

Highlights

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 2029-2020.

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.