



# **SELF STUDY REPORT**

**FOR**

**1<sup>st</sup> CYCLE OF ACCREDITATION**

**B K BIRLA INSTITUTE OF ENGINEERING AND  
TECHNOLOGY**

CEERI ROAD, OPPOSITE TO B K PLAZA , PILANI, RAJASTHAN. 333031

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[www.bkbiet.ac.in](http://www.bkbiet.ac.in)

Submitted To

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

**BANGALORE**

**(Draft)**

# 1. EXECUTIVE SUMMARY

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## 1.1 INTRODUCTION

BK Birla Institute of Engineering & Technology (BKBIET) was founded in 2007 approved by AICTE, New Delhi and affiliated to Bikaner Technical University (BTU), Bikaner by Shree Krishnarpan Charity Trust, under Chairmanship of renowned industrialist Late Shri Basant Kumar Birla. It was created with a Vision to “Excel as an outstanding application-oriented and innovation-driven engineering institute” so as to inspire future Engineers to apply technology for solving real world challenges. The institute has active collaborations with 14 leading foreign universities and international student exchange program since 2009. The institution also has collaboration with industries & professional bodies covering internships, higher studies, student-faculty exchange, joint research, and publications. UG program in CSE is accredited by NBA. The entire institution functions with robust ERP (e-governance) and academic activities are managed through comprehensive LLMS.

The institute is spread in 18.01 Acre with lush green lawns, beautiful landscape and infrastructure. The environmental friendly ambiance provides an excellent learning and research atmosphere. The campus is residential with benefits including school education to wards of faculty/staff. The students hostels are hygienic and separately for girls/boys. Residential facilities available for faculty/staff. The institution has provision of water harvesting, backup support (405 KVA), and internet bandwidth (300 mbps). Institute is conscious about Digital India movement and many of its operation are digitally managed such as payment of fees, biometric attendance etc.

BKBIET offers 7 UG programs namely, CSE (120), EE (60), ECE (60), IT (60), VLSI (60), AI (60) and CSE (DS) (60). There are 2 number of PG programs offered namely M.Tech in CSE (18), M.Tech in ECE (VLSI Design) (18).

The OBE system with continuous assessment is in place with well- defined program outcomes aligned with Vision and Mission of the institute and Programs offered.

The institution has an impressive record of placements, and a significant number of pass outs are currently working in more than 100 reputed and listed corporates and multinational companies in India and abroad. A significant number of students have opted for higher studies, entrepreneurs and startups.

The institute is currently initiating activities to adopt NEP 2020 through a systematic plan.

## **Vision**

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

## **Mission**

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

## **1.2 Strength, Weakness, Opportunity and Challenges(SWOC)**

### **Institutional Strength**

Well defined Vision & Mission.

Well-developed infrastructure.

Qualified and experienced faculty & staff.

- Collaborations with 14 internationally renowned universities and professional bodies/industries provide ample opportunities and support to faculty and students academically.
- Proximity to internationally renowned BITS Pilani provides high morale to teachers and students.

Curriculum as prescribed by affiliating university is delivered to attain well-defined PEOs and POs along with PSOs and COs

Good academic culture, ambience and working environment leading to high students and faculty satisfaction.

- Campus placements are strong and career counselling for students is well organized and structured.
- Students are given awards and rewards for merit achievement.
- Institute location-accessible to all the Stakeholders.
- Owned by an old reputed industrial house therefore, linked with corporate operating at national and international levels.
- Good Labs & Workshops to meet curricular requirements.
- Industry training and Software/Soft Skills Training for Students
- Curricular & Co-curricular activities conducted as per norms.
- Large alumni base excelling professionally in many leading organizations with active networking and mentoring
- Laboratories with ICT facilities.
- Inter disciplinary grooming of Students.

- Excellent R&D facilities (Birla Professional Training and Research Center is in the premises with Three floor building)
- More than 30 Clubs & Technical Societies
- High faculty retentivity
- Lush green campus with RO water facilities
- Global exposure to faculty members
- Associated with various academic projects like

1. Drone for Chimney of Cement Industry funded by Kesoram Industries LTD Kolkata.
2. Quality Control Software Developed for providing mineral mix in cement industry funded by Kesoram Industries LTD Kolkata.
3. Analysis & upgrading of Low-Grade line to Sweetner funded by Kesoram Industries LTD Kolkata.
4. Logistic marketing and solar optimization funded by Kesoram Industries LTD Kolkata.

Membership of:

- NDLI, DELNET
- IEEE, IETE, IEI Student Chapters,
- NCC, NSS

Entrepreneur Cell: A separate cell for Entrepreneurship Development in the Institution to create awareness on entrepreneurship and encourage students to be entrepreneurs.

Faculty conscious of quality, hence actively involved in taking online training programs to keep their knowledge updated.

Many students are placed in foreign countries, are toppers and rank holders in university, serve as IAS/RAS, defense and police services.

### **Institutional Weakness**

- Less number of faculty with Ph.D.
- R & D and consultancy activities are limited.
- Less number of Research Outcomes and Patents

### **Institutional Opportunity**

- By becoming autonomous, the institute would be able to address the shortcomings under the affiliation system.
- New NEP 2020 gives opportunities for diversification and multi-disciplinary programs offering creating wider reach and avenues of institutional growth.

### **Institutional Challenge**

- Tough competition in research funding opportunities.

- Availability of quality faculty interested in teaching.
- Recent trends of students not opting for engineering programs except Computer Science
- Affiliating university curriculum becomes obsolete and there is little freedom for faculty to go beyond syllabus due to lack of time.

## 1.3 CRITERIA WISE SUMMARY

### Curricular Aspects

The curriculum provided by BTU is followed along with academic calendar. Institution academic calendar lists dates for issuing notices for selection of electives, project, seminar topics and industrial training etc. and schedule of events i.e. yoga day, blood donation camps, sports, and festivals. Course allocation is done through faculty meetings reviewing OBE design.

20 courses cover Science and Humanities & basic engineering and number of courses offered in different branches vary from 59 to 62 courses. Credit based system is followed provided by BTU.

The value-added courses such a BUILD ENVIRONMENT COURSE are offered in first and second semesters. Further value-added activities include adoption “learning by doing” strategy sensitizing students to green issues and encouraging them to explore water harvesting schemes on campus and carry out annual tree plantation drive along with NCC training credits. KHEDLA campaign carries out 7 days camps under NSS, Joy of giving (a donation drive for poor children) under NIRMAN, YOGA camps, anti-drug campaigns, stress management and SWACHTA PAKHWARA.

All students in final year are involved in projects and industrial internships in 2nd through 4th year, individually or in groups every year. In the year 2023, 2 industries provided internships to students. 4 students received Rs 15000 per month as stipend for internship by Kesoram industries (Sedam & Basantnagar Plant).

Students also enroll in courses in NPTEL, MOOCs etc. and obtain certificates.

Students also participate in NSS and NCC and got awarded by Ministry of Youth Affairs and Sports.

### Teaching-learning and Evaluation

Students admissions is done through (Rajasthan Engineering Admission Process) JEE Main scores and class 12 marks. Last two years, 2022-23 & 2023-24, admissions are 82% and 89.6%, respectively. Average seats filled in last five years is 53.17% and 39.47% for reserved categories and average of 91.56% students passed in last 5 years. The faculty student ratio is 19.88. Faculty is well qualified with adequate number of doctorates.

OBE system adopted and focus on student centric learning with pedagogy strategies such as

participative/collaborative learning problem-based learning etc. are used in curriculum delivery aiming for formation of lifelong learning attitudes.

Co-curricular and extracurricular activities are organized frequently to supplement curriculum through technical and non-technical seminars, workshops, guest-lectures etc. Strategy of Learning by doing adopted to sensitize students to green issues, harvesting schemes, adopting a nearby village etc. Student performance in COs, POs and PSOs are done through Direct and indirect assessment.

25 Faculty and 275 students participated exchange programs in French and Thailand University. Significant number of students got higher education opportunities and jobs in these universities.

ICT tools such as cisco packet tracer, touch pads, google classrooms, Microsoft teams etc. are used.

A grievance and redressal is transparent, a copy placed in the library. Constant feedback obtained from the students and grievance admitted through application and resolution is ensured within one week

Birla Professional Training and Research Centre provides research environment in multidisciplinary engineering and technology fields.

Innovation Cell helped 7 students to become entrepreneurs and currently helping in startups. All academic, co-curricular, and extracurricular activities of institute is monitored by IQAC.

### **Research, Innovations and Extension**

The institution received Rs 53.7 lacs sponsored research to conduct research on cement industry. Research involves interdisciplinary involvement.

Currently, Limited Indian Knowledge System exists in the institution through Science and Mathematics course. Yoga and gym classes are organized and students participate in sports completions. Two temples are located on campus holding daily prayers.

IPR cell has organized workshops on IPR and to-date 6 patents have been successfully obtained by faculty.

Entrepreneurship cell is operational since 2016 and trainings, resources mobilization and mentoring have resulted in 7 entrepreneurs and setting up 6 startups.

To provide holistic development among students, NCC, NSS and adoption of nearby village and various community services are being organized such as blood donation, health camps, donation etc. NSS and NCC activities by students have given opportunities to win recognitions and certificates, for example, students participated in national parades in Delhi, and awards through NSS activities through Ministry of Youth Affairs & Sports depict outstanding contribution of the students. A total of 83 extension and outreach programs in NSS and NCC have been organized in last 5 years.

### **Infrastructure and Learning Resources**

The institute is located in a remote rural area on sprawling campus of 18.01 acres consisting of 3 academic blocks housing 28 classrooms, 35 laboratories, 14 tutorial rooms, 5 seminar halls, workshop, library, drawing hall and computer center along with administrative block and Birla Professional Training and Research Centre housing all industry relevant training and 3 lectures halls. This is a nodal centre for all trainings, including soft skills and placement activities.

ICT enabled classrooms and laboratories are extensively used. The ERP system includes student data. Student feedback is obtained through Google Sheets. The institutional, website [bkbiet.ac.in](http://bkbiet.ac.in), houses lecture notes and teaching material. The account section and library is digitized. The library is air conditioned spread over an of 700.5 square meters with seating capacity of 200, consisting of 3 divisions i.e. referral, issue/return and book bank.

For extracurricular activities, there is 'Sarla Birla activity center' comprising of gym and rooms for dance, music, creativity and grounds for cricket, football, volley ball, badminton, table tennis, tennis court, amphitheater with capacity of 1200, NCC store room.

Hostel for 71 boys single seater and 266 doble accommodation are fully operational with fully filled capacity. Girls' hostel has 41 single seaters and 97 double seated rooms. Both hostels are fully internet enabled.

69 faculty and staff quarters are existing in the institutional premises with guest house. Botanical garden grows vegetables for institution consumptions.

Campus wide networking exists with Wifi of 300 MBPS on leased line 55 wifi enabled computers available in hostels.

### **Student Support and Progression**

Over the past five years, substantial increase in scholarships and free ships provided by government agencies and Sarla Birla Scholarship, has enhanced opportunities to students from weaker section with 46.40% of the students receiving the advantage.

In addition to financial support, the institution is dedicated to enhancing the overall development of our students by organizing capacity-building programs that encompass a wide range of skills, including soft skills, language proficiency, and communication skills. Furthermore, the institution has prioritized life skills to prepare the students for the challenges of the real world. Institutional commitment to holistic development extends to community services, curricular and co-curricular activities, career counseling, entrepreneurship and startup opportunities. Due to these efforts increasing number of students are getting placed, seeking higher education and become job providers.

A number of students have qualified state, national and international examinations with some getting into IAS cadre, receiving gold medals, RAS and armed forces. Apporx. 645 students participated in sports and cultural programs in last 5 years.

Institution has alumni meets where sharing, advising and interacting with current students, have been organized. Alumni are contacted for providing feedback for improvement and financial support. The students have been actively engaged in extracurricular activities, with an average of 161 activities per year in sports and cultural programs over the last five years. Amphitheater organizes lot of cultural activities and movies and annual day celebrations are organized and conducted by students to encourage team spirit and leadership qualities.

### **Governance, Leadership and Management**

A well defined Vision and Mission developed with the involvement of stakeholder exists. The BOG and governance structures are in place with participation from industrialists, academicians, faculty and affiliating university/DTE participation as members. The policies are well laid out with transparency and decentralized power structures and hierarchy.

The institution has developed Strategic Plan which encompasses provisions of NEP 2020. The Trust runs higher education institution offering Arts and Commerce degrees, ITI and Polytechnic within the same premises. Autonomy, integration of these institutions will be facilitated and interdisciplinary and multidisciplinary programs started.

Some of the features of NEP 2020 are already existing such as student centric, flexibility, though limited, in course offerings, inquiry-based education is already operational with quality assurance.

The institutional Strategic Plan includes introduction of multipoint entry and credit system, facilities for credit transfers and prior learning exemptions, providing variety in course offering to enable students define their own program of study, encouraging learning in languages, promoting Indian culture and appreciating cultural diversity, maintenance of Academic Bank, skill development and certification courses, offering new programs in UG,PG and Phd. On line and distance learning options.

The efforts towards sustained institutional growth through best practices, research & development, innovations and startups are synchronized with the institutional Vision and Mission. Taking up socially relevant projects, collaboration with foreign universities have been operational for number of years. Experiential learning through community engagement is encouraged and finding sustainable solutions. IPR activities are a step forward to start ups encouraged by institution.

### **Institutional Values and Best Practices**

Equity and nondiscrimination policies are strictly followed by the institution. Girl child have historically faced biases in the state, hence, BKBIET management has been consciously aiming at women inclusive campuses with students as well as faculty. Gender sensitization workshops have been organized.

Hostels with safety and security have been operational since inception of the institution. Girl students from weak financial background receive scholarships and free ships. Gender sensitization cell exists in the institution to look into grievances and issues, if any, faced by students as well as faculty.

Girls are encouraged to participate in competitions, extra-curricular and co-curricular activities. Women faculty as well students have been sent to France and Thailand under exchange programs.



Institution is conscious about environmental issues, such as management of degradable and non-degradable waste, water harvesting, solar panels, green campus through tree plantations etc. Quality audits are regularly conducted.

Diversity among students and faculty is consciously promoted. Linguistic harmony is ensured through language clubs such as clubs for French and English. Communal harmony is ensured through organizing events and workshops.

Significant best practices are: (1) Collaborative activities with foreign universities have been operational since 2009 with 14 universities located in France and Thailand. Under this arrangement, 278 students and 25 faculty have gone under exchange program to the institutions in these countries and 52 students participated in research based Masters' degree program.

(2) Projects funded by Industries: Hindalco, Ultratech Cement, Vasavadatta Cements and Kesoram industries have provided funds for research and live problems to the institution.

## 2. PROFILE

### 2.1 BASIC INFORMATION

Name and Address of the College	
Name	B K BIRLA INSTITUTE OF ENGINEERING AND TECHNOLOGY
Address	CEERI Road, opposite to B K Plaza , Pilani, Rajasthan. 333031
City	Pilani
State	Rajasthan
Pin	333031
Website	<a href="http://www.bkbiet.ac.in">www.bkbiet.ac.in</a>

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Director	S M Prasanna Kumar	01596-244262	9414062510	-	director@bkbiet.ac.in
Professor	Anil Kumar Sharma	01596-246092	7597023120	01596-243477	principal@bkbiet.ac.in

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular Day

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	
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State	University name	Document
Rajasthan	Bikaner Technical University	<a href="#">View Document</a>

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC	17-12-2022	<a href="#">View Document</a>
12B of UGC	17-12-2022	<a href="#">View Document</a>

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	<a href="#">View Document</a>	02-06-2023	12	New Courses as sanctioned by AICTE are also mentioned in the document

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	CEERI Road, opposite to B K Plaza , Pilani, Rajasthan. 333031	Rural	18.01	45183

## 2.2 ACADEMIC INFORMATION

<b>Details of Programmes Offered by the College (Give Data for Current Academic year)</b>						
<b>Programme Level</b>	<b>Name of Programme/Course</b>	<b>Duration in Months</b>	<b>Entry Qualification</b>	<b>Medium of Instruction</b>	<b>Sanctioned Strength</b>	<b>No.of Students Admitted</b>
UG	BE,Computer Science And Engineering	48	Higher Secondary	English	120	120
UG	BE,Information Technology	48	Higher Secondary	English	60	31
UG	BE,Electronics And Communication Engineering	48	Higher Secondary	English	60	57
UG	BE,Electrical Engineering	48	Higher Secondary	English	60	34
UG	BE,Artificial Intelligence	48	Higher Secondary	English	60	59
UG	BE,Computer Science And Engineering Data Science	48	Higher Secondary	English	60	60
UG	BE,Vlsi U G	48	Higher Secondary	English	60	0
PG	Mtech,Computer Science P G	24	B.Tech	English	18	0
PG	Mtech,Vlsi P G	24	B.Tech	English	18	0

### **Position Details of Faculty & Staff in the College**

<b>Teaching Faculty</b>												
	<b>Professor</b>				<b>Associate Professor</b>				<b>Assistant Professor</b>			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	6				11				34			
Recruited	2	0	0	2	5	6	0	11	32	2	0	34
Yet to Recruit	4				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	0				0				11			
Recruited	0	0	0	0	0	0	0	0	9	2	0	11
Yet to Recruit	0				0				0			

<b>Non-Teaching Staff</b>						
	<b>Male</b>		<b>Female</b>		<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government						13
Recruited	12		1		0	13
Yet to Recruit						0
Sanctioned by the Management/Society or Other Authorized Bodies						0
Recruited	0		0		0	0
Yet to Recruit						0

<b>Technical Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government				16
Recruited	13	3	0	16
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

**Qualification Details of the Teaching Staff**

<b>Permanent Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Male</b>	<b>Female</b>	<b>Others</b>	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	2	0	0	6	5	0	7	1	0	21
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	34	3	0	37
UG	0	0	0	0	0	0	0	0	0	0

<b>Temporary Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

<b>Part Time Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

<b>Details of Visting/Guest Faculties</b>					
<b>Number of Visiting/Guest Faculty engaged with the college?</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>
	3		0		3

**Provide the Following Details of Students Enrolled in the College During the Current Academic Year**

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	277	37	0	0	314
	Female	41	10	0	0	51
	Others	0	0	0	0	0
PG	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Category		Year 1	Year 2	Year 3	Year 4
SC	Male	25	13	7	9
	Female	3	0	1	0
	Others	0	0	0	0
ST	Male	2	2	1	1
	Female	0	0	0	2
	Others	0	0	0	0
OBC	Male	186	72	73	102
	Female	26	21	25	15
	Others	0	0	0	0
General	Male	97	103	99	123
	Female	21	29	18	29
	Others	0	0	0	0
Others	Male	5	1	0	4
	Female	0	0	0	0
	Others	0	0	0	0
Total		365	241	224	285

### Institutional preparedness for NEP



## 1. Multidisciplinary/interdisciplinary:

a) Holistic multidisciplinary institution... The institution is geared to adopt NEP 2020, through the strategic plan. As a first step, the institution is obtaining accreditation by NBA for its programs and NAAC for the institution to facilitate the institution to obtain autonomy. b) Integration of humanities and science with STEM... The institution offers STEM related UG level and limited PG level programs; more programs that provide vertical mobility in terms of postgraduate and doctoral programs will be initiated. Along with merging existing institutions of the trust, new Programs will also be introduced in specific social science, languages, fine arts and performing arts, Science, Law, Commerce etc. based on the need analysis. The institution plans to gradually move towards teaching intensive University with research in focused areas based on the expertise available at the institution. c) Credit-based courses and projects... Currently, the affiliating University has a limited credit system in place. To ensure holistic development, the institution has MOUs with number of foreign universities and professional organizations/industry to facilitate exchange programs and academic collaborations etc. that provide students with exposure and learning experience in the contemporary world of work. d) Multidisciplinary flexible curriculum... The institution recognizes the significance of introducing Multi point entry and Credit system (MPECS) , hence, as an autonomous institution, introduction of multipoint entry and credit system with flexibility will be taken up on priority. e) Multidisciplinary research endeavors... The institution already has 12 MOUs with foreign universities and professional organizations/ industries. More collaborative research avenues will be explored and initiated with collaboration with these agencies and strive to enhance industry-academic linkages to embark on interdisciplinary research including research in humanities and social sciences. BITS Pilani, will also be approached for collaborative research in multidisciplinary areas. f) Multidisciplinary / interdisciplinary approach... The curriculum will be designed in such a way that the student takes fixed credits from his/her core discipline and remaining credits could be from wide variety of programs offered either in the institution or in other institutions facilitating credit transfer facility. To provide

	<p>avenues of effective multidisciplinary collaboration, the institution will develop a shared vision, define clear roles and responsibilities, use technology tools extensively to facilitate collaboration among disciplines. On line tools such as Google Docs and Zoom subscription will be taken to facilitate effective collaborative work and create an environment of mutual respect where individual can express themselves openly and respectfully. More activities will be organized to focus on interdisciplinary activities through setting up clubs including multiple disciplines and organize activities to promote interdisciplinary activities such as debates, collaborative projects among student etc. Promote interdisciplinary research to encourage students and faculty to engage in interdisciplinary research to address real life problems with innovative solutions on complex issues.</p>
<p>2. Academic bank of credits (ABC):</p>	<p>(a) Describe the initiatives taken by the institution to fulfil the requirement of Academic Bank of credits as proposed in NEP2020. The institution maintains an LMS and ERP systems that includes all academic and non academic information about the students. The institution will register in ABC and transfer records of students from already existing LMS and ERP after obtaining autonomy. (b) Whether the institution has registered under ABC to permit its learners to avail the benefit of multiple entries and exit during the chosen programme? Provide details Since the institution is under an affiliating system, academic bank of credit is maintained by the affiliating university. Once the institution is autonomous and become a degree awarding institution will register under ABC formally. (c) Describe the efforts of the institution for seamless collaboration, international of education, joint degrees between Indian and foreign institutions, and enable credit transfer. The institution already has MOUs with 12 foreign Universities and number of activities are taken up through this arrangement. However, as an autonomous institution, the management plans to devise mechanism for seamless collaborations, internationalization of education, joint degree with foreign institutions and facilitate for credit transfer which has been included in the Strategic Plan of the institution, (d) How faculties are encouraged to design their own curricular and pedagogical approaches with the</p>

	<p>approved framework, including text book, reading material selections, assignments and assessments etc. The faculty will first need to be trained in curricula development and then provided freedom to design their curricula, seek approval of the Board of studies and introduce the same. (e) Describe any good practice/s of the institution pertaining to the implementation of Academic Bank of credits (ABC) in the institution in view of NEP 2020. The institution will create transparent mechanism to build flexible approach to curriculum design and development through structured approach involving experts from institutions.</p>
<p>3. Skill development:</p>	<p>(a) Strengthening vocational education and soft skills... Through a well established Language lab, language skill training is being offered to almost all the students as part of curricular requirement and students are also assessed to determine the language skill acquired The strategic plan provides for competency-based courses with multiple pathways to enable horizontal as well as vertical mobility of learners in vocational education, vocational training, general education and technical education since the institution already has diploma and degree institutions, which will be integrated and the faculty could devise programs that would link one level of learning to another higher level. This will enable the students to acquire desired competency levels, find the job as per the competency acquired and at later stage, return for acquiring additional skills to further upgrade their competencies. The certificates provided after completion of each level will have clearly defined competency achieved by the student. (b) Vocational education and integration in mainstream... The Trust runs ITI within the same campus offering certification in 8 trades and so far has trained about 10,000 students. These trades have 100% seats filled each year. The Birla Professional Research and Training Centre (BPTRC) attached to the BTTI value adds to the training curriculum and enhances the technical competence of the trainees. c) Providing Value-based education... Institute offers number of value based education included in the curriculum such as Course Introduction - Need, Basic Guidelines, Content and Process for Value Education d) Design credit structure to ensure to: (i) The institution is fully prepared to follow credit structure</p>

	<p>as provided by BTU, Bikaner and currently training students in welding, foundry, carpentry, blacksmithy, basic electronics, Surveying, Machine Shop Practice, Fitting and Sheet Metal Shop, etc. through workshops. (ii) Engaging services of industry veterans and master craftsman. The institution is located in the Marwari region that has impressive record of businesses owned and operated by industrialists with their origin firmly planted in Pilani, hence frequent interaction with industry veterans and master crafts persons are invited by ITI and BKBIET is organized to fill the gaps. (iii) ITI and BKBIET both offered well-structured on-line courses during Pandemic time to achieve the academic calendar. After Pandemic, though regular classes are conducted, the faculty use flipped classroom strategies to enable students to learn at their own pace anytime anywhere, hence forming part of blended learning. (iv) NSDC association with the institution... The institution will interact with NSDC to create a learners enrollment for students as well as working professionals to help them upgrade their skills and improve their competency levels with the facility to assess prior learning and recognize the same. (v) Skilling courses through ODL. With collaboration with sister institution ITI, the institution will offer skill development courses through blended learning using institutional premises for practice orientation and online and/or distance learning mode for theory.</p>
<p>4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):</p>	<p>a) Delineate the strategy and details regarding the integration of the Indian Knowledge system (teaching in Indian Language, culture etc.) into the curriculum using both offline and online courses The students come from varied backgrounds and are familiar with cross cultural languages. If they are from the local areas they speak they Hindi and Marwari and other students who come from other states speak their own language. All these two categories of students are familiar to learn the subject matter through on-line and off-line mode in English and their local language. In any circumstances the concept clarity is offered definitely in Hindi and English both. The curriculum has the provision of value based courses details of which are already given above which extensively provide the understanding of culture of India. The institution has its own temple where regular prayers</p>

	<p>are offered and festivals are celebrated. There also shastris and pandits are invited to give more education about Indian culture. As per the current practices of the institution, teaching learning process in the classrooms is delivered in bi-lingual mode i.e. English and Hindi. Each teacher is familiar with both the languages and have earned basic learning of language through the formal system. The institution is already geared up to provide to specialized teaching methods in English and Vernacular for which the details are mentioned in the strategic plan. b) What are the institutions plans to train its faculties to provide the classroom delivery in bilingual mode (English and vernacular)? Provide the details? Once the institution is autonomous, the institution plans to design curriculum in Indian languages and train faculty extensively to deliver in bilingual mode. c) Provide the details of the degree courses taught in Indian languages and bilingually in the institution Currently, all courses including UG and PG are taught in English and Hindi and also the lab work is also done in both languages. d) Describe the efforts of the institution to preserve and promote the following: I. Indian languages (Sanskrit, Pali, Prakrit and classical, tribal and endangered II. etc.) III. Indian ancient traditional knowledge IV. Indian Arts V. Indian Culture and traditions. During Annual fests in the institute, lot of cultural activities related to Rajasthan tribal culture and special competitions in Indian classical music are organized. Institution has specially dedicated museum to reflect Indian ancient traditions along with the historical traditions of the area in and around Pilani. e) Describe any good practices of the institution pertaining to the appropriate integration of Indian knowledge system (teaching in Indian language, culture using on line courses) in view of NEP 2020 Two good practices are as below: i. All teaching learning process in all UG/PG programs is conducted in English and Hindi ii. The labs and workshop are also conducted in English and Hindi iii. Apart from these two good practices, all institutional functions, curricular and extra curricular are conducted in Hindi and English. Guest invite to the institute are also encouraged to speak in English and Hindi. Orientation programs are also conducted in Hindi and English.</p>
5. Focus on Outcome based education (OBE):	i. Describe the institutional initiatives to transform its

curriculum towards outcome based education. The concept of outcome education system has been provided to the faculty members through: (a) Directly undergoing training programs/course on OBE (b) On OBE many offline courses are attended by the faculty Though the University curriculum is not in the realm of OBE, but the institution has organized training for teachers through vigorous online and on campus where they have received training in all aspects of OBE in planning, delivery and assessment process. ii. Explain the efforts made by the institution to capture the Outcome based education in teaching and learning practices. The institution and department level Vision and Mission were evaluated through brainstorming sessions to ensure the Mission statements are aligned to the Vision and PEOs are prepared to include all elements of the purpose of offering the programme to the students. The Program Outcomes, as stipulated by NBA reflecting the agreements of Washington Accord are being followed including Program specific Outcomes required by the stakeholders, especially the placement agencies and professional societies related to concerned departments. Gap analysis between university curriculum and POs is carried out by each department and strategy to cover the gaps through including contents beyond syllabus. The course files are prepared before commencement of the semester and course description discussed and shared with the students during the first week of the semester. Each faculty member is trained to use Bloom's Taxonomy in the process of planning, delivery mechanisms and assessment. Feedback, formative assessment is frequently conducted to improve the courses and devise strategies so that the students perform better in mid term and end of semester examinations. At the end of the semester the students provide feedback and teachers also provide conduct self appraisal to report achievement vis-à-vis targets defined before commencement of the course and recommend improvement. Hence, both direct and indirect feedback is obtained. The HOD then aligns the targets and achievement of courses vis-à-vis Program outcomes compiled for all programmes along with the recommendations, discuss the same with faculty and presents it to the head of the institution. iii. Describe any good practice/s of the institution pertaining to the Outcome based education (OBE) in

	<p>view of NEP 2020 Through the system of OBE, the institution is geared to set up system of continuous improvements in the program offerings and use innovative student centric strategies such as collaborative learning, problem based learning, flipped classrooms etc. A portal has been created on the website for faculty to share their innovative teaching learning processes and other faculty members are encouraged to critique and present their views, use the technique and add their improvements and recommendations and express their opinions</p>
<p>6. Distance education/online education:</p>	<p>(a) Delineate the possibilities of offering vocational courses through ODL, mode in the institution. With collaboration with ITI the institution will be able to offer vocational courses through ODL for students as well as working professionals based on the need assessment. The institution also plans to offer programs in IT and Electronics and the National Skill Qualification Framework has designed 78 programs in these two disciplines. The institution will initiate offering selected courses in these 2 disciplines to start with. (b) Describe about the development and use of technological tools for teaching learning activities. Provide the details about the institutional efforts towards the blended learning The institution plans to use open learning software such as MOOC and MODLE, Google Classrooms etc along with already existing LMS software and develop need based ODL in collaboration with ITI located in the campus as well as collaboration with local small scale industries dealing with variety of vocations. Tools developed during on line education by teachers and provide details (c) Describe any good practice/s of the institution pertaining to the Distance education/online education in view of NEP 2020 The University does not provide any permission to conduct vocational or any other educational courses through ODL. However, efforts made by the institution are listed below: (a) Online teaching was conducted during Pandemic period so the teachers are familiar with conducting classes and examining the students</p>

### Institutional Initiatives for Electoral Literacy

<p>1. Whether Electoral Literacy Club (ELC) has been</p>	<p>Yes, This cell has been setup with participation of</p>
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set up in the College?	faculty and students.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	Faculty Coordinator: Dr Rashmi Jangir and Mr Manoj Kr Saini Student Coordinators: Gargee, Mansi, Anushka Sandhya and Ankit It is made operational from academic session 2023-24.
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	Electoral Literacy Committee of institute would be platform for engaging Institute students in activities and hands-on experience to educate them on their electoral rights and to familiarize them with the electoral process of registration and voting. Activities like quizzes etc are intended to stimulate and motivate students by prompting them to reflect and ask questions. This would help to foster the culture of electoral involvement among young and future voters through Institute ELC. Committee would make volunteer , educate them and during election Process, these volunteers involved themselves and would further help to gather voters and educate them about voting process, registration and necessity of Voting.
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	The institution electoral committee plans to organise awareness drives, hold discussion among local committee to create awareness towards electoral processes.
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.	The institution electoral committee will attempt to identify students above 18 who are yet to enroll as voters and encourage them to register themselves with election office as voters.



## Extended Profile

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### 1 Students

#### 1.1

Number of students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1061	908	965	1060	1270
File Description		Document		
Upload Supporting Document		<a href="#">View Document</a>		
Institutional data in prescribed format		<a href="#">View Document</a>		

### 2 Teachers

#### 2.1

Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 130

File Description	Document
Upload Supporting Document	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

#### 2.2

Number of teaching staff / full time teachers year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
58	72	80	75	86

### 3 Institution

#### 3.1

Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
255.29	136.09	111.15	138.75	334.44

File Description	Document
Upload Supporting Document	<a href="#">View Document</a>

## 4. Quality Indicator Framework(QIF)

### Criterion 1 - Curricular Aspects

#### 1.1 Curricular Planning and Implementation

##### 1.1.1

**The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment**

**Response:**

Since BKBIET is affiliated to Bikaner Technical University, BTU the design of the curriculum is given to us by the affiliating university. The curriculum consists of 20 courses for allied subjects (science, mathematics, humanities, basic engineering), and varying number of courses in the specialization of the programme for example, there are 62 courses in CSE and 59 courses in IT. BTU treats subject-wise laboratory as an individual course. Additionally, the number of courses includes a seminar in third, fifth, and seventh semesters, industrial training in in the summer months before third, fifth, and seventh semesters, and one project in the final semester. The curriculum makes allowance for one professional elective in fifth, sixth, seventh and eighth semesters each.

At the beginning of each semester, BTU sends to us an Academic Calendar. Copies of these are placed at Annexure I. This calendar identifies the start of semester, induction program date for first year, dates of internal examinations, last working day, dates of BTU practical and theory examinations. However, it leaves the detailed planning to the Institute. The calendar of BKBIET lays stress on course design for Outcome Based Education.

Specific faculty meetings are scheduled for course allocation and reviewing OBE design. The Institute calendar lists out the dates for issuing notices for elective selection and allocation, project selection, choosing seminar topics, and industrial training. It provides a plan for preparing and submitting question papers and display of answer copies to students. There are a number of co-curricular activities to supplement the curriculum. These are normally held once every month and include technical as well as non-technical guest lectures, seminars, workshops etc. These are scheduled dynamically on availability of the resource person. The Institute calendar also fixes dates of student events like yoga day, blood donation camps, festivals and sports. Dates for convocation/degree distribution programme are communicated to BKBIET by BTU. The ceremony is conducted on that day. Lastly, dates and nature of pre-placement classes are announced by the Training and Placement division. Copies of the Institute calendar are placed in Annexure I.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 1.2 Academic Flexibility

### 1.2.1

**Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)**

**Response:** 32

File Description	Document
List of students and the attendance sheet for the above mentioned programs	<a href="#">View Document</a>
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Evidence of course completion, like course completion certificate etc. Apart from the above:	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

### 1.2.2

***Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years***

**Response:** 45.36

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
512	497	614	408	357

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 1.3 Curriculum Enrichment

### 1.3.1

***Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum***

**Response:**

The institute follows the curriculum made by BTU in this regard till the year 2019-20 BTU had prescribed the Course entitled HUMAN VALUS in their curriculum. This was subsequently suspended and replaced by the BUILD ENVIRONMENT COURSE of three lecture hours and two practical hours in first semester as well as in the second semester. The students are divided in two batches and half the batch does the course in first semester and other half does in second semester. Seeing the engineering nature of this course the faculty the background in civil engineering teach this course and conduct its laboratories.

The institution has adopted a learning by doing approach in sensitizing students to green issues. Students are explore to a water harvesting schemes on campus and carry out an annual tree plantation drive besides this part NCC training credits participation in tree plantations outside the campus. To make socially aware BKBIET has carried out a number of programs in campus. In the KHEDLA a little Campaign is carried out a seven days camp under NSS , Joy of giving week under NIRMAN , YOGA camp are some of these notable example . Further anti-drug Campaign, stress management & SWACH ABHIYAN as well SAWCHTA PAKHWARA were conducted. A three day RAMCHARITRA MANS katha is organized in 2020. Workshops and personalities development and communication skills on regular basis .An active NCC runs on campus

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 1.3.2

**Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)**

**Response:** 65.69

**1.3.2.1 Number of students undertaking project work/field work / internships**

**Response:** 697

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 1.4 Feedback System

### 1.4.1

*Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website*

**Response:** C. Feedback collected and analysed

File Description	Document
Feedback analysis report submitted to appropriate bodies	<a href="#">View Document</a>
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	<a href="#">View Document</a>
Action taken report on the feedback analysis	<a href="#">View Document</a>
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## Criterion 2 - Teaching-learning and Evaluation

### 2.1 Student Enrollment and Profile

#### 2.1.1

##### Enrolment percentage

**Response:** 51.83

##### 2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2022-23	2021-22	2020-21	2019-20	2018-19
364	220	210	251	230

##### 2.1.1.2 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
480	480	420	540	540

#### File Description

#### Document

Institutional data in the prescribed format

[View Document](#)

Final admission list as published by the HEI and endorsed by the competent authority

[View Document](#)

Document related to sanction of intake from affiliating University/ Government/statutory body for first year's students only.

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

#### 2.1.2

*Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years*

**Response:** 39.47

##### 2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

2022-23	2021-22	2020-21	2019-20	2018-19
209	100	101	115	0

### 2.1.2.2 Number of seats earmarked for reserved category as per GOI/ State Govt rule year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
260	260	226	292	292

File Description	Document
Institutional data in the prescribed format	<a href="#">View Document</a>
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	<a href="#">View Document</a>
Copy of communication issued by state govt. or Central Government indicating the reserved categories(SC,ST,OBC,Divyangjan,etc.) to be considered as per the state rule ( Translated copy in English to be provided as applicable)	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 2.2 Student Teacher Ratio

### 2.2.1

**Student – Full time Teacher Ratio**  
(Data for the latest completed academic year)

**Response:** 18.29

## 2.3 Teaching- Learning Process

### 2.3.1

**Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences and teachers use ICT- enabled tools including online resources for effective teaching and learning process**



**Response:**

Since OBE has been adopted by the institution and student centric learning has gained momentum. The faculty use innovative pedagogy strategies to blend structured and unstructured teaching-learning strategies to encourage enhanced participation of students through traditional chalk and board to active learning. To ensure student involvement and participation, individually and in groups, is practiced so that student increasingly take responsibility for their own learning and be lifelong learners. The Strategies adopted are collaborative Learning through classroom activities /group assignments, experiential learning through live problems to provide hands on experience. Some examples are listed below:

**Experiential Learning**

- ICT tools are used by faculty such as cisco packet tracer, touch pads, google classrooms, Microsoft teams, etc.
- 35 well established laboratories exist and are used for practical, aligned to curriculum provided by affiliating University.
- Projects in final year help the students to gain knowledge on industrial environment.
- Second semester onwards all students undertake online industrial/ projects for duration of 15 days, 30 days and 45 days respectively.
- Workshops and seminars are conducted by faculty members and external professionals in relevant fields through student chapters
- Industrial training and Internships are organized through Birla Professional training and research center.
- Value-added courses for skill development are organized by departments.
- Industrial visits are organized to provide the experiential learning to expose the students to real life work environment.

**Participative Learning**

- Students are encouraged to organize and participate Hackathon, inter-collegiate events such as symposia, project contests, workshops, seminars, sports and cultural events, technical quizzes
- Tutorial classes are part of the timetable to help students to help students solve complex problems
- About 36 student clubs exists, such as NSS, Nirmaan, Music & Dance/drama, sports, yoga, science, speech, google developer students club, Newton School coding club etc.

As a part of the curriculum, language laboratory has been established to develop student's English proficiency.

- Interactive sessions / Webinars are organized annually
- Aptitude classes are organized regularly

**Problem Based Learning**

- Competitions and Internal Smart India Hackathons are organized as interdepartmental Students

where students enter coding competition and solve complex real life problems

- Industry sponsored projects are taken up faculty and students

### Other Strategies

- Faculty also use PPTs & videos, simulations, student presentations, demonstration, web searches, using digital Bloom sites based on the outcomes to be achieved
- Learning through short problems provided to the students in groups, Project- based learning, inviting guest lecture to fill the gaps identified in POs vis-à-vis syllabus etc.
- Flipped classroom strategies have help students learn at their own pace, anywhere, anytime, hold discussions with the peers, ask questions and clarifications during class and teacher gets the opportunity to cover more information, go beyond syllabus contents during their otherwise limited time in class of 50 minutes. This strategy has been found to be helpful to weak students especially.
- WhatsApp groups of students are created by faculty members to interact and further guidance to students.
- Students are encouraged to use open-source course ware through Udemy, MOOC, NPTEL and open sources provided by IITs etc.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 2.4 Teacher Profile and Quality

### 2.4.1

#### Percentage of full-time teachers against sanctioned posts during the last five years

**Response:** 69.87

#### 2.4.1.1 Number of sanctioned posts year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
96	99	102	114	120

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 2.4.2

*Percentage of full time teachers with NET/SET/SLET/ Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)*

**Response:** 22.1

**2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
21	16	16	15	14

File Description	Document
List of faculties having Ph. D. / D.Sc. / D.Litt./ L.L.D along with particulars of degree awarding university, subject and the year of award per academic year.	<a href="#">View Document</a>
Institution data in the prescribed format	<a href="#">View Document</a>
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awarded by UGC recognized universities	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 2.5 Evaluation Process and Reforms

### 2.5.1

**Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient**

**Response:**

- University academic calendar is followed to conduct internal & external assessment and is time bound.
- University assessment guidelines are shared with faculty and students. Awareness and transparency is ensured among them for theory and practicals with grades attached.
- Internal assessment results are declared timely and shared with students.
- Institution has adopted OBE. Internal tests, assignments and mid-terms are assessed using COs linked to Bloom's Taxonomy.
- Assessment and evaluation scheme is shared with students beforehand through course file description.
- After assessment, results are shared with students through WhatsApp and queries are responded.
- Assessment is done through tests, assignments, midterm-1, midterm-2.
- The COs are divided to cover part of course in midterm-1 and remaining in midterm-2. Improvement exams are conducted to cover all COs.
- Assessment based on predefined targets is done to determine extent of attainment of all COs.
- Choices are given between questions; ensuring same complexity so that each CO is attempted by students. Each question is related to some CO using Bloom's Taxonomy.
- The answer sheets are shown and discussed with students.
- All the scores obtained covering COs are compiled to determine their overall attainment of POs/PSOs.

### **Current Direct Assessment**

- Faculty provides details of assessments in course description sheet to the students' semester beginning. Based on credit system marks distribution is decided by university.
- Internal assessment of 20, 30 & 40 marks based on 2, 3 & 4 credits respectively.
- 20% of internal & 80% of university marks are used to calculate achievement.

### **Indirect Internal Assessment**

- At end of semester, students provide feedback on their assessment of course objectives and outcomes and extent of learning and benefit accrued by them as well as assessment of extent of overall course coverage.
- Faculty fill a self-assessment sheet to provide their own course assessment, its impact and corrective actions perceived.

### **Indirect Assessment from external stakeholders**

- External feedback is done for general and overall preparedness from alumni, industry and parents but do not form part of current indirect feedback mechanism covering OBE.
- Once batch is out with OBE and have been engaged in career activities for 1 to 2 years, it will be fruitful to seek feedback from alumni and recruiters.

### **Grievance Redressal of Examination:**

- Internal Mechanisms: The process of grievance and redressal at institution level is known to faculty, staff and students through institutional website. A copy is placed in library and in institutional handbook.
- Constant feedback from students is done for teaching learning processes. For examination grievance, there are internal mechanisms in place like grievance and redressal committee, exam cell, counselors/mentors and HoD.
- Student may submit their grievance through application to the Director/Examination in-charge and the issue is resolved within one week.
- Grievance is impartially investigated involving all concerned and redressal actions are determined. After resolving feedback is taken from the grieving person and record maintained.

### External

- The grievance is submitted through BTU's ERP and the grievance is resolved within 30 days by the university. The students see answer-sheets and if grievance is continued, matter is resolved by CoE at University.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 2.6 Student Performance and Learning Outcomes

### 2.6.1

*Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website*

#### Response:

- Teachers and students are aware of the stated program, course outcomes and program outcomes as stipulated by NBA.
- Institutional website has Vision, Mission, PEOs, POs/PSOs and COs displayed for each department.
- During orientation program Vision, Mission, PEOs, POs/PSOs and COs are discussed.
- During admission counseling students and parents are informed about the PEOs, POs/PSOs of the program.
- Further, during discussion on course objectives and course outcomes, each faculty discusses and shares the same with students. The students are aware of assessment scheme to be followed by faculty through same document shared with them.
- POs and PSOs are displayed in the Department, Laboratories, and library.
- POs and PSOs are communicated to employers and Alumni by sending mail and during the

Alumni Meet.

- During the IQAC meeting and faculty meeting, POs and PSOs are discussed.
- Evaluation mechanism of POs and PSOs through COs are defined by each faculty considering all six levels of Bloom's cognitive domain and mapped to POs/PSOs.
- Each teacher plans strategy for implementation of COs along with targets for attainment of each CO for their respective courses.
- Faculty maintains the record of performance of students through a process of continuous assessment.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 2.6.2

*Attainment of POs and COs are evaluated.*

**Explain with evidence in a maximum of 500 words**

**Response:**

### **Attainment of POs & COs**

- The mechanism for attainment of POs and PSOs through COs is well defined.
- Each faculty designs assignment, tests, viva voce, surprise tests, quiz, projects etc. based on COs.
- It is ensured that all COs are covered through assessment with same complexity as planned by the faculty with pre-defined targets of achievement.
- The results of the COs are mapped to POs and PSOs at the end of the semester.

### **Assessment of abstract concepts**

- During the internal assessments, for abstract Outcomes such as communication, team work, collaborative projects and assignments, critical thinking etc. the assessment is done through Rubrics which are discussed and shared with students beforehand to ensure students know what they would be evaluated on, hence ensuring transparency and clarity.
- The assessment both midterm examinations have equal weightage. Use of formative as well as summative assessment methods ensures continuous evaluation process and possible correct action to be taken for the benefit of the students in the same batch.
- **Setting Key Indicators for attainment of COs:** Based on the past experience of student performance in a course, each faculty sets up targets as key indicator of the achievement of the course for internal assessment, for example, 50% of students will attain 50% marks, attainment in course will be at the level (1), 50% of students will attain 60% marks the attainment in course will be at level (2) and 50% students will attain 70% marks the attainment level of the course will be at level (3). The attainment of course through these levels along with Student feedback at the

end of semester and faculty self-appraisals are analyzed to determine future corrective actions.

- Department collectively determines the future course of action, whether to take corrective actions if the targets are not achieved and if the targets are achieved at level (3) what improvements could be introduced for next batch.
- COs of each course are mapped to POs and PSOs to assess attainment levels. COs are reviewed regularly to ensure relevance with ever changing needs of the stakeholders and to devise beyond syllabus strategies if curriculum does not cover them.
- Being affiliated college of BTU, the students of BKBIET take examinations as per the semester pattern, through which institution measures POs based on the course attainment level fixed by the faculty.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 2.6.3

#### Pass percentage of Students during last five years (excluding backlog students)

**Response:** 91.56

#### 2.6.3.1 Number of final year students who passed the university examination year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
239	212	268	208	375

#### 2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
257	222	273	232	438

<b>File Description</b>	<b>Document</b>
Institutional data in the prescribed format	<a href="#">View Document</a>
Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / year-wise.	<a href="#">View Document</a>
Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 2.7 Student Satisfaction Survey

### 2.7.1

#### Online student satisfaction survey regarding teaching learning process

#### Response:

<b>File Description</b>	<b>Document</b>
Upload database of all students on roll as per data template	<a href="#">View Document</a>



## Criterion 3 - Research, Innovations and Extension

### 3.1 Resource Mobilization for Research

#### 3.1.1

*Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)*

**Response:** 64.7

**3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)**

2022-23	2021-22	2020-21	2019-20	2018-19
11	11	11	20.7	11

#### File Description

#### Document

Upload supporting document

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

### 3.2 Innovation Ecosystem

#### 3.2.1

**Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident**

**Response:**

**Indian Knowledge System (IKS):** IKS is present in the institution in a scanty manner through teaching of science, mathematics and to some extent philosophy. Yoga is being taken up by students as an exercise, yoga day is observed and with the help of existing teachers yoga is conducted. However, as students are keen to participate in gymnasium and are enjoying sports in the evening and participate in certain competitions and the institute level and inter-institute level. There are lot of examples available where students have gone to participate in sports and games. The institution have all necessary equipment's for gym and sports. There are two distinct temples existing in campus where daily prayer is offered and religious saints are invited for lectures.

**Awareness about IPR:** Some faculty members are fully conversant with the process and procedures of

the IPR and they have undergone the training also. The institution has to its credit to patents namely Smart Sweet lights with monitoring, navigation and mechanism to support sanitization needs by Mr Pradeep S Shekhawat and Mr Gopal Krishna Prajapat. A new approach for estimation of eigen value and eigen vector by Dr Vipin Kumar. Machine learning – driven stochastic differential equation inventory model for dynamic stock optimization by Dr Vipin Kumar and Dr Anupama Sharma. 5 registered patents. The last training attended by 5 faculties in year 2023.

**IPR cell:** An IPR cell is functional in the institution since 2016 headed by Dr H Rahaman with faculty members from different departments. The cell conducts training guidance on patenting, copyrights, trademarks, and other intellectual property issues. So far 6 patents have been registered the details are uploaded.

**Entrepreneurship cell:** Entrepreneurship cell is functional since 2016 headed by Dr H Rahaman. The cell conducts training, resources mobilization, mentoring etc. As a result, 7 entrepreneurs are functioning and this activity has led to setting up of 6 startups. Details attached. In the hackathon organized by GOI and GOR, students have participated in large numbers and have won prizes.

The outcome of these efforts are very well documented and deserve as a reward for the new student who are eager to join the institution. Our institution is placed in rural area therefore the growth indicates that some of the entrepreneurs and startup have been setup by our students in other countries also. One such setup is available in Dubai by Mr Bhupesh Mittal, ex-student 2017 pass out.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 3.2.2

*Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years*

**Response:** 76

**3.2.2.1 Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
15	13	20	7	21

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### 3.3 Research Publications and Awards

#### 3.3.1

**Number of research papers published per teacher in the Journals notified on UGC care list during the last five years**

**Response:** 0.66

**3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
22	18	15	16	15

File Description	Document
Link to the uploaded papers, the first page/full paper(with author and affiliation details)on the institutional website	<a href="#">View Document</a>
Link to re-directing to journal source-cite website in case of digital journals	<a href="#">View Document</a>
Links to the papers published in journals listed in UGC CARE list or	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

#### 3.3.2

**Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years****Response:** 0.57**3.3.2.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
31	14	5	15	9

File Description	Document
List of chapter/book along with the links redirecting to the source website	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

**3.4 Extension Activities****3.4.1****Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.****Response:**

Extension activities within neighborhood communities have long been recognized for their potential in stimulating holistic growth and providing hands-on experience, particularly for students. Over the past five years, some impressive activities has been conducted and their impact is visible. These activities include activities under NSS, NIRMAN, village adoption, plantation, women empowerment, etc. Their impact is not just tangible in terms of the improvements within the community, but also in terms of sensitizing students to social issues and fostering their holistic development.

**1. Enhanced Community Relations:**

Community relationship enhances bond between institution and surroundings. Students and locals

community working side by side have bridged age and social divides, fostering a renewed spirit of unity and mutual respect.

## **2. Socio-economic Impact:**

The activities conducted are targeted to provide services to young generation that includes providing basic education, food, healthcare, etc. this is done on a daily basis in the institution.

Through NSS and NCC activities blood donation camp are organized to generate awareness about AIDS and such diseases.

## **3. Student Transformation:**

Students who participated in these activities have shown remarkable growth and awareness about community problems. Exposure to ground level problems give deeper understanding to the students and therefore student development in sympathy, problem solving.

## **4. Awareness about hygienic practices by women of neighborhood and community:**

Extension activities, ranging from health camps, have illuminated pressing issues for students. For many, it was their first exposure to systemic problems faced by marginalized sections of society.

## **5. Multi-disciplinary Learning:**

Meeting of the students of the local community has the long lasting effect on personalities of the students as many of them are exposed to the social and community related problems for the first time. It provides strong understanding of multi-facet nature of community problems and problem solving attitudes to students.

## **In Conclusion:**

As a concluding remark, the institution is well linked with outer community since it is existing in the rural area. Support young students is often by giving them education, food and healthcare. Regular NSS activities are conducted as per the directives of the government. And the NIRMAN activities are providing sufficient social consciousness to the students and a sympathetic attitude towards local community.

Similar role is played by NCC for the benefit of students and society.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 3.4.2

#### **Awards and recognitions received for extension activities from government / government recognised bodies**

##### **Response:**

All the students and faculties directly or indirectly are involved in community extension activities, therefore all of them are given certificate for the kind of work they have done. In NSS activities students' participation and appreciation are recognized with certificates. In NCC activities students participate in different NCC camps held at different state and national levels. For their recognition, students receive certifications and awards which are proudly displayed in the institution. The recognition of participation in the national parades at Delhi is also available

**National Service Scheme (NSS) Awards (India):** Instituted by the Ministry of Youth Affairs & Sports, these awards recognize outstanding contributions towards community service, highlighting the role of educational institutions, NSS units, and volunteers.

**Impact of Recognitions:** Such accolades go beyond mere ceremonial honors. They serve as benchmarks of excellence, setting a standard for others to emulate. Moreover, they provide recipients with increased visibility, thereby attracting more resources, partnerships, and collaborations, amplifying their impact.

**Future Prospects:** With the increasing emphasis on community engagement and public-private partnerships, the role of extension activities is becoming more pronounced. Governments and institutions are steadily realizing the necessity of bridging the gap between academic knowledge and real-world application. As such, the number and stature of awards recognizing extension work are likely to grow, offering a platform for the best minds to come together and collaborate for the greater good.

**Conclusion:** The awards and recognitions for extension activities, bestowed by government and government-recognized bodies, are a testament to the importance of community outreach and engagement. By celebrating the heroes of extension activities, these awards not only acknowledge their efforts but also send out a clear message about the values that our society holds dear. They are an investment in a future where knowledge is not confined to ivory towers but flows freely, bringing about positive change in every corner of society.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 3.4.3

*Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.*

**Response:** 96

**3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
25	25	18	14	14

File Description	Document
Photographs and any other supporting document of relevance should have proper captions and dates.	<a href="#">View Document</a>
Photographs and any other supporting document of relevance should have proper captions and dates.	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 3.5 Collaboration

### 3.5.1

*Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.*

**Response: 14**

<b>File Description</b>	<b>Document</b>
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	<a href="#">View Document</a>
List of year wise activities and exchange should be provided	<a href="#">View Document</a>
List and Copies of documents indicating the functional MoUs/linkage/collaborations activity-wise and year-wise	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>



## Criterion 4 - Infrastructure and Learning Resources

### 4.1 Physical Facilities

#### 4.1.1

**The Institution has adequate infrastructure and other facilities for,**

- **teaching – learning, viz., classrooms, laboratories, computing equipment etc**
- **ICT – enabled facilities such as smart class, LMS etc.**

**Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)**

**Response:**

BKBIET Pilani is approved by AICTE and therefore meets all infrastructure requirements of Engineering and technological institutions. The institute is located in a campus of 18.01 acres, consisting of one Administrative block and three Academic blocks. Academic area consists of 28 classrooms, 35 laboratories, 14 tutorial rooms, 5 seminar halls, one workshop, one drawing hall, and one computer centre. Faculty members are allotted cabins in the academic area. A cabin is shared by two faculty members. There are single occupancy HOD chambers. Technical staff is located in the respective laboratories for which they are responsible.

The Institute runs a special centre called, Birla Professional Training and Research Centre. This is a nodal centre for all training carried out at BKBIET and has its own dedicated labs/workshops for industry-relevant training as well as 3 lecture halls. Besides running its own programmes, the Centre also manages all soft/technical skills programmes of BKBIET. All activities related to placement are also carried out here.

ICT enabled teaching facilities are available in two lecture halls of BPTRC and in all laboratories of the Institute. The Institute has an ERP system on which student data like attendance and marks is available. Feedback from students is obtained on Google sheets. Lecture notes and similar teaching material is available on the Institute web site [bkbiet.ac.in](http://bkbiet.ac.in) for anywhere, anytime access. It is also available on Google Classroom. ICT is also used in the accounts department and accounts are maintained in Tally.

Extra-curricular activities are carried out in the amphitheatre (capacity 1200) and the Sarla Birla Activities Centre, comprising one gym, dance room, music room, creativity room, badminton courts, TT tables etc. Cricket and football grounds as well as courts for, basketball, volleyball, and lawn tennis are also available. The NCC store room for the NCC company is located in BITS campus from where the BKBIET unit issues material as needed. NCC activities are co-ordinated by the NCC office of BKBIET located on the campus itself.

The boys hostel has 71 single-seat and 266 double-seat rooms. The girls hostel has 138 double-seat rooms. Internet facilities are available in both hostels. BKBIET provides staff housing on campus. There are 69 faculty quarters and one Director's bungalow. BKBIET has its own guest house. Vegetables are grown in the Botanical garden on campus.

There is a mart for daily needs and groceries as well as a canteen. The dispensary is staffed by a qualified pharmacist for first aid. Student/resident faculty members are sent to Birla Sarvajanik Hospital by the BKBIET ambulance if required. There are miscellaneous facilities like electricity room and electrical backup, water supply is by bore wells and RO facilities are available.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

#### 4.1.2

*Percentage of expenditure for infrastructure development and augmentation excluding salary during the last five years*

**Response:** 26.3

**4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)**

2022-23	2021-22	2020-21	2019-20	2018-19
57.26	17.30	9.36	3.04	169.61

File Description	Document
Institutional data in the prescribed format	<a href="#">View Document</a>
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 4.2 Library as a Learning Resource

#### 4.2.1

*Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students*

**Response:**

The institute library is fully air conditioned and is spread over an area of 700.5 square meter. It is divided into three parts, one for referral purposes, the second for issues/returns, and the third is the book bank for first year students. About 60 books are issued every day. The reading area can seat 200 seats and is used by 120 -130 students every day. The library is open from 9:00 am to 9:00 pm on all working days and from 9:00 to 5:00 pm on Sundays/holidays and during the examinations. Issues and returns are allowed from 9:00 am to 5:00 pm.

The institute library has 5361 unique titles and 35624 volumes. The number of books in the book bank is 13513. The library procures more than a dozen newspapers, National, regional and Local. Books for preparing for higher examinations (GARE, Civil Services etc.) are available together with books for verbal and non-verbal reasoning. Books of general interest like personality development, fiction, biographies etc. as well as dictionaries, handbooks and encyclopedias are all available in the library.

A large amount of e-material is available and access is enabled through the institute website bkbiet.ac.in. This material consists of Chemspider, CurrentScience, DOAJ, J-stage, Mapworld, Friends Science Publisher, OER Commons, LoS, MIT –OCW, DOAB, SabiNet, High wires Press Archive, Indian Academy of Science, Intech open access ,Scientific Research Pub, NDLTD, Cochrane Library Copernicus Publications

The library is member of DELNET, National Digital Library (also through e-Shodh Sindhu. The Library is a member in National Digital Library (<https://ndl.iitkgp.ac.in/>) (NDL) and Shodhganga. All our staff and students have access to these electronic resources.

The library staff uses three internet enabled computers for maintaining the library catalog and also for issue and returns. This latter facility is automated and part of the ERP package of the Institute. This automation is supported by suitable bar coding. Access to the catalogue is available to all students/faculty members.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

**4.3 IT Infrastructure****4.3.1**

**Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection**

**Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words**

**Response:**

There are total 464 desk top computers and 15 laptops of varying configuration in the institution. Out of these, 9 desk tops have been installed in Ghumansar, a village adopted by the Institute. 395 computers are available for students use and balance for faculty and staff.

The currently available internet bandwidth is 300 MBPS on a leased line. All computers are internet enabled. Wi-fi points are available in hostels (55 nos.) and also in the main Institute building(15 nos).

The Institute regularly invests in upgrading/renewing IT infrastructure. For example, in 2023-24, 25 new desk top computer and 1 laptop were purchased and in 2022-23 30 were re-furbished. An additional 2 laptops were upgraded. Similarly, in 2021-22, 5 laptops were purchased, and the hard disk of 6 desk tops as well as the RAM of 5 additional ones was upgraded. As far as internet is concerned, the bandwidth available was 100 MBPS 2020-21 and this was increased to 300 MBPS in 2022-2023. Further, 10 Wacom writing tablets were purchased for on-line teaching during the Corona period.

The Institute has license for 14 system software packages including windows server and Turbo C++. Application software is open source and includes software like SQL server, and Matlab.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

**4.3.2**

**Student – Computer ratio (Data for the latest completed academic year)**

**Response:** 2.69

**4.3.2.1 Number of computers available for students usage during the latest completed academic year:**

**Response:** 395

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	<a href="#">View Document</a>
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

#### 4.4 Maintenance of Campus Infrastructure

##### 4.4.1

*Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)*

**Response:** 38.86

**4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)**

2022-23	2021-22	2020-21	2019-20	2018-19
100.20	58.38	53.50	65.98	101.11

File Description	Document
Institutional data in the prescribed format	<a href="#">View Document</a>
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## Criterion 5 - Student Support and Progression

### 5.1 Student Support

#### 5.1.1

*Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years*

**Response:** 11.53

**5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
65	107	119	140	176

#### File Description

#### Document

Year-wise list of beneficiary students in each scheme duly signed by the competent authority.

[View Document](#)

Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).

[View Document](#)

Upload policy document of the HEI for award of scholarship and freeships.

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

#### 5.1.2

*Following capacity development and skills enhancement activities are organised for improving students' capability*

1. Soft skills
2. Language and communication skills
3. Life skills (Yoga, physical fitness, health and hygiene)
4. ICT/computing skills

**Response:** A. All of the above

File Description	Document
Report with photographs on Programmes /activities conducted to enhance soft skills, Language and communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	<a href="#">View Document</a>
Report with photographs on ICT/computing skills enhancement programs	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

### 5.1.3

**Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years**

**Response:** 21.11

**5.1.3.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
200	178	206	212	315

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### 5.1.4

***The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases***

- 1.Implementation of guidelines of statutory/regulatory bodies**
- 2.Organisation wide awareness and undertakings on policies with zero tolerance**
- 3.Mechanisms for submission of online/offline students' grievances**
- 4.Timely redressal of the grievances through appropriate committees**

**Response:** A. All of the above

File Description	Document
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	<a href="#">View Document</a>
Proof related to Mechanisms for submission of online/offline students' grievances	<a href="#">View Document</a>
Proof for Implementation of guidelines of statutory/regulatory bodies	<a href="#">View Document</a>
Details of statutory/regulatory Committees (to be notified in institutional website also)	<a href="#">View Document</a>
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 5.2 Student Progression

### 5.2.1

**Percentage of placement of outgoing students and students progressing to higher education during the last five years**

**Response:** 50.72

**5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
128	149	125	107	156

**5.2.1.2 Number of outgoing students year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
239	212	268	249	343



File Description	Document
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order(the above list should be available on institutional website)	<a href="#">View Document</a>
List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education.(the above list should be available on institutional website)	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

### 5.2.2

*Percentage of students qualifying in state/national/ international level examinations during the last five years*

**Response:** 1.08

**5.2.2.1 Number of students qualifying in state/ national/ international level examinations year wise during last five years (eg: IIT/JAM/NET/SLET/GATE/GMAT/GPAT/CLAT/CAT/ GRE/TOEFL/ IELTS/Civil Services/State government examinations etc.)**

2022-23	2021-22	2020-21	2019-20	2018-19
1	4	1	1	0

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 5.3 Student Participation and Activities

**5.3.1**

**Number of awards/medals for outstanding performance in sports/ cultural activities at University / state/ national / international level (award for a team event should be counted as one) during the last five years**

**Response:** 37

**5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
4	1	0	7	25

**File Description****Document**

Upload supporting document

[View Document](#)

list and links to e-copies of award letters and certificates

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

**5.3.2**

**Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)**

**Response:** 129

**5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
129	50	0	272	194

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 5.4 Alumni Engagement

### 5.4.1

**There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services**

**Response:**

#### **The Pivotal Role of Registered Alumni Associations in Institutional Development**

Higher educational institutions and schools form the bedrock of knowledge and skill acquisition, setting the foundation for professional growth and societal contributions. While the academic and extracurricular activities of these institutions play a pivotal role in chiseling the personalities of students, the journey of these institutions doesn't end with the graduation of its students. Alumni Associations act as the extended arms of these institutions, ensuring a cycle of growth, feedback, and development that can span decades. Their influence and contribution significantly enhance the institution's growth both financially and through a myriad of support services.

**Financial Contributions:** One of the most immediate and tangible impacts of Alumni Associations is the financial support they provide. Given that many of the alumni are established professionals, entrepreneurs, or leaders in their respective fields, they often contribute generously to their alma mater. This financial aid can be used for infrastructure development, scholarships, research projects, and even endowments for professorial chairs. Such contributions enable institutions to bridge the gap between limited governmental or foundational funding and the actual financial requirements.

**Mentorship Programs:** Beyond the financial aspect, alumni often serve as mentors to current students. They provide real-world insights, career guidance, and even help students network in their chosen fields. This direct connection between the alumni and students help students prepare for the challenges and opportunities they might face post-graduation.

**Facilitating Internships and Job Placements:** Alumni, given their standing in various industries, are in unique positions to facilitate internships or job placements for recent graduates. Alumni Associations often collaborate with the institution's placement cells, making them more efficient and ensuring that students have a smoother transition to the corporate world.

**Curriculum Development:** The dynamic nature of industries demands that academic curriculums evolve to stay relevant. Alumni, with their hands-on experience in the evolving market, provides invaluable feedback regarding the curriculum. By participating in academic councils or periodic reviews, they can help ensure that the courses offered are aligned with current industry needs, thus making students industry ready.

**Organizing Workshops and Guest Lectures:** Knowledge sharing is another significant area where alumni make a difference. Alumni often return to their institutions to deliver guest lectures, to share experiences, and conduct workshops. These sessions act as an interface between academic knowledge and its real-world application, giving students a clearer perspective.

**Building a Stronger Brand Image:** A successful alumni base acts as a testament to the institution's quality of education and training. When alumni achieve notable feats in their careers, it indirectly bolsters the reputation of the institution, thus enhancing the institution's brand image.

In conclusion, Alumni Associations are much more than just nostalgic congregations of former students. They are vital cogs in the machine of institutional development, growth, and ensuring that the institution remains relevant and continues to produce industry-ready professionals. By bridging the past with the present and the future, it ensures a holistic development cycle that benefits society on a border prospective.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## Criterion 6 - Governance, Leadership and Management

### 6.1 Institutional Vision and Leadership

#### 6.1.1

*The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.*

#### Response:

#### Governance in Accordance with Vision and Mission

The institution faculty and other stake holders have through brainstorming, consultations and studying past performance have prepared vision and mission which is relevant and addresses current and future state of the institution.

The institutional governance structure is well established and the hierarchy of the institution is fully functional. The institutional leadership and the sub systems are working in complete consonance with the institute vision and mission.

**1. NEP 2020 Implementation:** NEP 2020 envisages features such as holistic, student-centric, flexible, and inquiry-driven education for the benefit of the students. The institution functions in such a manner that these aspects are very well covered and is fully supported by institutional policies, structure and governance system. The implementation of NEP 2020 is gradually acquiring a stable framework in which BKBIET is committed to follow.

**2. Sustained Institutional Growth:** BKBIET believes in adopting good practices, strategies and policies that are well synchronized with the vision and mission. Growth pattern therefore indicates that adequate attention is paid to not only in teaching but also in research, innovation, entrepreneurship development, IPR formation along with service provided to community & society exercise.

#### 3. Decentralization:

BKBIET has well established decentralized process wherein the instructions and directives are passed on from BOG to director followed by principal, HODs. The decentralization further travels to individual

responsibilities distributed to individuals. Therefore, it operates through a hierarchy. All the dignitaries of the hierarchy such as principals, HODs etc. take directives from BOG.

**4. Participation in Institutional Governance:** Active participation of stakeholders, including faculty are represented in the BOG. Governance process reveals an inclusive leadership approach. Such participation ensures that the institution's policies and practices are not only top-down directives but are shaped by the collective wisdom of its hierarchy. This collective involvement ensures that the institution remains dynamic, receptive, and evolves in line with its vision and mission of the institution.

**5. Strategic Plan:** Perspective planning is an essential tool for institutions to map out their future. BKBIET aligns its short and long-term plans with the mission and is mention in the strategic plan prepared by faculty and other staff in consonance with vision and mission of the institution. All attempts have been made in the strategic plan have been defined future readiness and also the aspects are rooted in the fundamental ethos of the institution. The goals as mentioned to the strategic plan serve as a roadmap, ensuring that every step taken, every initiative launched, and every policy formulated brings the institution closer to its envisioned future.

In conclusion, when the vision and mission are the guiding lights, and the leadership and governance are the vehicles driving an institution, the path to success becomes clear. Through its alignment with national policies like NEP 2020, its growth strategies, its decentralized approach, its inclusive governance, and its future perspective plans, an institution not only thrives but also sets benchmarks for excellence. BKBIET is therefore poised to make lasting contributions to society, shaping futures, and defining legacies.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 6.2 Strategy Development and Deployment

### 6.2.1

*The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc*

**Response:**

**Institutional Strategic Plan:**

Institutions are fundamental to the stable functioning of any society. They provide a framework for our social, economic, political, and cultural activities. An effective strategic plan (SP) has been laid down which provides the roadmap and a pathway for meeting success in all measures of the institution. Evaluating the efficacy of the SP can be done by examining its deployment in policies, administrative setups, service rules, and procedures.

SP includes attaining autonomy, once autonomy is attained then institute will start the disciplinary and multi-disciplinary / inter-disciplinary programs, skill development programs with appropriate integration of Indian knowledge system (Teaching in Indian Languages, culture, using online courses). All programs, new and existing will be offered focusing on outcome. SP will also include distance learning and online learning programs. There will be provision of credit transfers, recognition of prior learning.

### **1. Policies:**

A document indicating all policies related to rules and regulations has been prepared and circulated among the stakeholders. The institution is governed by stipulated according to various parameters and extend of compliance basis. Policies created under a SP are holistic, forward-thinking, and inclusive. BKBIET has effective success indicatives that the SP is not just a document but a guiding philosophy.

### **2. Administrative Setup:**

The institution has a BOG and Director is the overall in-charge to execute all laid down policies and guidelines. The Principal reports to the Director and all HODs report to the Principal. HODs govern their respective departments and the Professors, Associate Professors and Assistant Professors report to the HOD. Each department is provided with technical and non-technical staff to manage the labs and official works. There are other official services being offered in the institution such as security services, medical, gardening, accounts, maintenance, hostel, wardens, mess in-charge, canteen and store. Since it is a residential campus, staff quarters are provided to the teaching and non-teaching staffs. Hostels are managed by hostel wardens and both the chief wardens. There is independent placement cell reporting to Principal. Similarly there are in-charges of games, campus and equipment maintenance, student activities, various functions, clubs and societies. There are separate in-charges of NCC and NSS.

### **3. Appointments:**

Appointments at all positions either academic or non-academic are announced through advertisement in newspaper. The positions are also notified through the institute website. The selection committee as constituted by BOG along with subject experts make recommendations of selections of the perspective candidates and formal appointment order is issued to the suitable candidates.

**4. Service Rules:**

A Service Rule Book is available in the institute which govern the conduct, rights, and responsibilities of the employees of the BKBIET. Copies of the SRB available in the library with Principal and Director. The rule book ensures accountability and commitment on part of employees.

**5. Procedures:**

Since the institution is in existence from the last 16 years, the procedures are well laid down. The institution has various committees to look after. Their members are from faculties and employees.

<b>File Description</b>	<b>Document</b>
Upload Additional information	<a href="#">View Document</a>
Institutional perspective Plan and deployment documents on the website	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

**6.2.2**

*Institution implements e-governance in its operations*

- 1. Administration**
- 2. Finance and Accounts**
- 3. Student Admission and Support**
- 4. Examination**

**Response:** A. All of the above



File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	<a href="#">View Document</a>
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	<a href="#">View Document</a>
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

### 6.3 Faculty Empowerment Strategies

#### 6.3.1

**The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression**

**Response:**

Faculty assessment form as per AICTE 360 feedback score is being developed by the institution. Earlier to 2022-23 feedback was obtained on an ordinary form which was used for appraisal of the teachers. This feedback form includes 6 parameters details of which are given below:

- a) Teaching Process: The parameters were Percentage of classes held, Percentage of average class attendance, bloom's taxonomy, providence of previous university papers, and teaching notes & content.
- b) Student feedback: in accordance with semester & course taught
- c) Departmental activities: The parameters depends upon the semester wise activities namely lab in-charge, time table in-charge, consultancy, NBA work, industry based UG projects guided, help in students trainings/internships, guest lectures of students, organizing industrial visits, student mentors.
- d) Institute activities: The parameters depends upon the semester wise activities namely HOD/Dean/Head R&D, coordinators appointed by the institute, organized conference/FDP/Seminars/Workshops/STTP/In-house summer training, Event organized in technical society, co-curriculum activities, initiative for industrial MOUs/Foreign collaboration, Hostel wardenship/T&P in-charge.
- e) ACR: University results, feedback from students, class management, assignment/tutorials, research publications, MOOCS, conference/FDP/Seminars/Workshops/STTP/In-house summer training, admission activity, social networking, personality development.
- f) Contribution to society: The parameters depends upon the semester wise activities namely Induction

programme, unnat bharat abhiyan, yoga classes, blood donation, swach Bharat, plantation, jal sakti abhiyan, initiative/development R&D, atal ranking, clean and green campus, RTU/BTU activity , Smart India Hackathon.

The formats are divided and are required to mandatory fill it up and require to submit it to HOD on a specified date. After verification from HOD, format is forwarded to Principal, who in turn evaluates it and ensures comprehensiveness of the report. The formats are further analyzed to assess the performance of the teachers and based on the analysis, the Principal provides counselling to the teachers who require the counselling in certain specified fields as assessed through this format.

The reports of two such assessments conducted during AY 2022-23 and previous year's record are available in the office of Principal.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 6.3.2

**Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years**

**Response:** 5.93

**6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
17	0	0	4	1

File Description	Document
Policy document on providing financial support to teachers	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	<a href="#">View Document</a>
Audited statement of account highlighting the financial support to teachers to attend conferences / workshop s and towards membership fee for professional bodies	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

### 6.3.3

*Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years*

**Response:** 14.19

**6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
8	5	36	35	17

**6.3.3.2 Number of non-teaching staff year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
79	66	66	65	65

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Copy of the certificates of the program attended by teachers.	<a href="#">View Document</a>
Annual reports highlighting the programmes undertaken by the teachers	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 6.4 Financial Management and Resource Mobilization

### 6.4.1

**Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)**

#### Response:

**Identification of Needs and Opportunities:** the institution receives funds through fee from the students and that is the major source. Other than that about 11 lakhs rupees is received from Kesoram Industries-Cement Division, Kesoram-Rayon, UltraTech, Birla Tyres, Hindalco. In certain years, the funds have been increased but during Covid-19 period the funds were marginally reduced. The details of year wise collection of funds is mentioned in criteria 4.4.1.

**Building Relationships with Donors and Stakeholders:** BKBIET through specific MOUs receives funds copies of the same are available in criteria 3.5.1 and also in criteria 7.2.

**Transparent Proposal Writing and Grant Applications:** all funds coming from the industries are through a well-defined transparent mechanism and all projects have clearly defined inputs and outcomes.

**Optimal Allocation of Resources:** Once funds are procured, effective strategies should be in place for their allocation. This involves prioritizing projects, ensuring that the most urgent and impactful ones receive adequate funding.

**Monitoring and Evaluation:** Setting up a robust monitoring and evaluation mechanism helps in tracking the usage of funds. By evaluating the outcomes and impact of funded projects, institutions can ensure that resources are being optimally utilized.

**Capacity Building:** Large number of faculty and staff are involved in different projects and because of working in project environment they learn new mechanisms, procedures and practices providing capacity

building opportunity.

**Regular Financial Audits:** Financial audits, both internal and external, play a crucial role in ensuring transparency and trustworthiness. Both these audits are conducted regularly as per as specified time schedule decide by BOG.

**Feedback and Continuous Improvement:** Feedback from the donor industry are obtained on a regular basis about the product and services rendered. The projects of the students are evaluated and the scoring pattern provides feedback of successful projects and best projects by students.

**Ensuring Sustainability:** The donor industries are committed to provide funds through MOU and such donations will continue in future.

In conclusion, the key to effective mobilization and utilization of resources lies in clear communication, transparency, and building robust systems for monitoring and evaluation. Regular audits cement this process by ensuring accountability, fostering trust, and paving the way for future collaborations and funding opportunities. BKBIET Pilani follows these strategies in a stable manner and therefore the donor base is increasing in a gradual manner.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 6.5 Internal Quality Assurance System

### 6.5.1

**Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities**

**Response:**

**Duties and functions of the committee:**

- 1.To develop a system for conscious, consistent and catalytic action to improve the academic and administrative performance.
- 2.To promote measures for institutional functioning towards quality enhancement through internalization of quality culture and best practices.
- 3.Development and application of quality benchmarks Parameters for various academic and administrative activities.
- 4.Facilitating the creation of a learner-centric environment conducive to quality education and faculty maturation to adopt the required knowledge and technology for participatory TL process.

5. Collection and analysis of feedback from all stakeholders on quality-related institutional processes.
6. Dissemination of information on various quality parameters to all stakeholders;
7. Organization of inter and intra institutional workshops, seminars on quality related themes.
8. Documentation of various programmes/activities leading to quality improvement;
9. Acting as a nodal agency for coordinating quality-related activities, including adoption and dissemination of best practices;
10. Development and maintenance of institutional database through MIS for purpose of maintaining /enhancing institutional quality.
11. Periodical conduct of Academic and Administrative Audit and follow-up.

#### Activities of IQAC:

- **Review of Teaching & Learning Process:** IQAC meets periodically at the beginning and end of semester to review quality of planning and achievements to ensure continuous improvement.
- **Putting in place operational Audits:** By setting up IQAC, the institution has introduced quality management system and devised mechanisms to improved integration between planning, delivery and assessment processes that are auditable.
- **Ensuring adherence to Academic Calendar:** IQAC undertakes operational audits to ensure and evaluate effectiveness of processes and structures.
- **Ensure integration of OBE:** IQAC ensures the university curricula is transformed as per OBE system stipulated by Washington Accord as adopted by NBA.
- **Assessment of Structures & Methodologies of Operations:** IQAC undertakes periodic audits to ensure operational efficiency.
- **Integration of ICT:** Recognizing the significance, IQAC assesses the curricular needs and procures licensed as well as open sources and ensures technology integration.
- **Feedback from students and faculty** not only highlights their perception of achievement but also their suggestions/recommendations for improvements. IQAC conducts impact analysis of this feedback and grades and determines the reasons for shortfalls, if any, and initiatives to improve the same such as organize faculty training if faculty expresses the need or organize expert lectures etc. and also ensure student satisfaction on quality of teaching learning processes.
- **Constant Feedback from Alumni and Employers:** Surveys and feedback mechanisms are taken annually from employers during their visit on placement drives and alumni during alumni meets.
- IQAC Created Repository of Academic Resources for innovative student centric strategies to improve quality and credibility of the institution.
- **Faculty Development Programs:** Recognizing the significance of continuous upgradation, IQAC, organizes faculty training programs based on need analysis.
- **Data Base Management:** IQAC ensures that each activity taken up in the institution is documented and recorded so ensure historical data is available as and when required.
- **Research & IPR activities:** IQAC formulates policies for research grants and IPR filing, obtains approval from the management, evaluates and foresees the filing of patents.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

**6.5.2****Quality assurance initiatives of the institution include:**

- 1.Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented**
- 2.Academic and Administrative Audit (AAA) and follow-up action taken**
- 3.Collaborative quality initiatives with other institution(s)**
- 4.Participation in NIRF and other recognized rankings**
- 5.Any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA etc.**

**Response:** B. Any 3 of the above

<b>File Description</b>	<b>Document</b>
Quality audit reports/certificate as applicable and valid for the assessment period.	<a href="#">View Document</a>
NIRF report, AAA report and details on follow up actions	<a href="#">View Document</a>
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	<a href="#">View Document</a>
Link to Minute of IQAC meetings, hosted on HEI website	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## Criterion 7 - Institutional Values and Best Practices

### 7.1 Institutional Values and Social Responsibilities

#### 7.1.1

**Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.**

*Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words*

#### **Response:**

BKBIET aims to provide equal opportunities to all women on campus, students as well as faculty. Lady faculty are involved in a variety of activities of the Institute. Women have a leadership role in BKBIET International Relation Division; hold headship of Electrical department; plan and organize the events of Swar Sangam and the Basant cultural festival; co-ordinate Nirman organization; is the interface between BKBIET and BTU. Women have played an active role in preparation of NBA SAR and NAAC SSR as well.

Girl students participate extensively in student activities, technical and non-technical. They are members of the Cultural Committee and of the Games and Sports Committee. They are also student members of the Anti-Ragging Committee, and of Sexual Harassment Prevention Committee.

A number of special events around women issues have been organized. A webinar was organized during COVID, a one-day workshop on Realizing Women's rights was held and the International Women's Day was celebrated.

Medical issues of women are handled by the Birla Sarvajanic Hospital. Besides, provision for maternity benefits exist for faculty who are in the regular grade.

The campus is well lit and the area around the ladies hostel particularly so. A system of taking leave of absence is in place and hostel students desiring to leave the campus during non-vacation period are granted leave only with parental consent. This applies to both female and male students.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

#### 7.1.2

**The Institution has facilities and initiatives for**

#### **1. Alternate sources of energy and energy conservation measures**



- 2. Management of the various types of degradable and nondegradable waste**
- 3. Water conservation**
- 4. Green campus initiatives**
- 5. Disabled-friendly, barrier free environment**

**Response:** A. 4 or All of the above

<b>File Description</b>	<b>Document</b>
Policy document on the green campus/plastic free campus.	<a href="#">View Document</a>
Geo-tagged photographs/videos of the facilities.	<a href="#">View Document</a>
Circulars and report of activities for the implementation of the initiatives document	<a href="#">View Document</a>
Bills for the purchase of equipment's for the facilities created under this metric	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

### 7.1.3

**Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following**

- 1. Green audit / Environment audit**
- 2. Energy audit**
- 3. Clean and green campus initiatives**
- 4. Beyond the campus environmental promotion activities**

**Response:** A. All of the above

File Description	Document
Report on Environmental Promotional activities conducted beyond the campus with geo tagged photographs with caption and date	<a href="#">View Document</a>
Policy document on environment and energy usage Certificate from the auditing agency	<a href="#">View Document</a>
Green audit/environmental audit report from recognized bodies	<a href="#">View Document</a>
Certificates of the awards received from recognized agency (if any).	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

#### 7.1.4

**Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)**

##### **Response:**

B.K. Birla Institute of Engineering and Technology (BKBIET) in Pilani, the institution is deeply committed to providing an inclusive environment that embraces diversity in all its forms. This commitment extends to promoting tolerance and harmony among students and employees across cultural, regional, linguistic, communal, and socioeconomic backgrounds. BKBIET also places a strong emphasis on sensitizing its community to the constitutional obligations, values, rights, duties, and responsibilities of citizens.

**Cultural, Regional, Linguistic, and Communal Tolerance:**

BKBIET recognizes that diversity is a source of strength and enrichment. The institution's efforts in promoting an inclusive environment include:

**Cultural Celebrations:** BKBIET actively celebrates various cultural festivals and events, fostering a sense of belonging and unity among students from different cultural backgrounds.

**Regional Integration:** Initiatives like regional cultural exchange programs are organized to encourage students to appreciate and understand the richness of India's diverse regions.

**Linguistic Harmony:** Language diversity is celebrated through language clubs and activities that promote multilingualism and linguistic harmony.

**Communal Understanding:** The institution promotes communal harmony through events and workshops

that encourage dialogue and understanding among different communities.

**Socioeconomic Inclusivity:**

BKBIET is dedicated to ensuring that education is accessible to all, regardless of socioeconomic background. Institutional initiatives include:

**Financial Aid Programs:** BKBIET offers a range of scholarships and financial aid packages to support students from economically disadvantaged backgrounds.

**Community Engagement:** The institution actively engages with the local community to address socioeconomic disparities, providing educational resources, workshops, and support to those in need.

**Constitutional Sensitization:**

BKBIET recognizes the importance of constitutional values, rights, duties, and responsibilities in shaping responsible citizens. Initiatives in this regard encompass:

**Educational Programs:** BKBIET conducts educational programs and seminars to sensitize students and employees to the Indian Constitution's core values and principles.

**Legal Awareness Workshops:** The institution organizes workshops on legal rights and responsibilities, empowering its community with essential legal knowledge.

**Citizenship Education:** BKBIET places a strong emphasis on citizenship education, encouraging active participation in civic life and the democratic process.

B.K. Birla Institute of Engineering and Technology (BKBIET), Pilani, stands as a beacon of institutional commitment to fostering an inclusive environment that celebrates diversity in all its dimensions. The institution's initiatives in promoting tolerance, harmony, and constitutional awareness reflect its dedication to nurturing responsible citizens who not only embrace diversity but also understand and uphold the values, rights, duties, and responsibilities enshrined in the Indian Constitution. These efforts underscore BKBIET's vision of producing graduates who are not only academically proficient but also socially aware and committed to the principles of a just and inclusive society.

BKBIET's holistic approach to education ensures that students and employees are not only prepared for their careers but are also equipped to contribute positively to their communities and the nation as a whole. The institution's commitment to fostering an inclusive, tolerant, and constitutionally aware environment is a testament to its dedication to shaping responsible and conscientious citizens.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 7.2 Best Practices

### 7.2.1

**Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual**

**Response:**

**Best Practices: 1. International Student / Faculty Exchange Program**

#### 1. Title of the Practice:

BKBIET International Relations Divisions (BIRD) and active platform for international student/faculty exchange programs.

#### 2. Objectives of the Practice:

1. Designed to promote academic, cultural and overall growth for participants.
2. Enhance the global perspective.
3. Mutual Research & Development Growth
4. Academic Collaboration Interdisciplinary research
5. Networking and Alumni Engagement.

#### 3. The Context:

The programs influence Globalization of Education, Diverse Student Body, Academic Collaboration, Cultural Diplomacy, Geopolitical Relations, Technology and Connectivity, Quality Assurance, Safety and Well-being, Cultural Adaptation, Long-Term Goals etc.

The challenging issues are not so good grade scored by students, economic factors such as Funding, Scholarships or some health issues.

#### 4. The Practice:

BKBIET Pilani provides the platform to the students and faculty for exploration and exchange of holistic education, research opportunities, and motivates them for growing participation for diverse global exposure. Since 2009 BKBIET holds 14 collaborations with different universities of France and Thailand, out of which 10 are with France and 4 with Thailand. BKBIET Pilani have a BIRD cell dedicated to ensure the proper functionality and objective of these programs. BIRD since its inception have provided a platform to faculties and students through this program. In addition, BIRD also provide guidance to the students of institute for higher education.

**Collaborations in France:**

1. Polytech Nantes, France
2. INSA – Rouen, France
3. INSA – Rennes, France
4. INSA – Strasbourg, France
5. UHA Mulhouse (Earlier Name: ENSISA Mulhouse), France
6. IUT, Angouleme (University de Poitiers), France
7. CY Tech (Earlier Name: EISTI Cergy), France
8. EPF, France
9. n+i, Paris France
10. IFI, Alliance Francaise, French Institute in India

**Collaborations in Thailand:**

1. Thammasat University, Thailand
2. Bangkok University, Thailand
3. King Mongkut’s Institute of Technology Ladkrabang (KMITL), Thailand
4. King Mongkut’s University of Technology Thonburi (KMUTT), Thailand

**5. Evidence of Success:**

Under student exchange 278 students visited foreign universities, 25 faculty members participated in faculty exchange program and 52 students have participated in research-based master’s program which indicates a participation across the globe and thus indicates clear success.

This success indicates the competency of the student and faculty along with the involvement of the institute towards the advancement. These results directly improve the academic achievement, faculty and student global exposure, research collaboration and outcomes, global recognition and institution partnerships.

**6. Problems Encountered and Resources Required:**

**Problems Encountered:**

1. Administrative Complexity
2. Funding and Scholarships
3. Language Barriers
4. Cultural Adjustment
5. Safety and Security
6. Curriculum Alignment.

**Resources Required:**

1. Financial Resources
2. Administrative Support
3. Cultural Support
4. Orientation Programs
5. Quality Assurance Mechanisms
6. Infrastructure Development
7. International Office.
8. Networking and Collaboration
9. Safety Measures
10. Curriculum Development
11. Marketing and Outreach
12. Evaluation and Feedback
13. Government and Regulatory Support

**Best Practices: 2. Project funded by Industries and institute.**

**1. Title of the Practice:**

Rugular funding by funded by Industries for the R&D and project works of students.

**2. Objectives of the Practice:**

To collaboratively advance research, innovation, and knowledge transfer in all field through a mutually beneficial partnership between BKBIET Pilani and participating industries such as Hindalco, Ultratech Cement, Vasavadatta Cements and Kesoram industries.

These projects aim to achieve the following key objectives:

1. **Knowledge Generation and Dissemination**
2. **Technology Transfer and Commercialization**
3. **Workforce Development**
4. **Economic Growth and Competitiveness**
5. **Long-term Partnership Building**
6. **Measurable Outcomes**
7. **Resource Optimization.**

### **3. The Context:**

The collaborative project, funded by both industries and an esteemed institute, aims to bridge the gap between academia and the corporate sector, fostering innovation and mutual growth. This initiative seeks to facilitate knowledge exchange and technological advancements within a specific industry domain.

### **4. The Practice:**

The Collaborative Practice Project represents a pioneering venture jointly funded by Hindalco, UltraTech Cement, Vasavadatta Cements and Kesoram industries and a consortium of leading industries in all sectors. Annual fund of 11 lakh is transferred to the institution regularly for undertaking projects by faculty and students.

#### **Expected Impact:**

The Collaborative Practice Project aspires to make a transformative impact on all sector by:

- Cultivating a culture of innovation and knowledge exchange.
- Facilitating the rapid adoption of cutting-edge technologies.
- Nurturing a highly skilled and adaptable workforce.
- Addressing sustainability challenges and promoting ethical practices.
- Serving as a model for future collaborations between academia and industry.

The Collaborative Practice Project, funded by prominent industries and BKBIET Pilani, is poised to usher in a new era of partnership between academia and industry.

#### **Limitations and Constraints:**

1. **Resource Availability**
2. **Bureaucratic Hurdles**
3. **Cultural Differences**
4. **Data Confidentiality**
5. **Regulatory Complexity**

#### **Uniqueness in the Context of Indian Higher Education:**

This practice stands out in the context of Indian higher education due to its innovative approach:

1. **Collaborative Synergy**
2. **Applied Research**
3. **Skill Development**
4. **Innovation Culture**

### **5. Evidence of Success:**

The success of the collaborative project funded by industries and our institute is evidenced by a range. Evidence of success are the funding received by such as Innovative Solutions, Technology Transfer, Skilled Workforce, Sustainable Practices, Economic Growth, Long-lasting Partnerships, and Measurable

Impact. The group of students who are pursuing the project are provided with adequate funds to complete the project.

Apart from students' projects completed by them during their final year numbering to 05 the faculty projects under taken.

Sl. No	Project Title	Year
1	Assembling and supply of Drone for Chimney inspection for cement industry	2019 - 2020
2	Upgradation of line beneficiation process to utilise waste	2019-2021
3	Business Intelligence dashboard Implementation for logistic and net sale requirements	2019-2021
4	ERP- Quality control module and automation	2019-2022
5	Physical and chemical properties of developed cement product "Kesoram Super Plast".	August 2023-present

In addition to the projects mentioned above BKBIET Pilani have the MOUs with the following industry to undertake some specific projects details are given under below:

Sl. No	Industry
1	Kesoram Industries Limited: Cement Division
2	Birla Tyres
3	Kesoram Rayon

## 6. Problems Encountered and Resources Required:

### Problems Encountered:

- 1.Resource Allocation.
- 2.Coordination and Communication
- 3.Timeline Adherence

### Resources Required:

- 1.Skilled Personnel.
- 2.Technology and Infrastructure.
- 3.Monitoring and Evaluation.



File Description	Document
Best practices as hosted on the Institutional website	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>

### 7.3 Institutional Distinctiveness

#### 7.3.1

**Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words**

**Response:**

The most outstanding feature of the institution is Birla brand with sister institution BITS existing in the same city. While BITS only caters to the well performing students and charges high fees. BKBIET was established to provide rural youth of the region avenue of higher education with the strong belief that (1) rural youth of the region should get higher education opportunities with affordable fee structure and (2) the 'late bloomers' should also get the opportunity to learn and get quality education even though they are not high scorers in higher secondary. Hence, institution strives to cater to students from diverse educational, culture and financial backgrounds. A large number of students are conversant with vernacular and have issues with English language. The faculty members try to help such students by teaching in both languages. This need has been identified in NEP 2020 also. The efforts to bring variety of computer related programs have encouraged the students of the rural area to use and adopt computer related technology in their career choices and stay abreast with the global work environment.

Considering the historical bias against girl education, the institution has created safe environment and hostel facilities for girls. At present 30% girls are pursuing their studies in the institution and are actively taking non-conventional programs such as Mechanical, Electrical and Electronics Engineering. Girls are also participating in curricular and extra-curricular activities. The institution has toppers also among girl students. Ms Prarna has earned gold medal from BKTU and another girl, Ms Maya Chahar, has been selected in IAS officer in 2022. The girls also acquiring placements in industries, sometimes salary incentives higher than the boys.

The performance of the institution has led to foreign universities in France and Thailand to collaborate with the institution since 2009, even though the institution is located in rural remote area. The students and faculty members have been exposed to best practices followed in these institutions through student and exchange programs. Number of foreign students and faculty also have visited the institution. Collaborative research and development activities have been taken up.

Four well performing students attended summer internship training in Kesoram industries LTD at Basant Nagar and Sedam for the duration of one and half month in 2023 and received stipend of Rs 15000 per month including lodging and boarding each. The feedback from the participating students was very positive. This activity has encouraged other students to perform well and opt for internship training programs.

Separate Research Centre and Learning Centre has been set up in dedicated buildings namely, BPTRC (Birla Professional Training and Research Centre) for research and development activities and Gandhi Learning Centre, ABTRC for educating students on life of Mahatma Gandhi. The Gandhi Learning Centre is financed by two prominent industries of Aditya Birla Group (Hindalco Industries and Ultra Tech Cement). These industries provide Annual Maintenance Contract (AMC) to Institute's Aditya Vikram Birla Memorial- Pilani, Eternal Gandhi Museum (EGM) located Delhi, Gandhi Peace Center Exhibit Up gradation at Birmingham UK and Gandhi Peace Centre Multimedia Exhibition /upgradation at Atlanta City USA.

### **Collaborative projects related to sustainability and serving community**

Some of the unique projects taken up by the institution which

#### **1. Setting the Priorities related specially able person**

#### **The focus of research taken up aligned to Cement and Construction**

The institution is currently working for development of e-vehicles and e-cycles. Currently, the faculty is developing algorithms for mobility of specially abled person, converting existing cycles into e-cycles. Next step would be to ensure stability of developed e-vehicles.

#### **1. Upgradation of Lime beneficiation process to utilize waste**

Looking at huge collection of low grade cement lying since decades, was increasingly reducing the quality of lime and unusable for cement production. The low grade lime material was processed to enhance quality of low grade lime cement by rendering extra silica in the form of gauge. The low grade lime was transformed from 33 to approximately 49.3% which is reusable for cement production with collaboration with IBM, Ajmer branch and other scientists.

#### **1. Business Intelligence Dash board implementation for logistics and net sale requirements**

The dash board is developed by CSE using QLIK sans to provide insight and geo analysis for logistic and NSR module from 2019-2021.

The dash board gives target vis-à-vis actual for trade and non-trade analysis, contribution of actual analysis for both trade and non-trade, actual volume analysis, highest and lowest branch analysis and geo analysis for NSR module

#### **1. ERP-quality control module and automation**

CSE department developed on taking live readings of mixture of cement and calculating the impurity in 2020-2021.

#### **1. Assembling and supply of drone for chimney inspection for cement industry from 2019 to 2020. Faculty members from EE developed drone.**

#### **1. Community Engagement and Outreach**

Through ‘Nirmaan’ club a village has been adopted where students and faculty serve the local community. The institution celebrates “joy of giving” where local children receive donations as per the need.

Awareness programs on cleanliness and hygiene are organized along with helping students learn and improve quality of their education.

The faculty have 7 patents on their name. The region being mostly consisting of business community, start-ups and internship development are encouraged and 7 students so far have set up their own businesses and 6 students engaged in start-ups.

### **Charting the Path Forward**

The Institution's accomplishments in waste management research are not just a reflection of its past and present but are also future growth avenue. Plans are afoot to establish a dedicated sustainable waste management research hub, attract global talents, and deepen the existing collaborations.

### **Conclusion: A Legacy and a Promise**

The Institution's remarkable performance in sustainable waste management research serves as an of its priorities, vision, and commitment to global well-being. In the face of escalating environmental concerns, the Institution stands tall as a beacon of hope, leading the charge towards a more sustainable future. It is a legacy of excellence and a promise of continued innovation.

File Description	Document
Appropriate web in the Institutional website	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>

## 5. CONCLUSION

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### **Additional Information :**

A detailed Strategic Plan is prepared and attached with this document spelling out a clear cut methodology of strengthening the strengths, minimizing the weaknesses, enchasing the opportunities and minimize the challenges faced by the institution.

The governance of the institution take into an account all information collected on daily, weekly and monthly basis through ERP system and take corrective management action promptly facilitating the best of the teaching learning process with the transparency and delegation of powers. The institution follows best practices and is always open to include and enhances other good best practices and adopted by well performing institutions in India and abroad.

Great emphasis is laid on the teaching learning process by the institution and teaching and training is conducted by well-established plan and calendar of activities.

The affiliating university has ranked BKBIET Pilani as “A” category institution and within the “A” category BKBIET Pilani is ranked third. BKBIET Pilani is a choice institution by girls, the enrollment is rising over 16% because the institution offers safe and secure environment.

Free housing is provided to the faculty and staff on campus. The faculty is provided with help for schooling their wards (2 children) and their fee is reimbursed. Medical expenditure reimbursement is made to the faculty/staff and their dependents. PF and gratuity facility are also extended to all employees. The campus has stationary store, grocery shop, canteen, ATM, temples, kids playgrounds, Amphitheatre, indoor/outdoor sports complex, Gym, Green house, RO plant, water harvesting, hot water plants etc.

Birla’s had great association with Mahatma Gandhi, and in his memory many of the prime establishments are maintained by the Trust of BKBIET Pilani. Some of the prominent Museums are one in the BKBIET campus, New Delhi, UK and US.

25 faculty have been deputed on academic assignments, enhancing qualifications and participation in seminar/conferences and the faculty are also involved in technological research collaborating with foreign experts. Cost of all such exchanges are borne by the BKBIET Pilani and/or the collaborating universities or institutions.

FDPs are regularly organized by the institute or the Teacher participate in FDP organized by the sister organization.

## **Concluding Remarks :**

The institution, even though located in rural and remote area has created its brand value and is growing constantly. Impact of COVID 19 has diminished and the institute is fully operational and working satisfactorily in the competitive environment with increasing number of students taking admission. AICTE has granted the approval for new UG and PG programs in latest technologies. The institution has fully adopted OBE system of the education and many good practices in all departments have been started. The traditional interaction with international universities/institutes/organizations are continued and benefits is being extended to the faculty and students enmeshing with foreign students and faculty also visiting the institution. The institute also offers job oriented and value added programs for students which enhances employability to a large extent. The institution organizes on campus placement by topnotch national/international recruiters. The institute is fully geared up to join the GOI efforts of implementing NEP 2020, Digital India, establishing entrepreneurial ventures and startups. The strategic plan of the institute is distinctly defined with futuristic goals and strong path way and acquire high level importance in the domain of technical education in India and abroad. The institution is fully geared up to offer the multi-disciplinary programs with minimal alterations and as per the strategic plan and will soon become autonomous followed by becoming full-fledged university with the approach to integrate all associated institutes & programs of the trust. In future, the institute will acquire all inputs of NEP 2020 including multi point entry and credit system with the recognition of prior, facility for credit transfer from other institutions, Professional programs and Skill development programs with medium of instruction in local and vernacular language, online and distance education etc.