ANNUAL REPORT

2020-21

www.bbit.edu.in

ANNUAL REPORT 2021

INTRODUCTION

Budge Budge Institute of Technology (BBIT) is a technical institute whose main objective is to produce result-oriented and skilled professionals to meet the ever-growing demands of industries. The success story of an institution weaves around its pillars, which supports and facilitates the growth of individuals. These pillars are students, parents, teachers, and administration. The Institute seeks to set up a supportive environment the essence of which is "care". With a nurturing philosophy, it views each one as unique and is committed to grooming students into strong individual, global citizen with feet firmly rooted in values and traditions that embody a true spirit of BBIT. In a larger context the BBIT intends to provide quality education on which the country can depend. The curriculum is up to date to effectively fulfill the technological requirement of India. It is tuned to the requirements of research institutes and industries so that the benefits of your education can find application in improving the people's quality of life. The objective of the college is as following:

o Impart quality learning atmosphere in an upgraded teaching Learning Diaspora.
o Imbibing latest technology in the teaching learning process to meet the demands of front-end industries.
o High teacher-student ratio to ensure better learning interface
o Impart leadership and personality developments in students to ensure bright career
o Expose the students to different industrial environment and practical problems
o Improve communication skills, creativity and people qualities among students
o Encourage participation in co-curricular activities
o Develop social awareness
o Provide facilities for faculty up-gradation
o Encourage in subsequent publication of research papers in National and International Journals.
o Establish a close bond between the teachers and the students

VISION

To realize the full potential of knowledge through universal education and research so as to foster a new era of development and growth through innovations.

MISSION

- o To open new horizons of knowledge and to promote academic growth by offering state-of-the-art undergraduate, postgraduate and research programmes.
- o To keep pace with regional, national and global needs.
- o To play a pioneering role in shaping future generations through collaboration between academia and industry as well as between different national and international institutions.

AFFILIATION

- Budge Budge Institute of Technology is affiliated to Maulana **Abul Kalam Azad University of Technology (MAKAUT),** formerly known as WBUT for MBA, B.Tech & M.Tech Programs and **West Bengal State Council of Technical & Vocational Education & Skill Development** (**WBSCTVESD**) for Polytechnic Program .

- Budge Budge Institute of Technology is accredited by **National Board of Accreditation (NBA)** in B.Tech Program - **ME, EE, ECE** & **CSE** Streams.

- Budge Budge Institute of Technology is accredited by **NAAC with B+** grade.

- Budge Budge Institute of Technology got Recognition under Section 2 (f) of the UGC Act, 1956.

- Budge Budge Institute of Technology is approved by **All India Council for Technical Education (AICTE)**, New Delhi.

MESSAGES

Chairman

Greetings from BBIT family! As the Chairman of the Jagannath Gupta Family Trust, it gives me immense pleasure to welcome each of to our family at Budge Budge Institute of Technology. I congratulate the entire family of BBIT on making this annual report exhaustive and detailed. Our students and teachers work relentlessly whole year round so that we can give quality education to our students and help them to become responsible citizen of our Nation. This Report is a comprehensive note of all the efforts and achievements we have done. I wish the entire family of BBIT all success.

Jagannath Gupta

Chairman

Director General

A very warm welcome to one and all. As the adage goes the necessity is the mother of invention. We have undertaken the initiative to document the events and activities of our college in the past academic year, which I'm delighted to present in this Annual Report in the electronic format.

The academic year 2020-21 began with the continuous impact of ongoing global pandemic of COVID-19. We at BBIT, took many initiatives through collective efforts and successfully achieved our Academic goals.

To close my address, my heartfelt wishes to the graduating batch. It is with great pride and joy, we see you finish one relay of the journey and grip the baton to the next. Do not stop learning.

Through hard work and unwavering resolution for success, one can achieve any frontier one sets in life.

Thank you and Best Wishes!

Prof. (Dr.) Bhabes Bhattacharya

Programs offered

Bachelor of Technology (B.Tech):

Approved by AICTE and affiliated to MAKAUT.

The six **B.Tech** courses:

B.Tech in Civil Engineering: Intake - 60

B.Tech in Computer Science and Technology: Intake - 180

B.Tech in Electrical Engineering: Intake - 60

B.Tech in Electronics and Telecommunication Engineering: Intake - 60

B.Tech in Information Technology: Intake - 60

B.Tech in Mechanical Engineering: Intake - 60

Eligibility criteria (Engineering)

- Minimum aggregate of 45% marks and 45% marks in Physics, Chemistry and Mathematics (PCM) in the higher secondary or equivalent examination.
- Those who have passed out 10+2 and have qualified for the West Bengal Joint Entrance Examination or JEE (MAIN) in the current year, and are recommended by the Central Selection Committee are eligible for admission.
- Passed Diploma examination from an AICTE approved institution with at least 45% marks (40% in case of reserved category students) in appropriate branch of engineering / technology or passed with a B.Sc. degree from a recognised university as defined by UGC with at least 45% marks (40% in case of reserved category students) and passed 12th standard with mathematics as a subject.

- Admission through Lateral Entry Scheme shall be made strictly on the basis of current year merit and the preference of candidates in the Common Entrance Examination for admission through the Lateral Entry Scheme (i.e. JELET) conducted by the West Bengal Joint Entrance Examinations Board.

<u>Department of Civil Engineering:</u>

The Department of Civil Engineering prepares students to take up challenges on infrastructure and services development with high quality of training, motivation and orientation. It imparts education and training through qualitative fundamentals in B.Tech. The department has a strong team of faculty in different specialisation areas. The program emphasises all the core areas of Civil Engineering like the design of structures, buildings, bridges, dams and other infrastructures, pollutant control, waste management, etc.

- **Major laboratories:** Stress Analysis, Highway Materials, Traffic and Transportation, Structural Engineering, Surveying, Fluid Mechanics, Soil Mechanics, Concrete Laboratory, Environmental Engineering.

Department of Computer Science and Engineering:

CSE Department started functioning since the inception of our college (2009) with an of 180 students. The Department of Computer Science and Engineering provides insight into leading-edge techniques for the analysis, design and implementation of complex software systems.

- **Major laboratories:** Analog and Digital Electronics, Data Structure and Algorithm, Computer Organisation, Computer Architecture Numerical Methods Lab, Communication Engineering and Coding Theory, Software Tools Design and Analysis of Algorithm, Microprocessors and Microcontrollers, Programming Practices using C++, Object Oriented Programming (IT), Database Management System Lab, Network Lab, Operating System Lab, and Software Engineering Lab, Artificial Intelligence, Internet Technology (IT).

Department of Electrical Engineering:

The Electrical Engineering Department offers an undergraduate program, framed in keeping with the technological requirements of the electrical and associated industries in mind. The objective is to groom our students and update them with the latest developments. Seminars are conducted periodically by eminent personalities in this field. Placing students in various companies during vacations provides industry exposure.

- **Major laboratories:** Basic Electrical, Electrical and Electronic Measurement, Electrical Machines, Digital Electronics and Integrated Circuits, Power Electronics, Electric Drives, Microprocessor and Applications, Power Systems, Control Systems, Analog Electronic Circuits, Thermal Power Engineering, Multimedia, Electrical Machine Design, Circuits and Networks, Data Structure, Numerical Method and Programming.

Department of Electronics and Communications Engineering:

The programs of the Department of Electronics and Communication Engineering are designed to focus on technologies that underpin network technology, embedded systems, data communication, etc. with special emphasis on research and development. The graduates in electronics and communication engineering have various career opportunities in defence services, telecommunications services, embedded systems development, electronic and hardware manufacturing, VLSI design, software development, power sector, TV industry, music industry, automobiles, space communications, etc. The current intake is of 60 students.

- **Major laboratories:** Basic Electronics, Analog Electronic Circuits, Digital Electronics and Integrated Circuits, Analog Communication, Circuit Theory and Network Electronic Measurements and Instrumentation, Circuit and Network, Antenna and Propagation Control System, Micro-processors and Micro-controllers, Electronic Design, Microwave Engineering, Digital Comm. Systems, Digital Signal Processing, VLSI Design, Signals and Systems, Advanced Communication.

Department of Mechanical Engineering:

BTech in Mechanical Engineering is a core branch in the field of engineering and technology. The courses include Design Engineering, Thermal Engineering, Manufacturing Technology and Management aspects. The curriculum strengthens students' fundamentals and advanced technologies in mechanical engineering. After completion of the program, the students will have opportunities to work in the field of aerospace, automobile, energy sector, oil sector and related areas.

- **Major laboratories:** Graphics, Manufacturing Technology, Workshop Technology, Electrical Machine, Fluid Mechanics, Metrology and Measurement, Thermal Engineering and IC Engine, Strength of Materials, CAD-CAM, Dynamics of Machine, Mechatronics, CNC Lab, Air-conditioning and Refrigeration.

Department of Information Technology:

The Information Technology Department started the journey in the year 2020 with an intake of 60 students. It provides specialised knowledge necessary to analyse, design and evaluate system software, utility programs and software-hardware architectures.

- **Major laboratories:** Analog and Digital Electronics, Data Structure and Algorithm, Computer Organisation, Computer Architecture Numerical Methods Lab, Communication Engineering and Coding Theory, Software Tools Design and Analysis of Algorithm, Microprocessors and Microcontrollers, Programming Practices using C++, Object Oriented Programming (IT), Database Management System Lab, Network Lab, Operating System Lab, and Software Engineering Lab, Artificial Intelligence, Internet Technology (IT).

Management (MBA)

Approved by AICTE and affiliated to MAKAUT.

Globalisation, deregulation, consumerism and technology have changed the business landscape and an MBA has become essential in this global environment. The market and the competition are no more local. Distance has become irrelevant in the business context and a consumer can demand and acquire the best of products and services from any part of the world. Business management skills are essential to **managing** this changing and global environment, which is provided by the MBA course at Budge Budge Institute of Technology (BBIT).

Features:

- **2-year** full-time Programme with an intake of 60 students per year.
- Dual specialization in – Marketing, Finance, Human Resource, Systems, Operations Management, **Business** Analytics & Healthcar**e.**
- Modules on psychological profiling and personality development workshops.
- Opportunity to improve their communication skills in a well-equipped language laboratory.
- Compulsory summer internship.
- Affordable course fees and bank loan facility and need.
- Performance-based scholarship.

Eligibility criteria:

- Exam required: MAT | CMAT | JEMAT
- Must pass graduation in any discipline.
- Valid entrance test scorecard candidates in the final year of graduation may also apply.
- Candidates with work experience will get preference.
- Candidates will be selected through GD and PI.

Admission Candidates are selected on the basis of entrance test scores followed by GD / PI.

Master of Technology (M.Tech)

Budge Budge Institute of Technology (BBIT) proudly announced the launch of M.Tech in Power Systems in the Department of Electrical Engineering and Computer Science Engineering.

Duration: Both the M.Tech programs are two-year AICTE approved master's programs.

Intake: Total number of seats available in M.Tech is limited to 30 students.

Admission criteria: Admissions into the M.Tech program is on the basis of the GATE examination or state-level entrance examination, i.e. P-GATE.

To apply for admission in the M.Tech program, they need to secure a rank in the P-GATE examination which is conducted by MAKAUT.

M.Tech in Computer Science Engineering:

Apart from conducting high-quality, innovative and continually updated PG courses, the department is engaged in the research activities in frontier areas through establishing research groups. The broad research interests include Cloud Computing, Database and Data Mining, Data Analytics, Information and Network Security, Internet Technology, Image Processing, Soft Computing and Wireless Sensor Networks. With a view to **providing** the best exposure to the learners, the school actively organises several international conferences, student research symposiums, industry symposiums, innovative student project contests, UG project expo along with imparting the various student chapters such as CSI Chapter, IEI Chapter, etc.

M.Tech in Power Systems:

The M.Tech in Power System program is designed to provide generic skills to address some of the problems related to a shortage of electricity generation, technical and non-technical losses in distribution and massive expansion in the power sector, underutilisation of renewable sources, etc. through a wide range of subjects. The program emphasises on practical exposures, integration of modern techniques and global outlook through mini-projects, case studies, seminars, workshops and interaction with external experts.

Diploma
Approved by AICTE and affiliated to WBSCTE.

The Diploma Program in Engineering and Technology shall consist of a curricular component comprising courses in general studies, applied sciences, basic courses in engineering and technology, inter-disciplinary courses in engineering and technology, applied courses in engineering and technology.

The five diploma courses:

1. Diploma in Civil Engineering: Intake - 60
2. Diploma in Mechanical Engineering: Intake - 180
3. Diploma in Electrical Engineering: Intake - 60
4. Diploma in Electronics and Telecommunication Engineering: Intake - 60
5. Diploma in Computer Science and Technology: Intake - 60

Eligibility criteria:

JEXPO

Passed / appeared* 10th standard from any recognised board / council / institute with at least 35% marks in AGGREGATE (without additional / optional subject) at the qualifying examination (without rounding up).

VOCLET

Passed / appeared* 10+2 examination from the West Bengal State Council of Technical & Vocational Education and Skill Development (Vocational Education Division).

OR

Passed 2 years' ITI at a stretch after Madhyamik or equivalent examination passed (single certificate should mention the duration of the ITI course).

OR

Passed / appeared* 10+2 examination with **Physics and Chemistry** as compulsory subjects along with Mathematics or Biology subjects from any recognised board / council / institute.

OR

Passed / appeared* 10+2 (Science) with Mathematics as one of the subjects from any recognised board / council / institute.

OR

Passed / appeared* 10+2 (Science) with Technical Vocational Subjects from any recognised board / council/ institute (Including CSS-VHSE).

EVENTS & ACTIVITIES

In 2021 BBIT has witnessed different activities for students, faculties and for society at large.

Seminar / Webinar

The year 2021 was a year we all will remember for its very different professional environment that it led us into. Amidst the pandemic different departments worked very hard and organized seminars /webinars for the students.

1.The department of Computer Science had organized a webinar Modern Trends in IT jobs. The speaker was M.Hafizul.

2. The department of MBA organized a BIZ FEST an intercollege business fest .The program was entirely organized and handled and maintained by the MBA students.

3. The department of Mathematics organized a webinar on Importance of Statistics in recent Scientific research and technology.

4. Mechanical Engineering department organized an inter-college quiz competition for the students .

5. The department also organized an inter-college photography Competition.

6. The department of Physics organized a webinar on Our Universe and its Indian Exploration for the students.

7. The department of Basic science and humanities organized webinar on National science Day 2021.
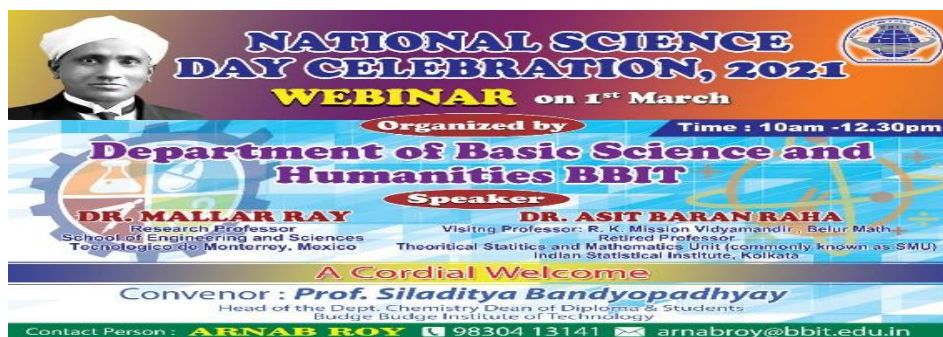
8. The department of MBA organized a webinar on Towards a new beginning.

9. **Department of Mathematics organized a webinar on Engineering Mathematical Tools.**

10. **The Department of MBA organized an Intercollege debate competition 'VIchar Manthan" on the occasion of World environment day 2021.**

11. **BBIT organized an inniovative workshopwebinar in association with INTEL . The students got highly benefitted through this program.**

12. The department of Mechanical engineering organized a webinar on Managing Self in difficult times.

13. The BBIT Diploma Engineering organized a webinar on by the department of Computer Science and Technology on Cyber Security & Ethical Hacking.

14. A seminar on The Path to Success was organized by the Polytechnic Division of BBIT to encourage the students on how to develop self care and be a leader.

STUDENT DEVELOPMENT PROGRAMS

1. Celebration of National Yoga Day on 21st June 2021 . An online and offline demonstration was organized with proper social distancing norms during this pandemic.
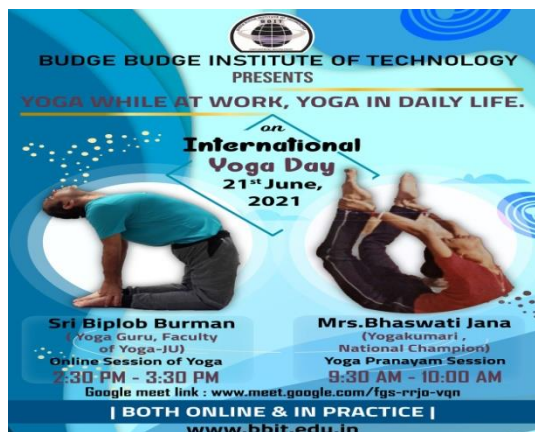
2. Department of BSH organized Eco System preservation Day for the students and helped in enhancing the environment awareness among them.
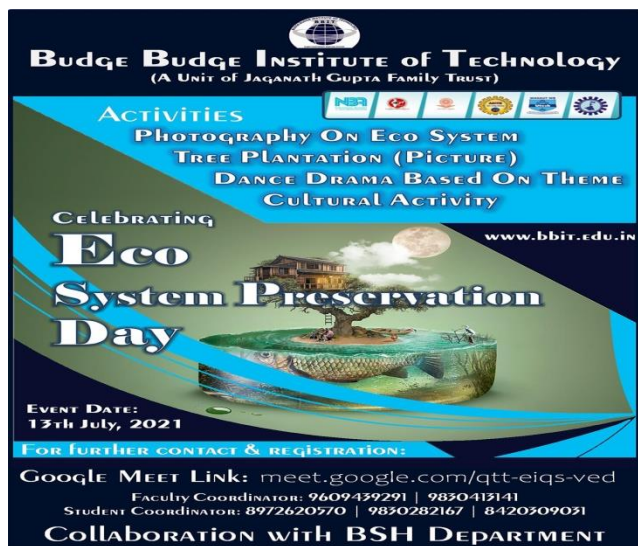
3. **Student development program organized by Admission department of BBIT**

4. **The students of the Diploma Engineering encouraged by their faculties created a wonderful wall magazine.**

OUTREACH PROGRAMS

As a part of the student outreach programs the students of BBIT presented their projects live in social media to the students across the Nation . This was done to encourage technology education and hands on project handling among the students.

i. **Project presentation by ECE**

ii. Project presentation by CSE

2. **As a part of the student outreach program our senior pass out students came forward and shared their experiences with our existing students on the tracking of career path.**

ECE Alumni

CSE Alumni

ME Alumni

3. **As a part of student outreach program, BBIT admission department**

4. **Some student outreach programs were organized for the joint entrance aspirants . As a part of social outreach program.**

Extracurricular Activities

1. **BBIT along with JIMSH organized a colorful competition on the occasion of HOLI.**

2. **On the occasion of World Environment Day, in order to motivate students to get into more physical activity, the department of basic science and humanities organized an online self run and track event for the students of BBIT.**

3. **Online Tech Fest TECHNOTRIX 2021 was organized by the different BTECH departments for the students of BBIT. In the pandemic situation, under study from situation the students whole heartedly participated and made this event a grand success.**

   As a part of the TECHFEST different online competitions were done like debate,shirt painting and so on.

4. The Diploma Engineering division organized an intra college painting competition to encourage the students for more creativity and create an awareness on environmental issues.


Conference and Conventions/Workshop

1. The department of MBA organized a 3 day HR conclave . Students from across the state and from other states participated in the program.

2. **The department of MBA organized a 3 day workshop on digital marketing. As the days are getting more globalised in terms of market and digital platforms are mostly preferred by customers, a training in digital marketing is very crucial at this point of time for the career of the students of MBA.**
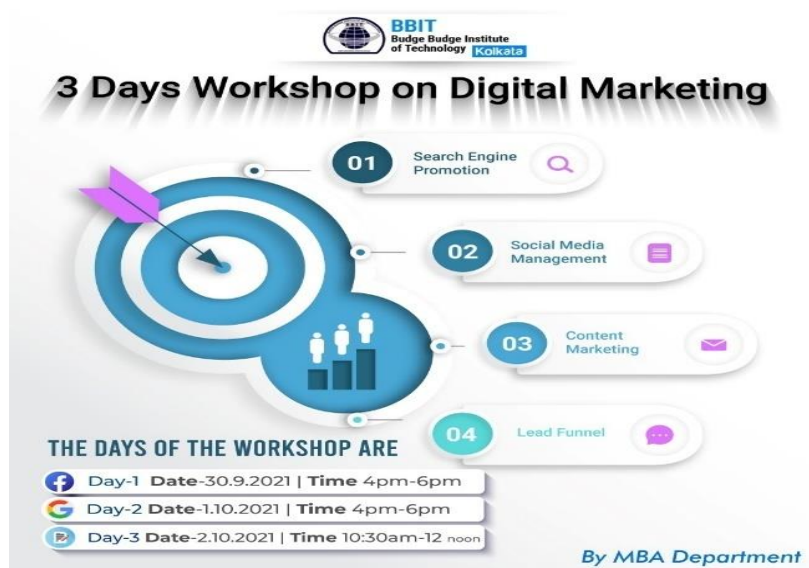
3. **As a hands-on learning, the Civil Department organized a small workshop on Drone usage in Civil Engineering.**
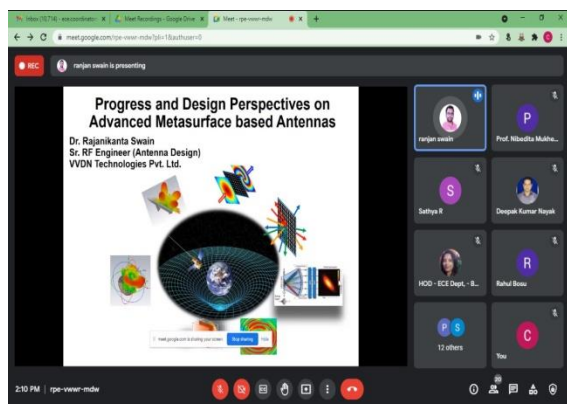
Faculty Development Program

Enriched faculties always impart better learning. BBIT always encourages its faculties to participate in different faculty development and self development activities.

In the year 2020 and 2021 total number of FDP attended by faculties are as follows:

Year   FDP attended

2020 :   73

2021 :   28

1. The Electronics and Communication Engineering department organized a FDP on The Progress and Design Perspectives on Advanced Meta surface based Antennas.

2. The Department of Electrical Engineering organized a 5 day FDP on Modern Trends in Energy System & Control: Its effect on Society.

3. **The Computer science Department organized a 3 day Faculty Development program on UBIQUITOUS COMPUTING.**
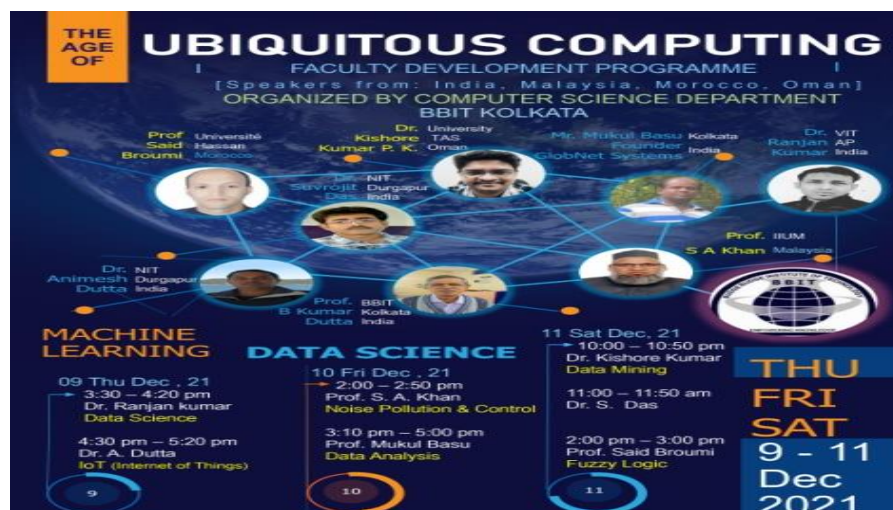

Examinations & RESULTS

The BBIT under the university conducts semester wise examinations as per the guidelines of MAKAUT. The performance of our students are the testimonials of the efforts BBIT takes towards achieving academic excellence.
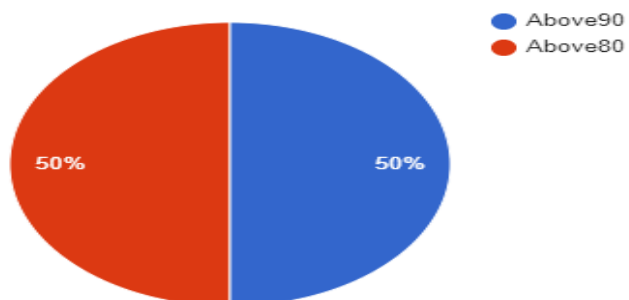
The results of the students department wiser are presented here:

The results of MTECH

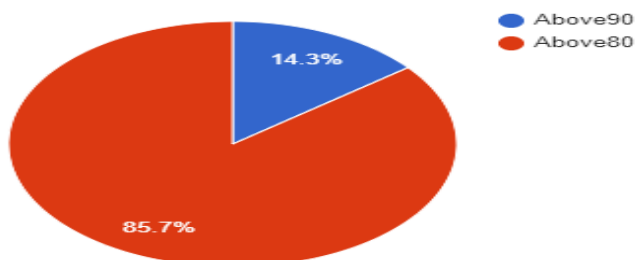## Pass Percentage of M.Tech (EE) 2nd Year Dept. (2020-21)

● Above80
● Above70

28.6%

71.4%
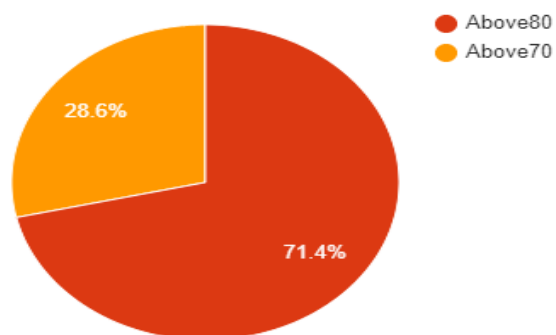
Pass Percentage of M.Tech (CSE) 2nd Year Dept. (2020-21)

● Above90
● Above80

50%   50%

The results of MBA

Pass Percentage of MBA 2nd Year Dept. (2020-21)

● Above90
● Above80

14.3%

85.7%

The results of BTECH

Pass Percentage of CSE 2nd Year Dept. (2020-21)

- Above90
- Above80
- Above70

93.2%
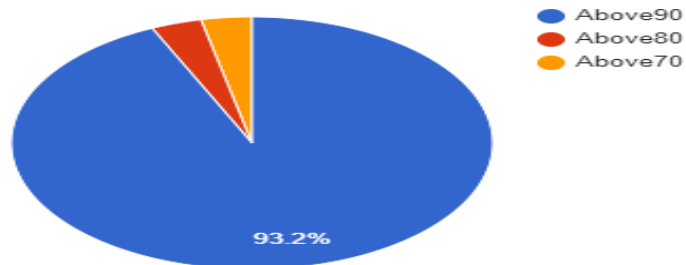
Pass Percentage of IT 2nd Year Dept. (2020-21)

- Above90

100%
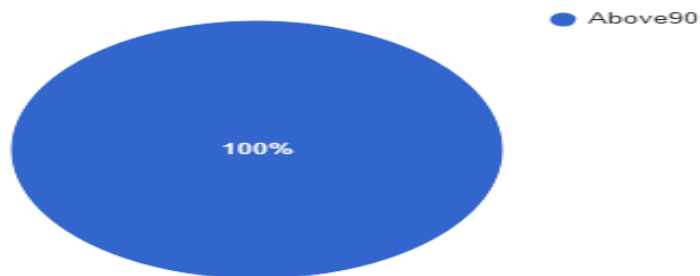
Pass Percentage of EE 2nd Year Dept. (2020-21)

- Above90
- Above80

13.3%

86.7%
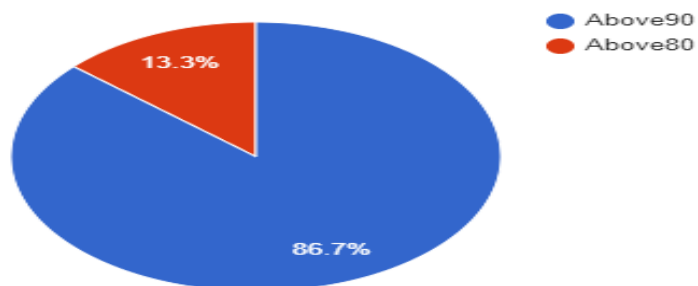
Pass Percentage of ECE 2nd Year Dept. (2020-21)

- Above90
- Above80

16.7%

83.3%
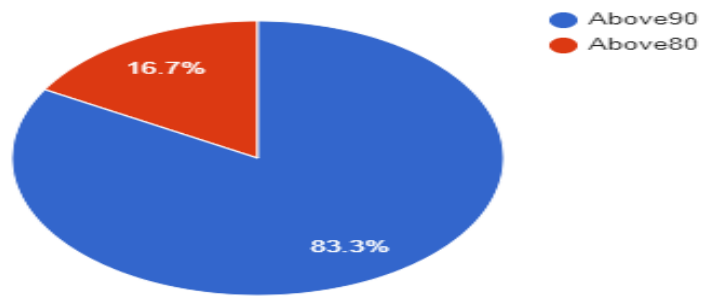
Pass Percentage of ME 2nd Year Dept. (2020-21)

- Above90
- Above80

30%
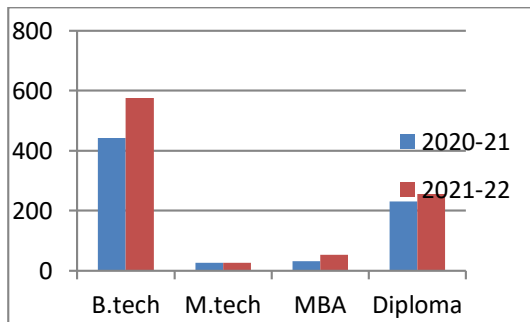
70%
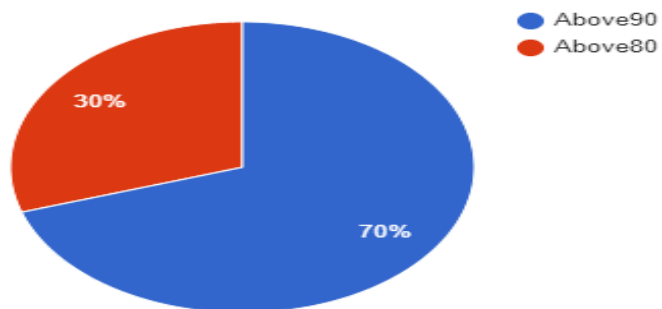
ADMISSIONS

BBIT has been successfully spreading its goodwill among the students of Bengal, Bihar , Jharkhand, Orissa , Northeast , Uttarpradesh and Jammu and Kashmir.

This year BBIT witnessed a rise in the admission graph .

Programme	2020-21	2021-22
B.tech	443	575
M.tech	26	27
MBA	32	53
Diploma	230	255

TRAINING & PLACEMENTS

The Training and Placement cell has been constantly working for the betterment of the career of the students of BBIT.

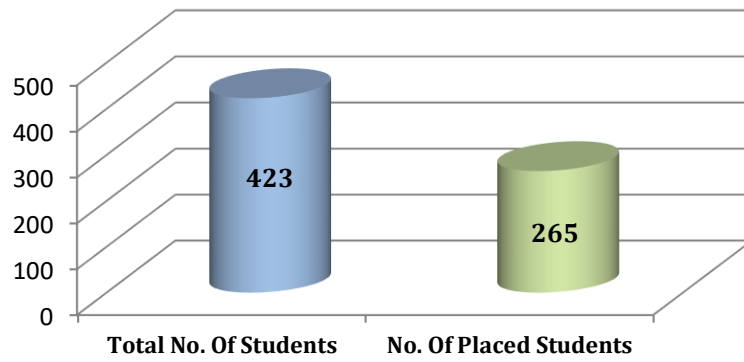Physical Placement drive at campus in 2021.

Final offer letter offered to our students.

Placement Details of 2021 PoB (B.Tech & MBA)		
Department	**No. of Students Placed**	**Percentage of Placement**
423	265	63%

Placement Details of 2021 PoB
(B.Tech & MBA)

423	
	265

Total No. Of Students	**No. Of Placed Students**

500
400
300
200
100
0

Different Career guidance training organized by the training and placement cell for the BBIT students.

Career Guidance Program for 2021 PoB		
Sl. No.	*Details*	
1	*Skill Development Program*	
	• *Aptitude* • *Softskill* • *Technical*	**60 Hours** **30 Hours** **60 Hours**
2	*Industrial Visit*	
	• *Industrial Visit at Ishaani Electronics Pvt. Ltd.*	
	• *Industrial Visit at Deutsche Maschinen India Pvt. Ltd.*	
	• *Industrial Visit at Dhanashree Electronics Ltd.*	
	• *Industrial Visit at Krypton Industries Ltd.*	
3	*Online Mock Assessments*	
	• *Pre-Placement Preparation Test by Firstnaukri.com*	
	• *Company Specific Mock Assessment Test by MyPerfectice*	
	• *Mega Online Assessment Test by M/s.Promact Infotech Pvt. Ltd.*	
4	*Seminar, Webinar & Workshop*	
	• *Technical Workshop & Tech Quiz Competition by Vani Institute*	
	• *Workshop on 'New Selection Pattern & Strategy to prepare for it, need of Soft skill & Analytical skill to pursue a successful career & scope & opportunities in Higher Studies' by XL Education*	
	• *Workshop on 'Jobs in Core Sector Post GATE' by T.I.M.E.*	
	• *How to become a successful IT Product Developer by ProGrad powered by Focus Academy*	
	• *Webinar on "How to create your career story" by Internshala*	
	• *Technical Workshop on Internet of Things byTechTree Technologies*	
	• *Webinar on "Industry Expectations from Fresh Mechanical Engineers" by Tata Power Skill Development Institute*	
	• *Webinar on "Cracking a High Packages at Product Companies" by Edyst*	
	• *A live session to help understand the international career prospects through learning the French language by Internshala*	
	• *Webinar on "How to get a Job at a FAANG Company" by Interview Buddy*	
	• *Webinar on Stress Management Session through Sahaja Yoga by M/s. H. H. Shri Mataji Nirmala Devi Sahajayoga Trust*	
	• *Webinar on "Career Enhancement Program" by NIIT Limited*	

AWARDS AND ACCOLADES

BBIT has been awarded BRANDSICON AWARD 2021.

BBIT has been featured in different dailies