladakh students

#### **Student Chapters**

Student Chapters enable students to keep themselves updated through workshops, seminars, quizzes and other technical activities.

- IEEE
- Institute of Electrical and Electronics Engineers
- IETE
- Institution of Electronics & Telecommunication Engineers
- IEI
- Institution of Engineers (India)
- GDSC
- Google Developer Student Club
- CSI
- Computer Society of India

- ACM
- Association for Computing Machinery
- ASME
- American Society of Mechanical Engineers
- IFERP
- Institute For Engineering Research and Publication
- Hack Club
- NIRMAAN-BKBIET



# B K Birla Institute of Engineering & Technology

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#### **Contact us**

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