# BCREC ANNUAL REPORT 2019-20

Dedicated to "Quality Education"





Dr. B.C. Roy Engineering College, Durgapur

# ANNUAL REPORT

(1st July, 2019 to 30th June, 2020)



# Dr. B.C. Roy Engineering College, Durgapur

Jemua Road, Fujhore, Durgapur-713206

Website: www.bcrec.ac.in

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#### **VISION**

To transform the institution into a global centre of learning through synergic application of creativity, innovation and discipline

#### **MISSION**

- > Create ideal ambience for learning and growth
- ➤ Help students inherit value-systems, be creative and agile thinkers
- Establish Discipline, Value Added Education and Training & Placement as three core values
- > Building capabilities among students to lead from the front as also be a team player
- > Develop a symbiotic relationship between the institution, society and the community, for mutual betterment
- > Expand the Vistas of higher learning in Technology and Management Fields, including Post-Graduate Studies and Research
- Encourage global vision and integration with International Best Practices for Local, Regional and National Development

# **QUALITY POLICY**

We are committed to impart quality "Education and Training" that satisfy the requirements of our students in the fields of "Engineering, Pharmacy and Management" and our aim is to be an Institute of Excellence in global terms in the field of quality technical education through continual improvement.

We facilitate our faculty and support staff to update their knowledge and skill to match the dynamics of industrial and technological development.

#### **FOREWORD**



In today's rapidly evolving professional landscape, there is an increased obligation for judicial dissemination of technical knowledge for life-long success. We are living in an era where Technological innovation is a dominant force for the growth and prosperity of a nation, and engineering has been an important driver of this innovation. It gives me great pleasure to welcome to this collaborative environment at Dr. B.C. Roy Engineering College popularly known as "BCREC".

Our perseverance and endeavour are guided by our vision to transform the lives of our students, through

exemplary education and training, in their journey of discovery, understanding, awareness and perfection of cutting edge knowledge, skills and competencies.

Quest of excellence has been assumed here as paramount importance in academic achievements along with curiosity for knowing more through depth of understanding, leadership quality and interpersonal skill. BCREC prides itself on providing its students, both undergraduate and postgraduate with state of the art infrastructure, facilities, ambience and quality academic experience to prepare them as responsible and innovative global citizens having a firm grounding in their respective disciplines.

We are committed to maintain an environment which can facilitate encouraging enterprising skills of our students through professional competence and rich academic input by creation of new avenues and opportunities beyond the regular curriculum as well. The Institute have qualified, enthusiastic, and dedicated faculty, comprising of academicians with brilliant educational backgrounds, and industry experts. The institute will apply for NBA re-accreditation for two programmes and two new applications for NBA accreditation for two departments. Also, we will be applying for NAAC accreditation. I am confident that the team spirit of students, faculty and staff of the institution will take the institution to one of the best in the country in near future.

I warmly welcome you at our institute. I hope that apart from electrifying the campus life, you will make sure that you also enlighten the society with your knowledge and service.

Let the journey begin for a successful career.

With Best Wishes,

Tarun Bhattacharya General Secretary

#### MESSAGE FROM THE DIRECTOR

Of late, there has been a sea change in the academic, economic and technological environments the world over. Age-old attitudes and conventional mind-set are being discarded everywhere. With its articulated vision of emerging as a major player in the global scenario, and with its economy unshackled and forces of competition unleashed, India too is treading the new path. The wave of change sweeping across the country and the world has thrown up myriad opportunities- at the same time posing daunting challenges for all sections of the Indian society. Education is no exception to this changing scenario.



A tremendous feeling of confidence and power can be leveraged by formulation of a clear vision backed by

definite plans for taking engineering, technology and management education to the desired level of competitiveness. A technical institution supported by high-end infrastructure is the basic prerequisite for producing quality engineers. For India, more than ever before, it is essential to bring together the world of science and technologies for meaningful interventions in the socioeconomic sphere. Modern engineering institutions who covers a wide spectrum in the knowledge space should lead from the front in such endeavours by utilizing its quality manpower and infrastructure.

BCREC evolved through from the concerted effort of like-minded professionals and philanthropic entrepreneurs who strove hard to create an institution of global standards of learning through synergic application of creativity, innovation and discipline. A solid grounding in terms of domain knowledge, hands-on training, capacity building and managerial skills has enabled BCREC to emerge as an esteemed centre of learning in the fields of engineering, technology, management and computer applications, and that too within a short space of time. The institute has also earned NBA accreditation for B. Tech in ECE & CSE disciplines. We will apply for re-accreditation for these two departments. Institute will apply for the NBA accreditation for B.Tech. in ME & IT. Institute will also apply for NAAC accreditation in the upcoming year.

The locational advantage offered by the Durgapur-Asansol Industrial belt has provided BCREC immense scope for direct interaction with large industries at every level. Dedicated Cells for Industry-Institute Partnership, National Service Scheme (NSS) Cell and Entrepreneurship Development Cell have been set up by the Institute to install within the students-industry orientation and social responsibility.

The Institution emphasizes on enhancing the standard of education through a judicious admixture of academic and industrial expertise for inducting managerial skills and R&D impetus and elearning amongst students and faculty members with a view to creating a world-class R&D infrastructure in an atmosphere conducive to the teaching-learning process. The deep commitment

and dynamism of the management also helps in inculcating within the students preparedness for facing competitiveness at every level.

I expect that our students would come forward to become a part of this whole learning process and take advantage of all the facilities that the Institution is providing to emerge as assets for the industry as also for the society.

"Build your own dreams, or someone else will hire you to build theirs"

Prof. (Dr.) Pijush Pal Roy

Director

#### **OUR INSPIRATION**



Dr. B.C. Roy Engineering College Society (BCREC) named after the legendary physician Dr. Bidhan Chandra Roy, [1882–1962] the second Chief Minister of West Bengal in India who was a great visionary and a karma yogi. With steely determination, he worked like a crusader and took great pains to build a new West Bengal over the wrecks of a partition torn ravaged state. The Steel city of Durgapur is his dream child and a unique creation of his noble vision.

As a mark of our respect, Dr. B.C. Roy Engineering College is our humble tribute to him. Dr. B.C. Roy Engineering College (BCREC) Durgapur was founded in

2000. Since then, the BCREC has transformed itself in many ways. The college was modelled after the best institutions of the country, and even today retains some of these features.

The objective of the college was to effect re-organization of the system of education in the state so as to develop technical, technological education and research in engineering. Earlier, the college was affiliated under the University of Burdwan. Later, it got affiliation under the Maulana Abul Kalam Azad University of Technology (Formerly West Bengal University of Technology).

# **Structure of Dr. B.C. Roy Engineering College Society (BCREC Society)**

Sl. No.	Name	Designation	Address	Mobile No
1.	Tarun Bhattacharya	General Secretary	52, MOULANA AZAD SARANI, City Centre, Durgapur – 713216	9434011952
2.	Ratan Roy Chowdhury	President	5/37, MAXMULLER PATH, City Centre, Durgapur – 713216	9434646746
3.	Jernail Singh	Treasurer	MWAV02, BENGAL AMBUJA City Centre, Durgapur – 713216	9434053499
4.	Mita Mitra	Vice- President	MWAV-11, BENGAL AMBUJA City Centre, Durgapur – 713216	9474556013
5.	Nikhil Sikdar	Member	2/2, MICKLE SARANI SUBHASPALLY, BENACHITY Dugapur – 713213	7407252244
6.	Tapati Bhattacharya	Member	52, MOULANA AZAD SARANI, City Centre, Durgapur – 713216	9735206666
7.	Rita Singh	Member	MWAV02, BENGAL AMBUJA City Centre, Durgapur – 713216	9832194123
8.	Dr. Satyajit Bose	Member	The Mission Hospital, 219(P), Immon Kalyan Sarani, Sector 2C, Bidhan Nagar, Dugapur - 713212	9800881701

#### **Brief Details About Us**

Name of Head of the Institute : **Prof. (Dr.) Pijush Pal Roy** 

Exact Designation : **Director** 

Phone number with STD code : (0343) 2504121 / (M) 9431506000

FAX number with STD code : (0343) 2504059 / 2503424

Email : director@bcrec.ac.in / info@bcrec.ac.in

Highest Degree : **Ph.D.** (IIT-ISM, Dhanbad)

Field of specialization : APPLIED SCIENCES.

Name of the affiliating University : Maulana Abul Kalam Azad University of Technology,

West Bengal (Formerly West Bengal University of

Technology)

Address : BF – 142, Salt Lake City, Kolkata – 700064

Website : www.makautexam.net www.makautwb.ac.in

Latest affiliation period : 2020-2021 Academic Year

# Members of the Board and Their Brief Background

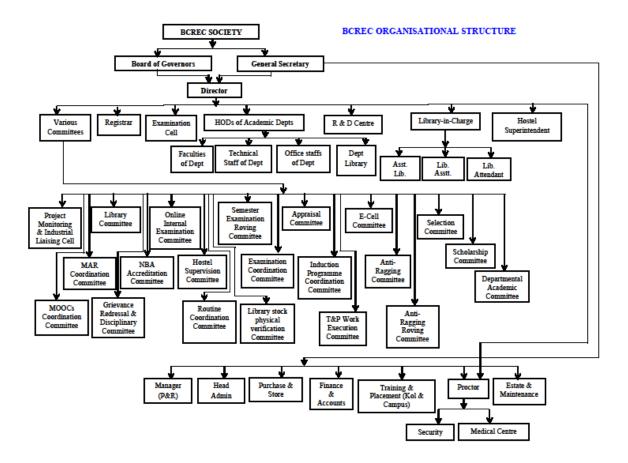
	Name	Detail Background	Designation
Sl.			
<b>No.</b> 1.	Prof. (Dr.) Binay K Dutta	Visiting Professor, School of Environmental Science & Engineering, IIT, KGP.	Chairman
2.	Shri Pranabesh Das	Director of Technical Education, Govt. of West Bengal, Bikash Bhawan, Salt Lake City, Kolkata – 700091	Member (Ex-Officio)
3.	Prof. (Dr.) Arup Mukherjee	Dept. of Chemical Technology, University of Calcutta	Member, Nominee MAKAUT
4.	Prof. (Dr.) Swapan Kumar Mondal	Prof. Kalyani Govt. Engineering College.	Member, Nominee - Higher Education Department Govt. of West Bengal, Bikash Bhawan, Salt Lake City, Kolkata – 700091
5.	Dr. Aloknath De	Sr. Corporate Vice Chief Technology Officer, Samsung R&D Institute	Member
6.	Dr. Satyajit Bose	Chairman & Senior Cardiac Surgeon, The Mission Hospital	Member
7.	Mr. Goutam DAsgupta	Direcotr, Application Development Capgemini Technology Services India Ltd.	Member
8.	Eastern Regional Officer	Eastern Regional Office, AICTE, College of Leather Technology Campus, LB Block, Sector – III, Salt Lake City, Kolkata – 700098	Member (Ex-Officio)
9.	Prof. (Dr.) Anupam Basu	Director, National Institute of Technology, Durgapur – 713209	Member
10.	Dr. Harish Hirani	Director, CMERI, Durgapur	Member
11.	Prof.(Dr.) Narendranath	Professor & Head, Dept. of ECE & Dean (Student Affairs )	Member
12.	Prof. (Dr.) Jayanta Pal	Professor & HOD, Basic Sc & HU	Member
13.	Smt. M. Mitra	Society Member of Dr. B. C. Roy Engineering College, Durgapur	Member
14.	Sri T. Bhattacharya	Society Member of Dr. B. C. Roy Engineering College, Durgapur	Member
15.	Sri J. Singh	Society Member of Dr. B. C. Roy Engineering College, Durgapur	

16.	Sri Ratan Roy Chowdhury	Society Member of Dr. B. C. Roy	Member
		Engineering College, Durgapur	
17.	Sri Nikhil Sikdar	Society Member of Dr. B. C. Roy	Member
		Engineering College, Durgapur	
18.	Prof. (Dr.) Pijush Pal Roy	Director, Dr. B. C. Roy	Member Secretary
		Engineering College, Durgapur	

Members of Academic Advisory Body Duly constituted and functioning regularly by the Director as Chairman, all HOD's as members and Registrar as Convener of the committee. Details are given below:

Sl. No	Name	Designation
1.	Prof. (Dr.) Pijush Pal Roy, Director	Chairman
2.	Prof. (Dr.) Kanchan Chatterjee, HOD (ME)	Member
3.	Prof. (Dr.) N.N. Pathak, HOD(ECE)	Member
4.	Prof. (Dr.) K.M. Hossain, HOD(AEIE)	Member
5.	Prof. (Dr.) Chandan Konar, HOD(CSE)	Member
6.	Prof. (Dr.) Raj Kumar Samanta, HOD (IT)	Member
7.	Prof. (Dr.) Susanta Dutta, HOD (EE)	Member
8.	Prof. (Dr.) Jayanta Pal, HOD (BSH)	Member
9.	Prof. (Dr.) Rajib Roy, HOD (FMS)	Member
10.	Prof. (Dr.) D Mukherjee, Adviser(CSE&IT)	Member
11.	Prof. (Dr.) C. K. Ghosh, HOD (R&D)	Member
12.	Prof. (Dr.) Chandan Chattoraj, Dean (Academics)	Member
13.	Prof. (Dr.) Arunava Mookherjee, FMS	Member
14.	Prof. (Dr.) Pabitra Kumar Dey, HOD (MCA)	Member
15.	Prof. (Dr.) S. R. Das, TIC (Chemistry)	Member
16.	Prof. (Dr.) S. B. Mukherjee, TIC (Maths)	Member
17.	Prof. (Dr.) Sanjay Sengupta, HOD (CE)	Member
18.	Prof. Koushik Senapati, Maths.	Member
19.	Prof. Debadrita Sen, TIC (English)	Member
20.	Prof. (Dr.) Rajdeep Ray, HOD (Exam)	Member
21.	Dr. Aloke Kahali, Head (Admn)	Member
22.	Cdre. Ratnakar Ghosh, Campus Admin.	Member
23.	Smt. Ruma Mitra, Registrar	Convener

#### **Organizational Chart and Processes**



- Nature and Extent of involvement of Faculty and students in academic affairs / improvements Each and every faculty member has been involved with mentoring for maximum 20-25 students from all the years to provide specialized guidance to the students in matters of academics, career, personality development, social obligation, etc. Regularity in the classes is being treated as "top priority". Head of the Departments regularly monitor the class schedule of the day in the early morning hour and engage substitute in case of absent teacher. As per directives of AICTE and the University, regular classes have been provided in the Class Routines for MOOCs courses and MAR activities. Students are also reciprocating with the initiatives taken by their teachers.
- Mechanism / Norms and Procedure for democratic / good Governance- Dr. B. C. Roy Engineering College, Society recognizes the need for decentralization for the growth of the college and accords autonomy commensurate with the level of management. Heads of the departments are appointed who are given autonomy for efficient governance. The roles and responsibilities of administrators/decision makers for various assigned jobs listed below clearly depict the delegation of authority, providing operational autonomy leading to a decentralized governance system.
- Director implements and monitors the academics to cater to the college's vision and

mission. He is responsible for academic development of the college and monitors progress of various teaching/learning processes. He also monitors Research and Development activities in the college through Project Monitoring & Industrial Liaisoning Cell (PMIL).

- Registrar is responsible for supervision and management of all administrative and operational functions.
- Head of the departments are responsible for the day to day academic activities and assuring quality in teaching and learning process and administrative functions of the department and monitor various students' activities.
- In addition, Librarian, Professor-In charge of Examination, Workshop Superintendent take care of library resources, examination and workshop related activities. Other support functions like admission of the students is handled by Senior Manager (Administration), Finance & Accounts related issues are looked after by Senior Manager (Finance). Placement Cell is looked after by Head (Training & Placement) and the campus is looked after by Campus Administrator and his team.
- Student Feedback on Institutional Governance / Faculty Performance- Student feedback is taken twice in a year (once in every semester) through online and appropriate action is taken after analysis of the same in the Academic Council Meeting.

# **Establishment of Anti Ragging Committee 2019-20**



<ul> <li>Prof. (Dr) Pijush Pal Roy- Director</li> </ul>	0343-2504121/
& Chairman (Anti-Ragging Committee)	9431506000
<ul> <li>Prof. (Dr) C. K. Ghosh-Member Secy (Anti-Ragging)</li> </ul>	9474646041
Prof. Saindhab Chattaraj, Joint Convener	9475744761
<ul> <li>Prof. Rajdeep Ray Joint Convener</li> </ul>	7407101616
• Prof. (Dr) K. M. Hossain-HOD (AEIE)	9434387588
• Prof. (Dr) Jayanta Pal - HOD (Basic Sc & Hu)	9434225354
<ul> <li>Prof. (Dr) Sabyasachi Chandra- HOD (CE)</li> </ul>	9800463502
Prof. (Dr) N. N. Pathak- HOD (ECE)	9434334966
<ul> <li>Prof. (Dr) K. Chatterjee- HOD (ME)</li> </ul>	9474484906
• Prof. (Dr) S. Dutta- HOD (EE)	9434254591
Prof. (Dr) R. K. Samanta - HOD (IT)	9333336958
<ul><li>Prof. (Dr) Chandan Koner - HOD (CSE)</li></ul>	7001875643
<ul><li>Prof. (Dr) Rajib Roy - HOD (FMS)</li></ul>	9932258030
<ul> <li>Prof. Koushik Senapati (Basic Sciences)</li> </ul>	9474785846
<ul> <li>Prof. Sabbir Reza Tarafdar - CSE</li> </ul>	9434615914
Prof. Sunil Kr. Choudhary - EE	9093077660
• Prof. Subhasish Pal - BSH	9932378969
• Prof. S. Lahiri - BSH	9851006415
• Prof. (Dr) S. De Dutta - BSH	9434023004
• Smt. Ruma Mitra, Registrar	9007443233
<ul> <li>Shri Shouvick Chandra, Sr. Manager(PR)</li> </ul>	9830035725
• Cmde. R. Ghosh (Retd.) - Campus Admin.	9831028886

N.B. for Students: It is mandatory to fill up Online Anti-Ragging Undertaking Visit - http://www.antiragging.in/Site/Affidavits\_Registration.aspx

Students in Distress owing to ragging related incidents can access the Toll Free Heipline 1800-180-5522 or write to the Member Secretary, AICTE, 7th Floor, Chanderlok Building, Janpath, New Delhi-100 001.

Scanned with CamScanner

# Dr. B. C. Roy Engineering College, Durgapur

# WE PROMISE YOU A RAGGING FREE CAMPUS.

# ANTI - RAGGING ROVING SQUAD

#### CONTACT

• Prof. (Dr.) Babul Prasad Tiwari, Convener	9434313400
Prof. Abhijit Bhowmick, Jt.Convener - IT	9433354734
Prof. (Dr.) Dola Sinha - EE	9647361722
Prof. (Dr.) Anirban Bose - AEIE	9903244083
• Prof. (Dr.) Moumita Pradhan-IT	9433486517
Prof. Arijit Kr. Banerjee - CE	9339204602
Prof. Soumyadip Das - CE	8670567167
Prof. Chitta Sahana - ME	9474824401
Prof. Ankita Som - CE	9563941745
Shri Suman Das - Admn.	9732381823
• Shri Sumantra Banerjee - Admn.	9832119999
Shri Indranil Bhattacharyya - CSE	9831573925
• Shri Subhas Chakraborty, Dy. Campus Admin	9051908465

WARNING Ragging is Crime



www.bcrec.net

Students in Distress owing to ragging related incidents can access the Toll Free Helpline 1800-180-5522 or write to the Member Secretary, AICTE, 7th Floor, Chanderlok Building, Janpath, New Delhi-100 001.

#### 1. COLLEGE PROFILE & FACT SHEET

# 1.1 Brief Background

BCREC evolved from a coming together of like-minded professionals and philanthropic entrepreneurs with an objective to create an institution of global standards of learning through synergic application of creativity, innovation and discipline. Established in the year 2000, BCREC Society within a short span of time made its mark as centre of excellence in the fields of engineering, pharmacy and management education.

Dr. B.C. Roy Engineering College has been recognized as an e-Govt. Campus by the Engineering Watch (in association with National Informatics Centre, Govt. of India) among the 100 prestigious colleges nationwide.

# 1.2 Affiliations, Approvals & Accreditation

- Approved by AICTE, New Delhi
- Affiliated to Maulana Abul Kalam Azad University of Technology, West Bengal (Formerly WBUT)
- Approved by Department of Higher Education, Govt. of West Bengal
- NBA Accredited for two programmes.

#### 1.3 Medium of Instruction

The medium of instruction and examination shall be in English.

# 1.4 College Timings

Tuesday to Saturday from 10 am to 5.30 pm.

# 1.5 BCREC Campus

#### 1.5.1 Location

Dr. B.C Roy Engineering College is located in a tranquil and conducive ambience creating an ideal learning environment to stimulate intellectual and personal growth. The city is now both an industrial hub as well as educational hub.

The very location of the institute itself, being in proximity to vast knowledge application areas, guarantees the fundamentals of quality technical and professional education. The college is established in an eco-friendly and sylvan surrounding, easily approachable by land-route from tertiary areas of Asansol, Raniganj and Burdwan. Kolkata is 150 km by rail and 186 km by road, and is just 3 hours journey from Kolkata.

#### 1.5.2 Salient Features

# Sprawling Green Campus

- State-of-the-art Research Wing
- Qualified and Experienced Faculty
- Strong Alumni
- Need based Scholarships
- Multipurpose Air-conditioned Auditorium
- Zero tolerance to Ragging
- Separate Hostels Boy's & Girl's
- Digital Library with MOOCS & NPTEL
- High achievement in campus placements



Fig. 1.1- Areal View of the BCREC Campus

#### 1.6 Facilities

#### 1.6.1 Classrooms

The institute is structured with well-furnished classrooms having latest teaching aids. All classrooms are well lit, airy with spacious seating arrangements. The lights, sound, and air circulation make the room physically comfortable to support the teaching / learning enterprise.

The institute also has dedicated smart classrooms for all courses.

A Smart Classroom is a presenter friendly classroom environment conducive to the teaching / learning process. All smart classrooms are equipped with OHP linked to a computer with high speed data networks and projection screen. The classrooms are acoustically built so as to prevent echo and reverberations. They are designed to promote maximum interaction between the faculty and the students.



Fig. 1.2- Photos of the Classroom (a) Smart Classroom & (b) Traditional Classroom

#### 1.6.2 Wi-fi Facilities

The institute provides staff, faculty and students access to the wireless network on campus where available

#### 1.6.3 Multi-speciality Gymnasiums

A healthy body is the essence of a healthy mind. The institute provides well equipped multispeciality gymnasiums for separately girls and boys alike.

#### 1.6.4 Health Centre and Medical Facilities

The college maintains a Medical Unit to provide medical aid to students under the expert supervision of our experienced resident physician in collaboration with The Mission Hospital, Durgapur. The MOU with The Mission Hospital provides for a Doctor positioned at the College premises from 11:00 am to 5:00 pm. Provision for ambulance services for admission in The Mission Hospital is available for 24 hours. In addition, a college car is always stationed for any medical emergency of any student during College hours.

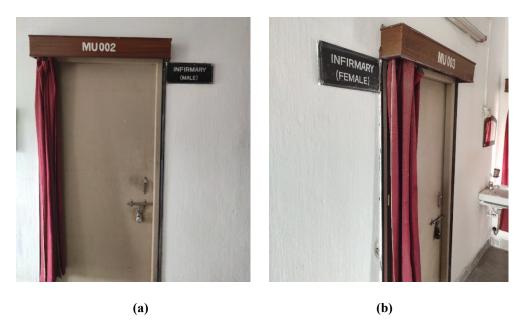


Fig. 1.3- Medical Facilities in the Campus (a) Male Infirmary & (b) Female Infirmary

#### 1.6.5 Reprographics / Xerox Point

Photocopying facilities are available within the campus at multiple points to cater to the reprographic needs of all.

#### 1.6.6 Uninterrupted Power Supply

The institute has dedicated HT power supply, generator backup and 10 KVA UPS especially for the computer labs.

#### 1.6.7 Banking Facilities

The campus has an AXIS Bank ATM and SBI ATM that provide 24 hrs ATM Banking facility apart from the fully operational M/s SBI Bank branch within the premises to facilitate monetary transactions for students and faculty alike.



Fig. 1.4- Banking Facilities in the Campus (a) Axis Bank ATM & (b) SBI ATM

#### 1.6.8 Educational Loan

The institute provides all assistance to open easy and prompt educational loan for the eligible students.

#### 1.6.9 Cafeteria and Food Station

The college has two food stations that provide good quality snacks and meals to satisfy the taste buds of the faculty and the students at a very reasonable price. Even guardians who visit their wards may avail of the facility.



Fig. 1.5- Cafeteria in the College Campus

#### 1.6.10 Open Air Auditorium & Multipurpose AC Auditorium

BCREC has two auditoriums, namely the Nazrul Manch and a fully equipped AC-Auditorium. Apart from that the Instituted also as one Seminar Hall named Albert Einstein Hall. The Albert Einstein Hall is a fully air-conditioned synchronized with sound systems and projectors facility for conduct of guest lectures, seminars etc. Nazrul Manch, an open air auditorium that accommodates over 900 students for cultural activities, fests etc.



Fig. 1.6- Open Air Auditorium

#### 1.6.11 Departmental Computer Labs with High-Speed Internet

Institute has state-of-the-art computer labs with high speed leased line internet connections with powerful servers and 100% UPS backup. Each student is provided with personal email id and password with adequate storage space on the student's server. There are also high quality laser printers, DMP printers, scanners, and OHP and multimedia projectors. Students are encouraged to maximize their learning and computer skills by constant use of internet for research, making notes, submissions and presentations. Total computer resource is over 820 for entire BCREC. Proficient laboratory instructors are always there to help the students in the lab.

#### 1.7 Accommodations

#### 1.7.1 Halls of Residence (Hostels)

BCREC has well ventilated accommodations for boys' and girls' students within the campus that emote a pleasant feeling and enhance learning. Hostels are managed by female matrons (Girls Hostels) and male wardens (Boys Hostels) respectively apart from 24 hrs security is provided in each of the hostel blocks.

Each hostel offers complete facilities including boarding and lodging, common room, internet and Wi-fi, room telephone service etc. The following hostels (3-Boys /2-Girls) are currently available.

**Table 1.1- Number of Students Residing in Different Hostels** 

Boys	Girls
Satyen Bose Hall of Residence	Mother Teresa Hall of Residence
Total number of students residing: 374 students	Total number of students residing: 204 students
Aurobindo Boys Hostel	Nivedita Girls Hostel
Total number of students residing: 202 students	Total number of students residing: 240 students
Chittaranjan Boys Hostel	
Total number of students residing: 244 students	



Fig. 1.7- Boys' Hostel in BCREC Campus

#### 1.7.2 Guidelines for Hostel Accommodation

Accommodation at boys' and girls' hostels being limited, students are advised to apply immediately after admission in separate prescribed form available in our corporate office. Admission to hostels is for one year duration and is subject to renewal annually depending on good conduct. Accommodation is allotted to students based on need, financial position and other allied aspects.

Hostel charges and seat rents etc. once paid cannot be refunded.

#### 1.7.3 Guest Rooms and Professors Enclave

AC / Non AC guest rooms are also available for guardians on temporary basis on payment. In campus residential flats for Professors and high officials is located beside the girl's hostel to provide utmost security for students.

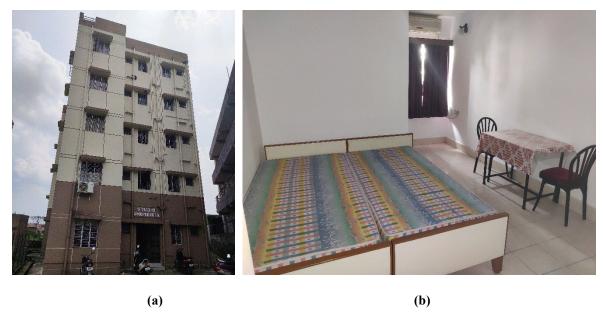


Fig. 1.8- Residing Facilities in BCREC Campus (a)For Faculty Members & (b) For Guests

#### 1.7.4 Central Library and Departmental Library

The well-equipped Dr. Meghnad Saha Central Library is housed in a separate sprawling three-storied building with internet connectivity and collections of text books, reference books, CD-ROM/DVD discs and online databases. It is a participant in the INDEST-AICTE Consortium and subscribes to IEL online and DEL online database besides the DELNET database.

The Central Library has a collection of over 80,000 books. It also accommodates a book bank from where students can borrow books for a longer duration. There are also departmental libraries attached to teaching departments. The composite holdings of all these libraries can be accessed for search from different corners of the college building on OPAC (Online Public Access Catalogue) run on time tested LIBSYS software. The library also provides reprographic and inter-library loan services.



Fig. 1.9- Meghnad Saha Central Library

#### 1.7.5 DELNET (Developing Library Network)

Our institute is an Institutional Member of DELNET (IM-595). Accesses millions of Networked Library Resources through DELNET IP-Based Discovery Portal. It also avails facilities for DDS (Document Delivery Service.)

#### 1.7.6 NDL (National Digital Library)

Our college is an Institutional member of NDL (National Digital Library of India), an initiative of Ministry of Human Resource Development under its National Mission on Education Information and Communication Technology (NMEICT). National Digital Library (NDL) is a pilot project to develop a framework of virtual repository of learning resources with a single-window search facility. Filtered and federated searching is employed to facilitate focused searching so that learners can find out the right resource with least effort and in minimum time. It is developed and hosted at IIT Kharagpur.

The institute also subscribes to IEEE(ASPP) package which contains 179 online journals with back files access since 2005 in the fields of Computer Science & Engineering, Electrical, Electronics, Telecom & related disciplines.

In addition to that Elsevier (Science Direct) which contains 275 journals with back files access since 2000, in the fields Engineering and Computer Science are also subscribed.

Our college is a Local Chapter of NPTEL (National Programme on Technology Enhanced Learning), an initiative by seven pioneer Indian Institutes of Technology (IIT Bombay, Delhi, Guwahati, Kanpur, Kharagpur, Madras and Roorkee) and IISc Bangalore and funded by MHRD, Govt. of India. NPTEL provides E-learning through online Web and Video courses in Engineering, Science and Humanities. This initiative offers online courses and certification in various topics. Contents for the above courses were based on the model curriculum suggested by All India Council for Technical Education (AICTE) and the syllabi of major affiliating Universities in India. NPTEL has started offering online certification courses through its portal.

There are 10 hours, 20 hours, as well as 40 hour courses offered twice a year.

The college publishes a journal of repute "The Bulletin of Engineering and Science", which publishes articles not only from Science and Engineering departments but also IT and Management.

BCREC is committed to provide research BCREC is committed to provide research and development activities in its campus. Research & Development Centre (R & D) of the college is a unique section which can accommodate several researchers at a time. The adjacent CAD/CAM/ROBOTICS Laboratory provides the required tool room support. The faculties are also encouraged to explore the research projects and participate in paper presentation in symposia, conference or workshops, model displays etc. Often the syllabus oriented study falls short to fulfil the demands of the industry. Keeping this in mind, BCREC organizes seminars and workshops in regular intervals, where stalwarts from both academia and industry share their knowledge and experience with the students on modern day issues.

Department of Electronics & Communication Engineering (ECE), of Dr. B.C. Roy Engineering College, Durgapur had signed a joint MoU with Xilinx, USA and Core EL Technologies India Pvt. Ltd. for up gradation of infrastructure in VLSI, Embedded Domain and other IT related topics and

also for research programmes, projects and student internships. The intention of bringing innovation in the field of Modern Electronics and to enhance the quality of education imparted to students of the Electronics and Communication engineering disciplines.

Dr. B.C. Roy Engineering College, Durgapur is a Nodal Centre (NC) of IIT- Bombay Spoken Tutorial Project, nominated by Maulana Abul Kalam Azad University of Technology (MAKAUT). This empowers all students pursuing Higher Education to learn a range of IT Skills, from General IT/ Computer Skills, Programming Software to lucrative job oriented software training. The courses are useful for both jobs (Skill focus courses) and academics (Syllabus focus courses). The program is funded by MHRD, Govt. of India and Part of NMEICT. Hence, the Courses, Training, Day to Day Guidance and Certificates are all completely FREE of COST for life.

Dr. B.C. Roy Engineering College, Durgapur is a Nodal Centre for Virtual Lab which is a venture of IIT; Kharagpur under the MHRD sponsored Project. The Lab covers Analog Signals, Networks & Measurement & Basic Electronics like subjects which have direct link to Electronics & Communication Engineering/ Electrical Engineering/ Applied Electronics & Instrumentation Engineering disciplines.

# 1.8 Other Important Details

#### Professional Society Chapters/Membership

#### 1. Indian Society for Technical Education (ISTE) Chapter

BCREC has an ISTE Chapter (Chapter Code: WB-08) since 2008 with twenty five members.

#### 2. The Institution of Engineers (India) Students' Chapter

BCREC has an IE (I) Students' Chapter (Chapter Code: ECSC/713206/BCRE) with more than hundred students members and twenty faculty members.

#### 3. Computer Society of India (CSI) Membership

CSE & IT of BCREC has CSI membership with four members.

#### MOU with IIT, Alumni Venture (CLASSLE)

BCREC is perhaps the only institute in this part of the country to have strategic tie-ups with renowned IIT Alumni Venture CLASSLE, for technical improvement of students including career assistance.

#### Research and Development Initiatives

A Cell namely Project Monitoring and Industrial Liaising (PMIL) promote collaborative and sponsored research activities in the College. This Cell is actively working in close association with all the departments to augment the process and helping the young faculties in framing project proposals in collaboration with premier institutions and industry. Under the guidance of the Director, BCREC, the PMIL Cell also provides innovative approaches for development of new technologies, product and services. Embedded with the existing infrastructure like modern computational facilities, Application Software, Machinery, Instruments and huge

knowledge-resource of the faculty, motivational research impetus runs in full-swing in the college. The faculty members continuously update themselves through global research initiatives, consultancy activities, exposure visits, academic development programmes, etc. BCREC is surrounded by several industries like SAIL-DSP, ASP, Thermal Power Plants, etc. and research organisations like CSIR-CMERI, etc. BCREC fully explores possibility of liaising with them. Currently about 10 research and consultancy project proposals are ready for various national funding agencies like DST-SERC, AICTE-RPS, NI-MSME, MNRE, ARDB, NI-MSME, MNRE, ARDB, AICTE-MODROBS, BRNS, IEI, etc. with substantial budget outlay.

During the past one year, faculty members and research scholars of BCREC published several research papers in peer reviewed journals and many papers were presented in national and international seminars/conferences. Some of the research papers have been indexed in international databases like Scopus, Google scholars, SCI, Index Copernicus, etc.

BCREC actively promotes students research and projects through collaborative platforms like IEI (India), IEEE xplore, etc. which have the distinction of being appreciated at national and international forum.

#### Texas Instruments Innovation Lab

Department of Electronics & Communication Engineering (ECE), of Dr. B.C. Roy Engineering, Durgapur had signed a joint MoU with Texas Instrument (TI), USA to set up TI Centre of Excellence and TI Innovation Lab for academic and research purpose. TI products are used worldwide by educators and researchers for Analog and digital communication analog circuit design, robotics, mechatronics, control and communication applications.

This TI Centre of Excellence gives students the opportunity to validate their knowledge and skills at a professional level. Hand-on experience of work and wide exposure during study period will not only enhance our students' chances for early placement but will also create and assure new opportunities for our students in the job market.

Moreover here we developed PCB (Printed Circuit Board) fabrication Lab. Though it is not included in the University Syllabus but interested students will gain the knowledge of fabrication techniques which will help them in their future professional life.

#### Alumni Association

At BCREC, we consider our alumni as the goodwill ambassadors and they have done us proud by proving their worth wherever they are. The Alumni Association is a platform of interface between our ex-students and the Institute. This platform not only facilitates effective and faster communication among the alumni members but also provides an opportunity to communicate throughout their life.



Fig. 1.10- Alumni Association in BCREC

#### International Collaborations

Expanding and strengthening collaboration worldwide is one of important focus areas of BCREC's strategy. As a result, BCREC has initiated partnerships with outstanding academic and other institutions across the globe to expand the student experience, faculty growth and contributions, and the impact of research done in the college.

BCREC has taken initiative to explore the possibilities of student exchange programmes through agreements with prestigious international institutions, like Lincoln University, Malaysia where students of this college will go for Summer School Programmes, Industrial Training, Projects, etc. It is not the students alone, the faculties will also be going to several Universities on Faculty Exchange Programmes to be at per with International Standard.

# Industry-Institute Interaction (IIPC)

With the onset of globalization and opening up of Indian economy, the competition among industries have become stiff. To bridge the gap between the demand of industries and our urgent need to prepare students for jobs, experts from industry visit regularly to deliver special lectures, seminars to students to build their knowledge on latest cutting-edge technology and make them aware on the industry practices.

# Entrepreneurship Development Cell (EDC)

Dr. B.C. Roy Engineering College has created budding entrepreneurs over the years through active participation of students in the "EDC" i.e. Entrepreneurship Development Cell. The social behavioural aspects and intelligent quotient of the students is nurtured to create

innovative projects and also keeping in mind the social responsibility. Through the EDC we try to help the society at large and also develop the entrepreneur acumen of the students.



Fig. 1.11- Entrepreneurship Cell in BCREC

#### Finishing School Activities

Our finishing school activities are intended towards giving finishing touches to our students through extensive coaching on communication skills, personality development and professional training activities. The desirable fundamental qualities of an engineer include logical and practical thought process, excellent communication skill and other soft skills, good work ethics, good computer literacy supported by a solid backing of sound technical education. An engineer is viewed as an innovator, planner, designer, manager and a producer of goods and services.

#### Soft Skills and Personality Enrichment

At BCREC along with focus on academic excellence we lay a lot of stress on holistic development of students in areas other than core academics which is the need of the hour. Personality development and Soft Skills programs are uniquely developed to groom the students to face the expectation and challenges of the professional world. Students are assessed on a regular basis and regular feedback is taken to ensure overall improvement and enrichment of their personalities. The sophisticated language lab is used to enhance communication skills.

# Vocational Training (VT)

The Vocational Training Programme is compulsory for all B.Tech students as per WBUT curriculum. The duration of VT is at least one & half months. It is to be completed during the periods between end of 3rd year, sixth semester and beginning of 4th year seventh semester.

Students participate in wide range of activities through Student Development Activity Clubs such as the Debate Club, BCREC Creative Mates Photography Club, Karate Club of BCREC, and other

formal and informal clubs department wise.

Whether a budding sports star of the future or a sporadic exerciser, our state of the art sports facilities, backed up with a selection of excellent services, provide the ideal venue for a range of activities, available to all students, at all levels.

#### Campus life at BCREC

Campus life at BCREC has a vast array of sports activities The Outdoor facilities include athletics (Track field with all accessories), Football, volleyball, basketball, badminton courts etc. The college provides excellent indoor facilities for table tennis, chess, carom etc. In addition to this, college have a yoga centre, where a certified yoga teacher takes the classes. The Annual Sports Day Celebrations are organised every year on a grand scale with enthusiasm and fervour. Cultural and sports events bolster the confidence and team spirit of the students and participation in sports gives a boost to one's concentration and competitive spirit.

Horizon - An engineer's paradise to portray the innovativeness and agility of a techie mind, the technological fest of BCREC. The festival of engineers mainly focuses on different innovative topics like Robotics, Ethical Hacking etc. Full of innovative events and exhibition, the students at the tech fest also participate and compete with top institutes of the country and also generates media attention in print as well as electronic.

A student's first step towards a rich and fulfilling campus life at BCREC. The institute gets awakened with cheers from newly enrolled students of B.Tech, M.Tech, MCA and MBA disciplines along with their parents and guardians that converges from different destinations to their institution of choice. The "fresh "students are welcomed and oriented with the rules and conduct of the institute.

This College is the first private college in the vicinity to start the NCC program being registered at the 14 Bengal Battalion with headquarters at Asansol. Students are encouraged to join the NCC programme. This instils discipline amongst them. The NCC troops invigorated under the leadership of Prof. I/C Smt. S. Lahiri puts up a grand march past in honour of the Indian Tricolour especially on India's Independence Day and Republic Day every year.

In addition Rabindra Jayanti, Republic Day and Independence Day, religious festivals like Janmastami, Sree Sree Saraswati Puja, Viswakarma Puja etc. are celebrated.

The financial strategy of the institute places student development as a key priority. The Tuition Fee Waiver (TFW) Scheme of AICTE is available only for undergraduate level engineering course for economically backward meritorious students of West Bengal up to maximum of 5% of sanctioned intake per course are available on supernumerary basis over and above the sanctioned seats for admission. The waiver is limited to the tuition fee only but all other fees except tuition fee will have to be paid by the beneficiary. The selection of candidates for the Tuition Fee Waiver Scheme shall be decided on the basis of merit and preference of eligible students in the State Joint Entrance Examination. A considerable sum from BCREC Student Development Fund is effectively put to use for the academic development and improvement. To maximize the potential of the students, the Minority Welfare Merit-cum-Means Scholarship scheme allows students from humble backgrounds to avail subsidized tuition fees at all the campuses of BCREC. Many students in the past have benefitted from this scheme as well as other schemes available such as the SC/ST and

OBC Post Matric Scholarship Scheme that caters to financial assistance to students from Scheduled Caste / Tribes or other backward classes.

#### Sports Facilities

BCREC have a good reputation in the region for their sports & culture. BCREC use to participate in different sporting events across the sub-division. In the BCREC campus, we have a great facility for different sports. Football, Cricket, Basketball, Volleyball, Karate, Badminton, Yoga are the different games & sports facilities available in the campus. The football ground has the maintenance facility where periodic maintenance is done. For the sports like karate, football, yoga- BCREC have appointed professional trainers & coaches who are dedicated and reputed in the Durgapur sub-division.





Fig. 1.12- Sports Facilities in BCREC (a) Yoga & Meditation Centre, (b) Football Ground & (c) Drip Irrigation System for Watering in the Ground (Maintenance)

#### Code of Conduct

All students must abide by the Rules and Standing Orders of the College. Violation of Rules and Standing Orders of the college or any misconduct inside and outside the College Campus or in Halls of Residence, will render a student liable to disciplinary action and may lead to expulsion from the college. At the time of admission, students will have to sign an undertaking to this effect and also to be endorsed by the guardians.

Further, if as a result of any demonstration or strike, any property of the College Campus or Halls of Residence is damaged, the cost of the same will be recovered directly from the students identified wherever possible or else collectively from such group of students as are responsible for the demonstration or strike.

#### Attendance and Examination

The strict observance of attendance and the examination sanctity has been a prime asset of the institute. Each student is required to secure at least 75% attendance as per WBUT norms in both theory and practical classes. Failure to attain the required %age debars a student for appearing in semester examinations.

#### **Examination Misconduct**

Any action which prejudices the integrity of the University Examinations shall be considered to be an academic misconduct and shall be punishable by appropriate disciplinary action. Academic Misconduct includes cheating in examinations, assignments, project or any other test used in judging students' performance in the course of a programme of study. Impersonating another student or entering into agreement with another person to be impersonated is an act of examination misconduct.

#### Discipline

All students must abide by the rules and standing orders of the college, violation of which or any misconduct inside or outside the college campus may lead to disciplinary action as per the regulations and render a student liable to expulsion from the college. Students have to sign an undertaking to this effect for the above during admission. Further, if as a result of any demonstration or strike, any college property is damaged, the cost will be covered directly from the students who are identified or collectively from such group of students who are responsible for it. In case of non-identification of any student(s) mass fine shall be imposed thereon.

#### Anti-Ragging Measures

As per the latest amendment to UGC Regulations on curbing the menace of ragging in higher educational institutions, 2009 [http://www.ugc.ac.in/page/Ragging-Related-Circulars.aspx] ragging is defined as – "Any act of physical or mental abuse (including bullying and exclusion) targeted at another student (fresher or otherwise) on the ground of colour, race, religion, caste, ethnicity, gender (including transgender), sexual orientation, appearance, nationality, regional

origins, linguistic identity, place of birth, place of residence or economic background. "

Ragging in any form on any student inside or outside the college campus or hall of residence is strictly prohibited as per W.B. Govt. Anti-Ragging Act. Students found indulging in ragging shall be subject to strict disciplinary action including expulsion from the college. Supreme Court also has declared ragging as a nasty crime and advised for immediate serious action leading to even jail. The decision of the Principal and the anti-ragging committee regarding all matters on ragging based on the report of the anti-ragging committee will be final.

#### Dress Code

Proper dress code helps to bring a sense of discipline, sense of belonging and professional attitude leading to students' achieving a better edge in today's highly competitive job market.

The Institute strictly maintains its Dress Code and ID card as compulsory for all students. Students not in prescribed uniform and/or not possessing a valid ID card are liable to be debarred from entering the campus / attending classes. To maintain uniformity of colour and quality, the uniform has to be ordered from the authorized shop in Durgapur, duly approved by the college. Name of the shop will be given during admission. Please note that Dress Kit may be procured from outside as per College uniform sample.

*For Boys:* Grey Trousers with off-white (light cream) shirts with emblem emblazoned ties, black ties, black shoes with white socks.

For Girls: Grey Skirt with off-white shirt with emblem emblazoned ties, black shoes with white socks. Grey Salwar (Churidar) with off-white (light cream) kameez for girls also may be allowed but is not encouraged. Winter Navy Blue Blazers from November to February for both boys and girls is compulsory. Girls' students opting for Salwar-Kameez may wear navy blue cardigan during winter. Earmarked Tie and Metal Emblem will be supplied to each student by the college at a nominal cost during admission.

#### 2. STUDENTS' STATISTICS

The Institute have All the B.Tech. courses have the duration of 4 years, whereas the M.Tech. courses are of 2 years duration. Master of Business Administration is of the duration of 2 years. On the other hand, the Master of Computer Application have the duration of 3 years; affiliated to West Bengal University of Technology (WBUT) (currently known as Maulana Abul Kalam Azad University of Technology (MAKAUT)). At present, M. Tech. programmes are offered in four disciplines. The number of students enrolled in both the batches are evenly distributed. Further, all final year students who appeared in the examination could complete their courses successfully.

#### 2.1 Details of Total Number of Seats during the Year 2019-20

The number of total seats for new admission for the academic year, approved by AICTE;

Table 2.1- Number of Seats Approved by AICTE

Sl. No	Name of Course	UG / PG	Approved Intake for 2019-20
1.	Computer Science and Engineering	UG (B.Tech)	120
2	Electronics & Communication Engineering	UG (B.Tech)	120
3	Electrical Engineering	UG (B.Tech)	120
4	Information Technology	UG (B.Tech)	60
5	Applied Electronics and Instrumentation Engineering	UG (B.Tech)	60
6	Mechanical Engineering	UG (B.Tech)	120
7	*Civil Engineering	UG (B.Tech)	60
8	Master in Business Administration	PG (MBA)	60
9	Master in Computer Applications	PG (MCA)	60
10	Modern Communication Engineering	PG (M.Tech)	18
11	Power System Engineering	PG (M.Tech)	18
12	Computer Systems and Technology	PG (M.Tech)	18
13	Mechanical Engineering	PG (M.Tech)	18

<sup>\*</sup>Number of Seats in the Civil Engineering Department is now 60

# 2.2 Details of the Admission during the Year 2019-20

#### 2.2.1 B. Tech Admission Process

Admissions are made through the Joint Entrance Examination (WBJEE) conducted by the West Bengal Joint Entrance Examinations Board (WBJEEB) and Joint Entrance Examination (JEE-MAIN) conducted by Central Board of Secondary Education (CBSE), New Delhi. After allotment of seats in counselling, candidates are required to complete further formalities for admission in the college campus.

#### oAge Restriction

Candidate must be 17 (seventeen) years of age or above as on 31-12-2019. There is no upper age limit. A candidate born on or after 1-1-2002 is not eligible to appear in the WBJEE 2019.

#### Eligibility Criteria

- a. Candidate must have passed the qualifying examination i.e the '10+2' examination with Physics and Mathematics along with any one of Chemistry/ Biotechnology/ Biology/ Computer Science/ Computer Application as compulsory subjects with individual pass marks (in both theory and practical where ever applicable) in all the three subjects as stated above in regular class mode.
- b. Must have obtained at least 45% marks (40% in case of reserve category candidates) in the above three subjects taken together.
- c. Must have passed English in the '10+2' examination with at least 30% marks
- d. The Board of the said qualifying examination must be recognised by the Central Government or State Government concerned.

#### Medical Fitness

Medical Certificate will have to be produced during counselling from a Registered Medical Practitioner regarding physical and mental fitness as per prescribed format to be provided at the time of counselling.

#### 2.2.2 B.Tech Lateral Entry

- i) As a follow-up of AICTE scheme for admission of diploma holders to degree courses, Dept. of Higher Education, Govt. of West Bengal has introduced a scheme for lateral entry from Polytechnics directly to the 2nd year, subject to fulfilment of following conditions (subject to change from time to time).
- ii) Diploma holder should be a bonafide student of West Bengal and a resident of the state for at least 10 years.
- iii) Should have passed diploma courses from an AICTE approved polytechnic of the state with minimum 45% marks in the relevant discipline and learning Special Joint Entrance Examination of the state is the eligibility. B.Sc. students are also eligible after qualifying JELET exam.
- iv) Diploma holders will be admitted to degree courses in engineering in the same discipline the diploma was awarded (in case of IT Degree Course a diploma holder in Computer Engineering is eligible).
- v) Admission will be strictly on merit basis.
- vi) Lateral entry to 2nd year 1st semester level is limited to 20% of sanctioned intake.

### 2.2.3 M.Tech. Admission Process

Candidates desirous of seeking admission to post-graduate courses in engineering at Dr. B.C. Roy Engineering College, Durgapur, through WBUT-PGET Entrance Exam. Both GATE qualified and Non-GATE candidates should appear for PGET Entrance conducted by MAKAUT as per regulations.

The application for admission is to be submitted online at the university website www.wbut.ac.in. GATE qualified candidates are eligible for scholarship from AICTE as per AICTE norms.

#### 2.2.4 MBA Admission Process

Duration- 2- year (full time) MBA Degree from West Bengal University of Technology (WBUT).

- i) Any graduate (10 + 2 + 3), final year student is also eligible
- ii) Selection will be on the basis of GD and PI
- iii) Must Qualify MAT/JEMAT [However CAT / CMAT candidates can also apply subject to the guidelines available from MAKUT time to time]

### 2.2.5 MBA Admission Process

Duration- 3-year fulltime MCA Degree from West Bengal University of Technology (WBUT).

Eligibility: Candidate should have the following qualification;

- i) A valid rank in JECA (Current Year) conducted by West Bengal Joint Entrance Examinations Board.
- ii) Recognised Bachelor's Degree of minimum 3 (three) years duration with Mathematics at 10+2 level or at graduate level.
- iii) Obtained at least 50%marks (45% marks for candidate belonging to reserved categories) at the qualifying examination.

Table 2.2- Number of Students Admitted in the Academic Year 2019-20

Sl. No.	Name of Course	UG / PG	Number of Students got admitted to first year in 2019-20	Lateral Entry
1.	Computer Science and Engineering	UG (B.Tech)	125	12
2	Electronics & Communication Engineering	UG(B.Tech)	126	12
3	Electrical Engineering	UG(B.Tech)	107	27
4	Information Technology	UG(B.Tech)	63	5
5	Applied Electronics and Instrumentation	UG(B.Tech)	14	0
6	Mechanical Engineering	UG(B.Tech)	69	46
7	Civil Engineering	UG(B.Tech)	35	33

Sl. No.	Name of Course	UG / PG	Number of Students got admitted in 2019- 20	Lateral Entry
8	Master in Business Administration	PG (MBA)	60	NA
9	Master in Computer Applications	PG (MCA)	24	NA
10	Modern Communication Engineering	PG(M.Tech)	1	NA
11	Power System Engineering	PG(M.Tech)	2	NA
12	Computer Systems and Technology	PG(M.Tech)	2	NA
13	Mechanical Engineering	PG(M.Tech)	4	NA

# 2.3 Number of Students Completing Their Respective Degrees during the Year 2019-20

Table 2.3- Number of Students Successfully Completing Their Studies in the Even Sem 2019-20 Academic Year

Name of Course	UG / PG	Number of students appeared in the final year examination	Number of students passed in final year examination
Computer Science and Engineering	UG (B.Tech)	130	128
Electronics & Communication Engineering	UG(B.Tech)	132	128
Electrical Engineering	UG(B.Tech)	134	130
Information Technology	UG(B.Tech)	58	57
Applied Electronics and Instrumentation Engineering	UG(B.Tech)	38	37
Mechanical Engineering	UG(B.Tech)	147	137
Civil Engineering	UG(B.Tech)	141	135
Master in Business Administration	PG (MBA)	60	59
Master in Computer Applications	PG (MCA)	20	20
Modern Communication Engineering	PG(M.Tech)	2	2
Power System Engineering	PG(M.Tech)	6	6
Computer Systems and Technology	PG(M.Tech)	6	6
Mechanical Engineering	PG(M.Tech)	8	8

### 3. DETAILS OF THE FACULTY MEMBERS

The teaching role of faculty members reflects their centrality in addressing the educational mission among colleges and universities. As faculty members teach, they disseminate and impart basic or applied knowledge to students and assist students with the learning process and applying the knowledge. In this construction of the teaching role, the teacher is the content expert, and students are regarded as learners or novices to the academic discipline or field of study. Faculty members are expected to follow developments in the field so their expertise and knowledge base remain current. At many universities, faculty members are also expected to participate in creating the new developments that are taught, which sometimes leads to tensions about appropriate priorities for research and teaching roles.

In BCREC, we have a pool of experience faculty members with a rich industrial experience. Faculty members employ a variety of teaching strategies. In a circuit theory lecture section, a faculty member may deliver lectures that are complemented by regular and smaller applications. At an operation research class, faculty members may work side by side with students diagnosing and addressing optimized solution of a problem. In a surveying class, students may conduct experiments or field work in regular laboratory sessions to complement their growing conceptual knowledge and hone their inquiry skills. Students in a digital image processing class may work alongside faculty members, fellow students and house staff to process a digital image. In a graduate seminar, students may lead selected discussions supplemented by a faculty member's input and appraisal. Students enrolled in BCREC may attend class using technological real-time hook-ups or may independently complete learning modules and communicate with the project guide through e-mail only as needed or stipulated for the preparation of the project report. The teacher is also responsible for assessing students' learning, and a wide range of strategies may be used, such as tests, papers, and project-oriented demonstrations of knowledge. Following is the list of faculty members who are currently working in BCREC;

Table 3.1- List of Faculty Members across all the Departments

Name of the Full-time teacher	Designation	Name of the Department
Dr. Chandan Konar	Professor	
Dr. Sanjay Biswas	Professor	
Dr. Dipendra Nath Ghosh	Professor	
Bappaditya Das	Assistant Professor	
Hiranmay Samaddar	Assistant Professor	
Suvobrata Sarkar	Assistant Professor	COMPUTER
Saindhab Chattaraj	Assistant Professor	SCIENCE AND
Amitabha Mandal	Assistant Professor	ENGINEERING
Sabbir Reza Tarafdar	Assistant Professor	
Kalpana Roy	Assistant Professor	
Biswajit Mondal	Assistant Professor	
Sanjib Saha	Assistant Professor	
Biswadeb Goswami	Assistant Professor	

Name of the Full-time teacher	Designation	Name of the Department
Sayed Zahir Hasan	Assistant Professor	1
Anandaprova Majumder	Assistant Professor	
Arindam Ghosh	Assistant Professor	
Ruma Ghosh	Assistant Professor	
Poulomi Tewari	Assistant Professor	
Biswajit Saha	Assistant Professor	COMPUTER
Dr. Babul Prasad Tiwari	Assistant Professor	SCIENCE AND
Koushik Senapati	Associate Professor	ENGINEERING
Dr. Abhijit Ghosh	Assistant Professor	
Sreejata Sen Sarma	Assistant Professor	
Rajib Kumar Mondal	Assistant Professor	
Arun Kumar Sadhu	Assistant Professor	
Shaon Bandyopadhyay	Assistant Professor	
Dr. Narendranath Pathak	Professor	
Dr. Chandan Kumar Ghosh	Professor	
Dr. Sarit Pal	Professor	
Dr. Tapas Mondal	Associate Professor	
Dr. Santanu Patra	Assistant Professor	
Dr. Tribeni Prasad Banerjee	Assistant Professor	
Dr. Aloke Saha	Assistant Professor	
Keka Hajra	Assistant Professor	
Rajdeep Ray	Assistant Professor	
Aritra Bhowmik	Assistant Professor	
Dr. Mrinmoy Chakraborty	Assistant Professor	
Koustav Roy	Assistant Professor	
Tapas Roy	Assistant Professor	
Anirban Chattopadhyay	Assistant Professor	
Dipta Chaudhuri	Assistant Professor	ELECTRONICS &
Ankita Mitra	Assistant Professor	COMMUNICATION ENGINEERING
Abhijit Banerjee	Assistant Professor	
Dr. Rajib Banerjee	Assistant Professor	
Debipriya Dutta	Assistant Professor	
Nilkamal Bhunia	Assistant Professor	
Sourav Moitra	Assistant Professor	
Moutusi Mondal (ROY)	Assistant Professor	
Dr. Jayanta Pal	Assistant Professor	
Dr. Sukalpa Dey	Assistant Professor	
Dr. Suneeta De	Assistant Professor	
Ramkrishna Rakshit	Assistant Professor	
Pradipta Sarkar	Assistant Professor	
Ardhendu Sekhar Chattopadhyay	Assistant Professor	

Name of the Full-time teacher	Designation	Name of the Department
Dr. Susanta Dutta	Associate Professor	•
Dr. Sumit Banerjee	Professor	
Dr. Dola Sinha	Assistant Professor	
Anupam Sinha	Assistant Professor	
Dr. Sanjoy Kumar Saha	Assistant Professor	
Mou Das Mahapatra	Assistant Professor	
Basudeb Mondal	Assistant Professor	
Dr. Tushnik Sarkar	Assistant Professor	
Dr. Tapan Kumar Chattopadhyay	Assistant Professor	
Dipak Kumar Dhak	Assistant Professor	
Sidhartha Ghosh	Assistant Professor	
Sourav Paul	Assistant Professor	
Chandan Paul	Assistant Professor	
Kingsuk Majumdar	Assistant Professor	
Sneha Sultana	Assistant Professor	ELECTRICAL
Sunil Kumar Choudhary	Assistant Professor	ENGINEERING
Soumen Biswas	Assistant Professor	
Snehasish Ghosal	Assistant Professor	
Dr. Aparna Chakraborty	Associate Professor	
Dr. Madhusree Kole	Assistant Professor	
Dr. Kamal Hussain	Assistant Professor	
Jaya Bhattacharjee(Mukherjee)	Assistant Professor	
Sohini Ghosh	Assistant Professor	
Sudip Kr. Gorey	Assistant Professor	
Sukarna Dey Mondal	Assistant Professor	
Dr. Chaity Sarkar	Assistant Professor	
Subrata Mandal	Assistant Professor	
Soham Dey	Assistant Professor	
Dr. Arindam Chakraborty	Assistant Professor	
Dr. Santigopal Pain	Assistant Professor	
Dr. Raj Kumar Samanta	Professor	
Dr. Debaprasad Mukherjee	Professor	
Dr. Gour Sundar Mitra Thakur	Associate Professor	
Avijit Bhowmick	Assistant Professor	
Prabal Kumar Sahu	Assistant Professor	
Manas Kumar Roy	Assistant Professor	
Md Keramot Hossain Mondal	Assistant Professor	INFORMATION TECHNOLOGY
Prasanta Majumder	Assistant Professor	TECHNOLOGI
Dr. Dinesh Kr. Pradhan	Assistant Professor	
Dr. Shashi Bajaj Mukherjee	Assistant Professor	
Dr. Moumita Pradhan	Assistant Professor	
Priyanka Roy	Assistant Professor	
Paramita Manna	Assistant Professor	

Name of the Full-time teacher	Designation	Name of the Department
Dr. Khondekar Mofazzal Hossain	Professor	•
Dr. Bijoy Laxmi Koley (Midya)	Assistant Professor	
Dr. Debasish De	Asst. Professor	
Samujjwal Roy	Assistant Professor	
Ritu Rani De (Maity)	Assistant Professor	
Chandan Das	Assistant Professor	APPLIED
Suman Dasgupta	Assistant Professor	ELECTRONICS & INSTRUMENTATION
Shibendu Mahata	Assistant Professor	ENGINEERING
Sumana Roy	Assistant Professor	
Dr. Sharmistha De Dutta	Assistant Professor	
Soumen Mallick	Assistant Professor	
Anirban Bose	Assistant Professor	
Kamalika Tiwari	Assistant Professor	
Dr. Kanchan Chatterjee	Professor	
Dr. Chandan Chattoraj	Professor	
Dr. Subrata Samanta	Associate Professor	
Dr. Arijit Banerjee	Associate Professor	
Shyama Charan Chakrabarty	Associate Professor	
Ranjit Kumar Roy	Assistant Professor	
Dr. Manoj Kundu	Assistant Professor	
Pabitra Kr. Mandal	Assistant Professor	
Partha Sarathi Bose	Assistant Professor	
Shivabrata Mojumdar	Assistant Professor	
Dr. Rupali	Assistant Professor	
Suman Karmakar	Assistant Professor	MECHANICAL
Subhajit Bhattacharya	Assistant Professor	ENGINEERING
Chitta Sahana	Assistant Professor	
Subhas Chandra Moi	Assistant Professor	
Siddhartha Bhowmick	Assistant Professor	
Dr. Saurav Ranjan Das	Associate Professor	
Subhashish Pal	Assistant Professor	
Rajeev Ranjan	Assistant Professor	
Arka Banerjee	Assistant Professor	
Rakesh Biswas	Assistant Professor	
Anubhav Roy	Assistant Professor	
Pranesh Kr. Das	Assistant Professor	
Deepak Kumar	Assistant Professor	
Dr. Sanjay Sengupta	Assistant Professor	
Dr. Sabyasachi Chandra	Professor	ON W
Subhransu Goswami	Assistant Professor	CIVIL ENGINEERING
Chhanda Mondal Roy	Assistant Professor	
Ashis Som	Assistant Professor	

Name of the Full-time teacher	Designation	Name of the Department
Prakash Mondal	Assistant Professor	•
Arijit Kumar Banerji	Assistant Professor	
Md. Hamjala Alam	Assistant Professor	
Shovan Roy	Assistant Professor	
Chanchal Das	Assistant Professor	
Ankita Som	Assistant Professor	
Amit Kotal	Assistant Professor	
Anindita Pan	Assistant Professor	
Anupam Kumar Biswas	Assistant Professor	CIVIL
Pranoy Roy	Assistant Professor	ENGINEERING
Sayantan Dutta	Assistant Professor	
Soumyadip Das	Assistant Professor	
Sarabjeet Lahiri	Assistant Professor	
Debadrita Sen	Assistant Professor	
Avijit De	Assistant Professor	
Subhashis Chowdhury	Assistant Professor	
Suvankar Maiti	Assistant Professor	
Koyendrik Bhattacharya	Assistant Professor	
Dr. Rajib Roy	Professor	
Dr. Arunava Mookherjee	Professor	
Dr. Indrani Sengupta	Assistant Professor	
Partha Chattopadhyay	Assistant Professor	MASTERS IN
Sandip Mukherjee	Assistant Professor	BUSINESS
Krishna Roy	Assistant Professor	ADMINISTRATION
Dr. Bhaswati Roy	Assistant Professor	
Niloy Kumar Bhattacharjee	Assistant Professor	
Aparna Bhaduri	Assistant Professor	
Dr. Pabitra Kumar Dey	Assistant Professor	
Subir Gupta	Assistant Professor	
Debasis Guha	Assistant Professor	
Ansuman Mahanty	Assistant Professor	MASTERS IN COMPUTER
Subhrangsu Chandra	Assistant Professor	APPLICATIONS
Falguni Chakraborty	Assistant Professor	
Uday Kumar Banerjee	Assistant Professor	
Dr. Mouparna Nandan	Assistant Professor	

# 3.1 Teachers Receiving Ph.D Degree during the Academic Year 2019-20

In the last academic year, the following faculty members have received their Ph.D degrees;

Table 3.2- Faculty Members of Different Departments Receiving Their Ph.D Degree during 2019-20 Academic year

Name	Department
Dr. Soumen Mallick	AEIE
Dr. Sourav Paul	AEIE
Dr. Sneha Sultana	MCA
Dr. Aritra Bhowmik	ECE
Dr. Rajdeep Ray	ECE
Dr. Subhas Chandra Moi	ECE

## 4. PARTICIPATION IN SEMINAR, WORKSHOP & FACULTY DEVELOPMENT PROGRAM

As we know that faculties have the most important role to play in influencing the student's career and unarguably an institution having the best faculties who are skilled in latest technologies will top the tables in coming years. This in turn poses a great challenge to the quality of education provided to the young and promising students. Because of this, many educational institutions are finding it difficult to maintain their education standards, as providing state of the art infrastructure alone is not enough but having the right faculty is equally important.

The Faculty Development Program provides opportunities for faculty to reflect on current knowledge about and practice of effective teaching and learning through dialogue, assessment and research. The Faculty Development Program hosts group workshops and individual consultations for the faculty to develop and share their experiences and explore creative pedagogic methods and resources for different settings and outcomes of student learning. The aim of the faculty development programmes is to promote campus-wide excellence in teaching which supports the professional development of new faculty members in their early careers and enhances student learning.

If we consider all these things in the Faculty Development Program then any faculty can easy to grow in their professional career and achieve the latest opportunities which are beneficial for them.

## 4.1 Benefits of the Faculty Development Program

- To make faculty skilled in latest technologies
- To make them integrate more technology onto their teaching
- To orient faculty to institution's objective & vision
- To expand faculty roles
- To help faculty find work balance
- To help for making quality and concern in the education
- To improve research skills with quality work

## **4.2 Details of the Faculty Members Participated in FDPs**

**Table 4.1- Participation of Faculty Members in FDPs** 

Name	Name of the FDP Program	Duration	Department
Prof. (Dr.) Abhijit Kumar Ghosh	Faculty Development Programme on "Behavioural Remodelling with Mentoring Pedagogy and Need of Mental Health Sessions for Class Room Delivery of Teachers" organised by E&ICT Academy IIT Guwahati in association with Dr. B. C. Roy Polytechnic	08-01- 2020 to 12- 01-2020	Basic Science and Humanities
Prof. Sarabjeet Lahiri	Faculty Development Programme on "Behavioural Remodelling with Mentoring Pedagogy and Need of Mental Health Sessions for Class Room Delivery of Teachers" organised by E&ICT Academy IIT Guwahati in association with Dr. B. C. Roy Polytechnic	08-01- 2020 to 12- 01-2020	Basic Science and Humanities
Prof. Sudip Kumar Gorey	Faculty Development Programme on "Behavioural Remodelling with Mentoring Pedagogy and Need of Mental Health Sessions for Class Room Delivery of Teachers" organised by E&ICT Academy IIT Guwahati in association with Dr. B. C. Roy Polytechnic	08-01- 2020 to 12- 01-2020	Basic Science and Humanities
Prof. (Dr.) Pabitra Kumar Dey	Faculty Development Programme on "Behavioural Remodelling with Mentoring Pedagogy and Need of Mental Health Sessions for Class Room Delivery of Teachers" organised by E&ICT Academy IIT Guwahati in association with Dr. B. C. Roy Polytechnic	08-01- 2020 to 12- 01-2020	Department of Computer Applications (MCA)
Prof. Ansuman Mahanty	Faculty Development Programme on "Behavioural Remodelling with Mentoring Pedagogy and Need of Mental Health Sessions for Class Room Delivery of Teachers" organised by E&ICT Academy IIT Guwahati in association with Dr. B. C. Roy Polytechnic	08-01- 2020 to 12- 01-2020	Department of Computer Applications (MCA)
Prof. Subhrangsu Chandra	Faculty Development Programme on "Behavioural Remodelling with Mentoring Pedagogy and Need of Mental Health Sessions for Class Room Delivery of Teachers" organised by E&ICT Academy IIT Guwahati in association with Dr. B. C. Roy Polytechnic	08-01- 2020 to 12- 01-2020	Department of Computer Applications (MCA)

Prof. Biswadev Goswami	Faculty Development Programme on "Behavioural Remodelling with Mentoring Pedagogy and Need of Mental Health Sessions for Class Room Delivery of Teachers" organised by E&ICT Academy IIT Guwahati in association with Dr. B. C. Roy Polytechnic	08-01- 2020 to 12- 01-2020	Computer Science & Engineering
Prof. Shovan Roy	Faculty Development Programme on "Behavioural Remodelling with Mentoring Pedagogy and Need of Mental Health Sessions for Class Room Delivery of Teachers" organised by E&ICT Academy IIT Guwahati in association with Dr. B. C. Roy Polytechnic	08-01- 2020 to 12- 01-2020	Civil Engineering Department
Prof. Arijit Kumar Banerji	Faculty Development Programme on "Behavioural Remodelling with Mentoring Pedagogy and Need of Mental Health Sessions for Class Room Delivery of Teachers" organised by E&ICT Academy IIT Guwahati in association with Dr. B. C. Roy Polytechnic	08-01- 2020 to 12- 01-2020	Civil Engineering Department
Prof. Chanchal Das	Faculty Development Programme on "Behavioural Remodelling with Mentoring Pedagogy and Need of Mental Health Sessions for Class Room Delivery of Teachers" organised by E&ICT Academy IIT Guwahati in association with Dr. B. C. Roy Polytechnic	08-01- 2020 to 12- 01-2020	Civil Engineering Department
Prof. Md. Hamjala Alam	Faculty Development Programme on "Behavioural Remodelling with Mentoring Pedagogy and Need of Mental Health Sessions for Class Room Delivery of Teachers" organised by E&ICT Academy IIT Guwahati in association with Dr. B. C. Roy Polytechnic	08-01- 2020 to 12- 01-2020	Civil Engineering Department
Prof. Soumyadip Das	Faculty Development Programme on "Behavioural Remodelling with Mentoring Pedagogy and Need of Mental Health Sessions for Class Room Delivery of Teachers" organised by E&ICT Academy IIT Guwahati in association with Dr. B. C. Roy Polytechnic	08-01- 2020 to 12- 01-2020	Civil Engineering Department
Prof. Dipta Chaudhuri	Faculty Development Programme on "Behavioural Remodelling with Mentoring Pedagogy and Need of Mental Health Sessions for Class Room Delivery of Teachers" organised by E&ICT Academy IIT Guwahati in association with Dr. B. C. Roy Polytechnic	08-01- 2020 to 12- 01-2020	Electronics and Communication Engineering

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Prof. Anirban Chattopadhyay	Faculty Development Programme on "Behavioural Remodelling with Mentoring Pedagogy and Need of Mental Health Sessions for Class Room Delivery of Teachers" organised by E&ICT Academy IIT Guwahati in association with Dr. B. C. Roy Polytechnic	08-01- 2020 to 12- 01-2020	Electronics and Communication Engineering
Prof. (Dr.) Mauparna Nandan	Seminar on "Enterprise Architecture and its Security"	21-01- 2020	Department of Computer Applications (MCA)
Prof. Krishna Roy	Faculty Development Programme on "Entrepreneurship" Level 1 Certification organised by Wadhwani Foundation	26-02- 2020	Faculty of Management Studies (FMS/MBA)
Prof. Krishna Roy	Faculty Development Programme on "Entrepreneurship" Level 2 Certification organised by Wadhwani Foundation	06-03- 2020	Faculty of Management Studies (FMS/MBA)
Niloy Kumar Bhattacherjee	Short Term Training on "MOODLE LMS SPOKEN TUTORIAL PROJECT, IIT BOMBAY"	03-03- 2020 to 24- 03-2020	Faculty of Management Studies (FMS/MBA)
Dr Abhijit K Ghosh	Faculty Development Programme on Mentoring Pedagogy and Teaching for Higher Education E&ICT Academy IIT Guwahati and BCREC	29-06- 2020 to 06- 07-2020	Basic Science and Humanities (Chemistry)
Dr. Saurav Ranjan Das	Faculty Development Programme on "Mastering the Art of Handling Post Covid Challenges for Sustainable Development" Dr. M.G.R Educational and Research Institute	19-05- 2020 to 23- 05-2020	Basic Sc. and Humanities
Dr Abhijit K Ghosh	Faculty Development Programme on "Mastering the Art of Handling Post Covid Challenges for Sustainable Development Faculty of Humanities and Sciece", Dr.M.G.R EDUCATIONAL AND RESEARCH INSTITUTEAdayalampattu Phase II campus, Maduravoyal, Chennai	19-05- 2020 to 23- 05-2020	Basic Science and Humanities (Chemistry)
Dr. Saurav Ranjan Das	Faculty Development Programme on "VIRTUAL TEACHING- Learning MOODLE the Efficient way" Dr. M.G.R Educational and Research Institute	29-05- 2020 to 30- 05-2020	Basic Science and Humanities

Dr Abhijit K Ghosh	Faculty Development Programme on "VIRTUAL TEACHING - Learning MOODLE the Efficient way Faculty of Humanities and Science", Dr.M.G.R EDUCATIONAL AND RESEARCH INSTITUTE, Adayalampattu, Phase - II Campus in association with The Institution of Engineers (India), Tiruvallur Local Centre	29-05- 2020 to 30- 05-2020	Basic Science and Humanities (Chemistry)
Dr. Saurav Ranjan Das	Faculty Development Programme on "Role of Technology in a Post Covid World" R.M.K. Engineering College	06-12- 2020	Basic Science and Humanities
Dr. Saurav Ranjan Das	Faculty Development Programme on "Mentoring Pedagogy and Teaching for Higher Education" E & ICT academy, IIT Guwahati in association with BCREC	29-06- 2020 to 06- 07-2020	Basic Science and Humanities
Dr Abhijit K Ghosh	Short Term Training on "Moodle- An ICT Based Learning Management System (LMS) to Conquer the Academic Lock Down BCREC WITH SPOKEN LEARNING PROJECT IIT BOMBAY	03-03- 2020 to 24- 03-2020	Basic Science and Humanities (Chemistry)
Dr Abhijit K Ghosh	Faculty Development Programme on ROLE OF TECHNOLOGY IN POST COVID WORLD RMK ENGINEERING COLLEGE CHENNI	12-6-2020	Basic Science and Humanities (Chemistry)
Dr. Saurav Ranjan Das	Short Term Training on "Research Methodology and Intellectual Property Right" National Institute of Technical Teachers Training and Research, Kolkata	13-04- 2020 to 24- 04-2020	Basic Science and Humanities
Dr. Saurav Ranjan Das	International Webinar on "Advanced Functional Materials for Biomedical & Energy" LOYOLA College, Chennai	24-06- 2020 to 25- 06-2020	Basic Science and Humanities
Dr. Saurav Ranjan Das	Webinar "Psychological Council" MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY	18-05- 2020	Basic Science and Humanities
Dr. Saurav Ranjan Das	Short Term Training on "Moodle Learning Management System" IIT Bombay in collaboration with BCREC	03-03- 2020 to 24- 03-2020	Basic Science and Humanities

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Live Talk Show on "Leadership talk with secretary ministry and Chief Innovation officer MHRD" MHRD and AICTE	13-06- 2020	Basic Science and Humanities
International Webinar "New Horizons of Chemistry" international webinar Bidhan Chandra College, Asansol	19-06- 2020	Basic Science and Humanities
Online Program on "COVID-19" Harvard Medical School Learning Lab	09-04- 2020	Basic Science and Humanities
Online Virtual Session on "Mind Full to mindful" Dr. M.G.R. Educational and Research Institute	23-06- 2020	Basic Science and Humanities
Live Talk Show on "Leadership talk with Dipendra Manocha and Chief Innovation Officer, MHRD" MHRD and AICTE	27-06- 2020	Basic Science and humanities
Faculty Development Programme on "Artificial Intelligence and Data Science Oriental Institute of Science & Technology", Bhopal	10-06- 2020 to 14- 06-2020	Department of Information Technology
Faculty Development Programme on "Advances in Civil and Structural Engineering Government College of Engineering, Karad & Government College of Engineering", Nagpur	15-06- 2020 to 19- 06-2020	Civil Engineering Department
Faculty Development Programme on "Role of Technology in a Post Covid World R.M.K Engineering College, Affiliated to Anna University", Chennai	12-06- 2020	Department of ECE
Short Term Training on "Moodle", Dr. B.C.Roy Engineering College	03-03- 2020 to 24- 03-2020	Information Technology
Short Term Training on "Moodle" Dr. B.C Roy Engineering College	03-03- 2020 to 24- 03-2020	Information Technology
International Webinar on "Overcome the unfamiliar" international Webinar St. Cyril's College, Adoor	26-06- 2020	Basic Science and Humanities
	ministry and Chief Innovation officer MHRD" MHRD and AICTE  International Webinar "New Horizons of Chemistry" international webinar Bidhan Chandra College, Asansol  Online Program on "COVID-19" Harvard Medical School Learning Lab  Online Virtual Session on "Mind Full to mindful" Dr. M.G.R. Educational and Research Institute  Live Talk Show on "Leadership talk with Dipendra Manocha and Chief Innovation Officer, MHRD" MHRD and AICTE  Faculty Development Programme on "Artificial Intelligence and Data Science Oriental Institute of Science & Technology", Bhopal  Faculty Development Programme on "Advances in Civil and Structural Engineering Government College of Engineering, Karad & Government College of Engineering", Nagpur  Faculty Development Programme on "Role of Technology in a Post Covid World R.M.K Engineering College, Affiliated to Anna University", Chennai  Short Term Training on "Moodle", Dr. B.C.Roy Engineering College  Short Term Training on "Moodle" Dr. B.C Roy Engineering College  International Webinar on "Overcome the unfamiliar" international Webinar St. Cyril's	ministry and Chief Innovation officer MHRD MHRD and AICTE  International Webinar "New Horizons of Chemistry" international webinar Bidhan Chandra College, Asansol  Online Program on "COVID-19" Harvard Medical School Learning Lab  Online Virtual Session on "Mind Full to mindfull" Dr. M.G.R. Educational and Research Institute  Live Talk Show on "Leadership talk with Dipendra Manocha and Chief Innovation Officer, MHRD" MHRD and AICTE  Faculty Development Programme on "Artificial Intelligence and Data Science Oriental Institute of Science & Technology", Bhopal  Faculty Development Programme on "Advances in Civil and Structural Engineering Government College of Engineering, Karad & Government College of Engineering, Nagpur  Faculty Development Programme on "Role of Technology in a Post Covid World R.M.K Engineering College, Affiliated to Anna University", Chennai  Short Term Training on "Moodle", Dr. B.C.Roy Engineering College  Short Term Training on "Moodle" Dr. B.C. Roy Engineering College  Short Term Training on "Moodle" Dr. B.C. Roy Engineering College  International Webinar on "Overcome the unfamiliar" international Webinar St. Cyril's

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Dr. Saurav Ranjan Das	National Webinar on "Positive communication Beyond Pandemic Grief" St. Cyril's College, Adoor	30-05- 2020	Basic Science and Humanities
Siddhartha Bhowmick	Webinar on "Opportunities in Solar - Becoming #aatmanirbhar TPSDI", TATA POWER	23-06- 2020	Mechanical Engineering
Siddhartha Bhowmick	Live Talk Show on "Global Online Learning Platforms & Future of Jobs" INDIASPARK	27-06- 2020	Mechanical Engineering
Dr. Chandan Chattoraj	Faculty Development Programme on "NBA Accreditation and Teaching - Learning in Engineering (NATE) Swayam-NPTEL (AICTE)"	01-01- 2020 to 30- 04-2020	Mechanical Engineering
Dr. Gour Sundar Mitra Thakur	Faculty Development Programme on "One week online international FDP" on Recent Advances in Computer Science and Allied Domains (RACSAD 2020) Sharda University, India	08-06- 2020 to 12- 06-2020	Information Technology
Snehashis Ghoshal	Faculty Development Programme on "ONE WEEK FDP ON FACTS AND FACETS OF ENVIRONMENT (A COVID-19 PERSPECTIVE)", JIS College of Engineering (online)	18-05- 2020 to 22- 05-2020	PHYS-CHEM- MATH-HU
Dr. Sukalpa Dey	Short Term Training on Research Methodology and Intellectual Property Right (IPR) National Institute of Technical Teachers' Training & Research, Kolkata. (NITTTR)	13-04- 2020 to 24- 04-2020	Basic Science & Humaniries
Dr. Sukalpa Dey	Faculty Development Programme on "Mentoring Pedagogy and Teaching for Higher Education" E&ICT Academy IIT Guwahati	29.06.2020 to 06.07.2020	Basic Science & Humanities
Dr. Sukalpa Dey	Faculty Development Programme on "Mastering the Art of Handling Post Covid Challenges for Sustainable Development" Faculty of Humanities and Sciece, Adayalampattu Phase II campus, Maduravoyal, Chennai, Dr.M.G.R EDUCATIONAL AND RESEARCH INSTITUTE	19.05.2020 to 23.05.2020	Basic Science & Humanities

Dr. Sukalpa Dey	Faculty Development Programme on "VIRTUAL TEACHING - Learning MOODLE the Efficient way" Faculty of Humanities and Science, Adayalampattu Phase - II Campus in association with The Institution of Engineers (India), Tiruvallur Local Centre. Dr. M. G. R. EDUCATIONAL AND RESEARCH INSTITUTE	29.05.2020 to 30.05.2020	Basic Science & Humanities
Dr. Sukalpa Dey	Faculty Development Programme on "Role of Technology in a Post Covid World" R. M. K. Engineering College, Chennai	12.06.2020	Basic Science & Humanities
Arijit Banerjee	Short Term Training on "Moodle Learning Management System Spoken Tutorials", IIT Bombay	03-03- 2020 to 24- 03-2020	Mechanical Engineering
Rajeev Ranjan	Faculty Development Programme on "Importance of Mathematics in Science and Technology" GMR Institute of Technology	25-06- 2020 to 29- 06-2020	Mechanical Engineering
Rajeev Ranjan	Online Workshop on "Inculcating Universal Human Values in Technical Education AICTE"	03-05- 2020 to 07- 05-2020	Mechanical Engineering
Rajeev Ranjan	webinar on VIRTUAL TRIBOLOGY LAB & LIVE DATA Sathyabama Institute of Science and technology	26-06- 2020	Mechanical Engineering
Rajeev Ranjan	Webinar on "Scope in Administrative Jobs After Engineering" NSHM Knowledge Campus	21-06- 2020	Mechanical Engineering
Rajeev Ranjan	Webinar on "Opportunities in Solar TPSDI"	23-06- 2020	Mechanical Engineering
Dr. Rajib Banerjee	Short Term Training Programme on "NBA Accreditation and SAR Preparation NITTTR, Kolkata in association with MHRD""	20-4-2020 to 24-4- 2020	Electronics and Communication Engineering
Dr.Rajib Banerjee	Short Term Training Programme on "HRD through Training and Development NITTTR, Kolkata, in association with MHRD"	27-4-2020 to1-5-2020	Electronics and Communication Engineering
Dr. Rajib Banerjee	Short Term Training Programme on "Induction Training NITTTR", Kolkata in association with MHRD	25-4-2020 to 29-5- 2020	Electronics and Communication Engineering

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Sreejata Sen Sarma	Short Term Training on "Moodle- An ICT Based Learning Management System (LMS) to Conquer the Academic Lock Down IIT Bombay and the "Electronics and Communication Engineering Department" of Dr. B.C.Roy Engineering College, Durgapur	03-03- 2020 to 24- 03-2020	Mathematics
Dr Abhijit Kumar Ghosh	Webinar on "POST COVID ROLE OF SCIENCE AND TECHNOLOGY TOWARDS SELF RELIANT INDIA IEEE BANGALORE SECTION"	19-5-2020	Basic Science and Humanities (Chemistry)
Dr Abhijit Kumar Ghosh	International Webinar "ON NEW HORIZON OF CHEMISTRY CHEMISTRY DEPARTMENT BIDHANCHANDRA CHANDRA COLLEGE ASANSOL"	19-6-2020	Basic Science and Humanities (Chemistry)
Dr Abhijit Kumar Ghosh	National Webinar on "RESEARCH METHODOLOGY LOYOLA COLLEGE CHENNAI"	12-6-2020 to 13-6- 2020	Basic Science Department (Chemistry)
Dr Abhijit Kumar Ghosh	International Webinar on "ADVANCED FUNCTIONAL MATERIALS FOR BIOMEDICAL AND ENERGY LOYOLA COLLEGE"	24-6-2020 to 25-6- 2020	Basic Science and Humanities (Chemistry)
Surajit Dey	Online Training on "DATA SCIENCE INTERNSHALA TRAINING PROGRAMME"	05-06- 2020 to 17- 07-2020	Computer Science and Engineering
Dr. Rajdeep Ray	Faculty Development Programme on "Modern Trends in Electrical Engineering" Dr. B. C. Roy Polytechnic(A unit of Dr. B. C. Roy Engineering College, Durgapur)	23-06- 2020 to 27- 06-2020	Electronics and Communication Engineering
Avijit De	Short Term Training on "Moodle Learning Management System IIT Bombay and the "Electronics and Communication Engineering Department" of Dr. B.C.Roy Engineering College	03-03- 2020 to 24- 03-2020	Mathematics
Mou Das Mahapatra	Faculty Development Programme on "MODERN TRENDS IN ELECTRICAL ENGINEERING" DR. B. C. ROY POLYTECHNIC, DURGAPUR	23-06- 2020 to 27- 06-2020	Electrical engineering

Tushnik Sarkar	Short Term Training on "Moodle Learning Management System Spoken Tutorial Project", IIT Bombay	03-03- 2020 to 24- 03-2020	Electrical engineering
Tushnik Sarkar	Faculty Development Programme on "Modern Trends in Electrical Engineering", Department of Electrical Engineering of Dr. B. C. Roy Polytechnic	23-06- 2020 to 27- 06-2020	Electrical engineering
Pranoy Roy	Short Term Training on "Moodle Learning Management System Spoken Tutorial Project", IIT Bombay	03-03- 2020 to 24- 03-2020	Civil Engineering
Pranoy Roy	Faculty Development Programme on "Internet of Things AICTE Training And Learning (ATAL) Academy"	07-05- 2020 to 11- 05-2020	Civil Engineering
Pranoy Roy	Online Course on "Basics of SAR Remote Sensing Indian Institute of Remote Sensing (ISRO)"	26-05- 2020 to 30- 05-2020	Civil Engineering
Pranoy Roy	Faculty Development Programme on "Role of Teachers and Educational Institutes in Unnat Bharat Abhiyan" (UBA) NITTR CHANDIGARH	18-05- 2020 to 22- 05-2020	Civil Engineering
Pranoy Roy	Faculty Development Programme on "Waste Management NITTR CHANDIGARH"	11-05- 2020 to 15- 05-2020	Civil Engineering
Pranoy Roy	Short Term Training Programme on "Earthquake Resistant Structures" NITTR KOLKATA	15-06- 2020 to 19- 06-2020	Civil Engineering
Pranoy Roy	Short Term Training Programme on "IS:456-2000 Interpretation, Application, Limitations and Software Application" NITTR KOLKATA	22-06- 2020 to 26- 06-2020	Civil Engineering
Md Keramot Hossain Mondal	Faculty Development Programme on "Python and it's application in Robotics", TCS	26-06- 2029	Information Technology
Prof. Ritu Rani De(Maity)	Faculty Development Programme on "Python and it's application in Robotics" TATA Consultancy services	26-06- 2020	Electronics and Instrumentation Engineering

Dr. Khondekar Mofazzal Hossain	Faculty Development Programme on "Python and it's application in Robotics" TATA Consultancy Services	26-06- 2020	Applied Electronics and Instrument Engineering
Shaon Bandyopadhyay	Faculty Development Programme on "Modern Trends in Computer Science" Dr. B.C.Roy polytechnic, Durgapur	01-07- 2020 to 02- 07-2020	Computer science & Technology
Arijit Banerjee (Coordinator)	Faculty Development Programme on "Online Mentoring Pedagogy and Teaching for Higher Education" E&ICT Academy IIT Guwahati in association with the Departments of Electrical Engineering and Mechanical Engineering, Dr. B. C. Roy Engineering College, Durgapur	29-06- 2020 to 06- 07-2020	Mechanical Engineering
Prabal Kumar Sahu	Faculty Development Programme on "Python and it's application in Robotics", TCS	26-06- 2020	Information Technology
Dr. Sourav Paul	Faculty Development Programme on "Modern trends in electrical engineering" Dr. B. C. Roy Polytechnic	23-06- 2020 to 27- 06-2020	Electrical engineering
Dr. Sourav Paul	Faculty Development Programme on "Python and it's application in Robotics" Dr. B. C. Roy Engineering College, Durgapur	26-06- 2020	Electrical engineering
Dr. Sneha Sultana	Faculty Development Programme on "Modern Trends in Electrical Engineering" Dr. B. C. Roy Polytechnic	23-06- 2020 to 27- 06-2020	Electrical Engineering
Dr. Sneha Sultana	Faculty Development Programme on "TCS digital workshop" Dr. B. C. Roy Engineering College - Placement Cell	26-06- 2020	Electrical Engineering
Mr. Debasis Guha	Faculty Development Programme on "Python and it's application in Robotics" Tata Consultancy Services	26-06- 2020	Master of Computer Applications (MCA)
Mr. Debasis Guha	Faculty Development Programme on "Modern Trends In Electrical Engineering Department of Electrical Engineering, Dr. B.C. Roy Polytechnic, Durgapur	23-06- 2020 to 27- 06-2020	Master of Computer Applications (MCA)

Dr. Suneeta De	Online Course on "Exploring English - Language and Culture British Council"	15-05- 2020 to 15- 06-2020	Basic Science & Humanities
Dr. Suneeta De	Online Course on "Ideas for a better world - Change through Policy Making British Council"	15-05- 2020 to 15- 06-2020	Basic Science & Humanities
Chandan Das	Faculty Development Programme on "Python and it's application in Robotics" Tata Consultancy Services	26-06- 2020	Applied Electronics and Instrument Engineering
Dr. Saurav Ranjan Das	Seminar on "Enterprise Architecture and its Security" BCREC, BCRP and IEEE	21-01- 2020	Basic Science and Humanities
Dr. Sukalpa Dey	Short Term Training on "Moodle Learning Management System" Dr. B. C. Roy Engineering College, Durgapur	03-03- 2020 to 24- 03-2020	Basic Science & Humanities
Dr. Chandan Koner	Faculty Development Programme on "Python and it's application in Robotics" TCS	26-06- 2020	Computer Science and Engineering
Arka Banerjee	Online Course on "E-Sodh Sindhu Web of Science Certification Series"	15-06- 2020	Mechanical Engineering
Arka Banerjee	Live Talk show on "Global Online Learning Platforms & & Future of Jobs" INDIASPARK	27-06- 2020	Mechanical Engineering
Arka Banerjee	International Online Faculty Enrichment Programme on "Tips & Tricks for Publishing in International Scientific Journals" Department of Zoology, Chemistry, Botany & Physics (Under DBT-Star College Strengthening Scheme, Govt. of India), Surendranath College, 24/2 M.G.Road, Kolkata-700009	20-06- 2020	Mechanical Engineering
Arka Banerjee	Faculty Development Program on "Python and it's application in Robotics" TATA Consultancy Services	26-06- 2020	Mechanical Engineering

Mr. Chandan Das	Faculty Development Program on "Python and it's application in Robotics" TATA Consultancy Services	26-06- 2020	Applied Electronics and Instrument Engineering
Dr. Saurav Ranjan	Webinar on "Engineering tomorrow:New fields,	13-06-	Basic Science
Das	Newer prospects" ABP Education	2020	and Humanities
Dr.Saurav Ranjan	Webinar on "Media Educators' Round Table" ABP Education	06-06-	Basic Science
Das		2020	and Humanities
Dr. Saurav Ranjan	Webinar on "VCs' Round Table- Higher Education ABP Education	30-05-	Basic Science
Das		2020	and Humanities
Dr. Saurav Ranjan	Webinar on "Hospitality Management" ABP Education	20-06-	Basic Science
Das		2020	and Humanities
Dr. Saurav Ranjan	Webinar on "Design Education" ABP Education	27-06-	Basic Science
Das		2020	and Humanities
Dr. Saurav Ranjan	Workshop on "Best Practices for Teaching Online"	04-07-	Basic Science
Das	ABP Education	2020	and Humanities
Biswajit Saha	Faculty Development Programme on "Effective Engineering Teaching In Practice NPTEL" – IIT Madras	27-01- 2020 to 21- 02-2020	Computer Science and Engineering
Biswajit Saha	Faculty Development Programme on "NBA Accreditation and Teaching - Learning in Engineering (NATE) NPT"EL – IISc Bangalore		Computer Science and Engineering
Basudeb Mondal	Faculty Development Programme on "Modern Trends In Electrical Engineering" Department of Electrical Engineering, Dr. B.C. Roy Polytechnic, Durgapur	23-06- 2020 to 27- 06-2020	Electrical Engineering
Priyanka Roy	Faculty Development Programme on "PYTHON AND IT'S APPLICATION IN ROBOTICS" TATA CONSULTANCY SERVICES	26-06- 2020	Information Technology
Paramita Manna	Short Term Training on "MOODLE -AN ICT BASED LEARNING MANAGEMENT SYSTEM"" Spoken Tutorial Project, IIT Bombay	03-03- 2020 to 24- 03-2020	Information Technology

Paramita Manna	Faculty Development Program on "Python and it's application in Robotics" TCS	26-06- 2020	Information Technology
Biswajit Saha	Faculty Development Program on "Python and it's application in Robotics" TCS	26-06- 2020	Computer Science & Engineering
Saindhab Chattaraj	Faculty Development Program on "Python and it's application in Robotics" TCS	26-06- 2020	Computer Science and Engineering
Amitabha Mandal	Faculty Development Program on "Python and it's application in Robotics" TCS	26-06- 2020	Computer Science and Engineering
Anandaprova Majumder	Faculty Development Program on "Python and it's application in robotics" Tata consultancy services	26-6-2020	Computer Science and Engineering
Anandaprova Majumder	Live Industry Talk Show on Global online learning platforms and future of jobs India spark	27-6-2020	Computer Science and Engineering
Dr. Pabitra Kumar Dey	Short Term Training on "Moodle Learning Management System" IIT Bombay & DR. B.C. ROY ENGINEERING COLLEGE	03-03- 2020 to 24- 03-2020	Master of Computer Applications (MCA)
Dr. Pabitra Kumar Dey	Faculty Development Program on "PYTHON AND IT'S APPLICATION IN ROBOTICS" TCS	26-06- 2020	Master of Computer Applications (MCA)
Amit Kotal	Webinar on "BASIC CONCEPTS OF STEGANOGRAPHY ": HIDING DATA WITHIN DATA MAKAUT	09-06- 2020	Civil Engineering
Syed Zahir Hasan	Faculty Development Program on "National Level 5 Days Online FDP on Machine Learning and Research Opportunities " Saptagiri College of Engineering, Bengaluru-57	15-06- 2020 to 19- 06-2020	Computer Science and Engineering

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Deepak Kumar	Faculty Development Program on "Mentoring Pedagogy and Teaching in Higher Education EICT Academy, IIT Guwahati in association with Department of Electrical Engineering and Mechanical Engineering, Dr. B. C. Roy Engineering College, Durgapur	29-06- 2020 to 06- 07-2020	Mechanical Engineering
Biswajit Mondal	Faculty Development Program on "Python and it's application in Robotics", T.C.S	26-06- 2020	Computer Science and Engineering
Dr. Tribeni Prasad Banerjee	Online Course on "Learning Physics Through Simple Experiments Centre for Continuing Education" of IIT Kanpur	02-04- 2020 to 10- 06-2020	Electronics & Communication Engineering
Dr.Tribeni Prasad Banerjee	Short term Training Program on "Moodle's A Learning Management System" Spoken Tutorial Project, IIT Bombay funded by the National Mission on Education through ICT, MHRD, Govt. of India.	03-03- 2020 to 24- 03-2020	Electronics & Communication Engineering
Prof. Ansuman Mahanty	Faculty Development Program on "Python and it's application in Robotics" Tata Consultancy Services	26-06- 2020	Department of Computer Applications (MCA)
Anandaprova Majumder	Live Talk show on Global Online Learning Platforms & & Future of Jobs delivered by Eminent Speaker Amit Goyal, Head-India & South East Asia, edX INDIASPARK Live Talk show	27-06- 2020	Computer Science & Engineering
Anandaprova Majumder	Webinar on "Celebrate Biodiversity and Environment" Dr. B. C. Roy Polytechnic	06-06- 2020	Computer Science & Engineering
Biswajit Saha	Webinar "Psychological Counseling" MAKAUT	18-05- 2020	Computer Science & Engineering
Biswajit Saha	Webinar "Post COVID-19 Role of Science and Technology" IEEE India Council	19-05- 2020	Computer Science & Engineering
Biswait Saha	Webinar "Celebrate Biodiversity and Environment" DR. B.C Roy Polytechnic	06-06- 2020	Computer Science & Engineering

Biswajit Saha	Short term Training Program on "Moodle Learning Management System" Dr. B. C. Roy Engineering College	03-03- 2020 to 24- 03-2020	Computer Science & Engineering
Soumyadip Das	Short term Training Program on "Moodle Learning Management System" Dr. B.C. Roy Engineering College and IIT Bombay	03-03- 2020 to 24- 03-2020	Department of Civil Engineering
Abhijit Banerjee	Short term Training Program on "Moodle Learning Management System" Dr. B. C. Roy Engineering College, Durgapur	03-03- 2020 to 24- 03-2020	Electronics and Communication Engineering
Dr. Chandan Chattoraj	Faculty Development Programme on "Higher Education 2020: Requirements and Expectations" TPCT's College of Engineering, Osmanabad	08-07- 2020 to 12- 07-2020	Mechanical Engineering
Kingsuk Majumdar	Faculty Development Programme on "Modern Trends In Electrical Engineering" Department of Electrical Engineering, Dr. B.C. Roy Polytechnic, Durgapur held from 23rd June to 27th June, 2020.	23-06- 2020 to 27- 06-2020	Electrical Engineering
Dipak Kumar Dhak	Faculty Development Programme on "Modern Trends In Electrical Engineering Department of Electrical Engineering, Dr. B.C.Roy Polytecnhnic, Durgapur	23-06- 2020 to 27- 06-2020	Electrical Engineering
Falguni Chakraborty	Faculty Development Programme on "Python and it's application in Robotics" TATA CONSULTANCY SERVICES	26-06- 2020	Academic interface programme
Mr. Debasis Guha	Faculty Development Programme on "Higher Education 2020: Requirements and Expectation Internal Quality Assurance Cell (IQAC)", TPCT's College Of Engineering, Osmanabad	08-07- 2020 to 12- 07-2020	Department of Computer Applications (MCA)
Arun Kumar Sadhu	Short Term Training Programme on "Programming in C++ Methodologies" NITTTR Kolkata	20-04- 2020 to 24- 04-2020	Computer Science and Engineering
Arun Kumar Sadhu	Short Term Training Programme on "Artificial Intelligence" NITTTR Kolkata	04-05- 2020 to 08- 05-2020	Computer Science and Engineering
Arun Kumar Sadhu	Faculty Development Programme on "Research Oriented Project Work" NITTTR Chandigarh	11-05- 2020 to 15- 05-2020	Computer Science and Engineering

Arun Kumar Sadhu	Faculty Development Programme on "Data Sciences" IIIT Nagpur	25-05- 2020 to 29- 05-2020	Computer Science and Engineering
Arun Kumar Sadhu	Webinar on "RESEARCH GATEWAY" Annai College	15-05- 2020	Computer Science and Engineering
Arun Kumar Sadhu	Online Training on "How to prepare your manuscript" Elsevier Researchers Academy	29-04- 2020	Computer Science and Engineering
Dr. Tapan Kumar Chattopadhyay	Faculty Development Programme on "Modern Trends in Electrical Engineering" Department of Electrical Engineering", Dr. B.C. Roy Polytechnic, Durgapur	23-06- 2020 to 27- 06-2020	Electrical Engineering
Dr Shashi Bajaj Mukherjee	Faculty Development Programme on "Emerging Trends In Mechanical Engineering Department of Mechanical Engineering", Dr. B. C. Roy Polytechnic, Durgapur	03-07- 2020 to 04- 07-2020	Mathematics (B.Sc & HU)
Dr Shashi Bajaj Mukherjee	Faculty Development Programme on "Python and it's application in Robotics" TCS	26-06- 2020	Mathematics (B.Sc & HU)
Dr Shashi Bajaj Mukherjee	International Webinar on "Bio-mathematical Modeling of Epidemics": Focus on COVID-19 Department of Mathematics, Brahmananda Keshab Chandra College, Kolkata.	25-06- 2020 to 26- 06-2020	Mathematics (B.Sc. & HU)
Dr Shashi Bajaj Mukherjee	Short term Training Program on "Moodle Learning Management System Training Spoken Tutorial Project", IIT Bombay, funded by the National Mission on Education through ICT, MHRD, Govt. of India.	03-03- 2020 to 24- 03-2020	Mathematics (B.Sc. & HU)
Biswajit Saha	Certification Programme on "Python For Beginners (30 Hours Self Paced)" E&ICT Academy IIT Roorkee with CloudxLab	24-05- 2020 to 10- 06-2020	Computer Science and Engineering
Biswajit Saha	Certification Programme on "Python For Machine Learning (40 Hours Self Paced)" E & ICT Academy with CloudxLab	13-06- 2020 to 25- 06-2020	Computer Science and Engineering

Pranesh Kumar Das	Online Course on "Learning Physics Through Simple Experiments" IIT Kanpur	02-04- 2020 to 10- 06-2020	Mechanical Engineering
Pranesh Kumar Das	Faculty Development Programme on "Python and it's application in Robotics", TCS	26-06- 2020	Mechanical Engineering
Arijit Kumar Banerji	Short term Training Program on "Moodle Learning Management System" Dr. B. C. Roy Engineering College, Durgapur	03-03- 2020 to 24- 03-2020	Civil Engineering
Pranesh Kumar Das	Faculty Development Programme on "Emerging Trends In Mechanical Engineering" Dr. B. C. Roy Polytechnic, Durgapur	03-07- 2020 to 04- 07-2020	Mechanical Engineering
Pranesh Kumar Das	Short term Training Program on "Moodle Learning Management System" Dr B. C. Roy Engineering College Durgapur and IIT Bombay	03-03- 2020 to 24- 03-2020	Mechanical Engineering
Avijit De	Faculty Development Programme on "Introduction to Operations Research" NPTEL	24-02- 2020 to 17- 04-2020	Mathematics
Manas Kumar Roy	Faculty Development Programme on "PYTHON AND IT'S APPLICATION IN ROBOTICS" TCS	26-06- 2020	Information Technology
Prof. (Dr.) Jayanta Pal	NPTEL -AICTE Faculty Development Program on "Solar Photovoltaic: Fundamentals, Technology and Applications"	29-07- 2019 to 29-09- 2019	Basic Science and Humanities
Prof. (Dr.) Raj Kumar Samanta	Faculty Development Program on "Problem Solving Through Programming in C" (NPTEL Online Certification)	01-07- 2019 to 30-10- 2019	Information Technology
Prof. (Dr.) Deba Prasad Mukherjee	Faculty Development Program on "Educational Leadership" (NPTEL Online Certification)	01-07- 2019 to 30-09- 2019	Information Technology
Prof. (Dr.) Moumita Pradhan	Faculty Development Program on "Advanced Computer Architecture" (NPTEL Online Certification)	01-07- 2019 to 30-09- 2019	Information Technology
Prof. (Dr.) Gour Sundar Mitra Thakur	Faculty Development Program on "Accreditation and Outcome Based Learning" (NPTEL Online Certification)	01-08- 2019 to 30-10- 2019	Information Technology
Prof. Arka Banerjee	Seminar on "Teaching and Learning Skill Development"	22-08- 2019	Mechanical Engineering
Prof. (Dr.) Chandan Chattoraj	Faculty Development Program on "Robotics: AICTE Training & Learning(ATAL) Academy", Guwahati	9-12-2019 to 13-12- 2019	Mechanical Engineering

Prof. (Dr.) Chandan	Faculty Development Program on	01-08-	Mechanical
Chattoraj	"Accreditation and Outcome Based Learning"	2019 to	Engineering
Chanoraj	(NPTEL Online Certification)	30-10-	Luginceilig
	(NTTEE Offine Certification)	2019	
Prof. Deepak Kumar	Faculty Development Program on "Robotics:	9-12-2019	Mechanical
Tron. Deepwir rammur	AICTE Training & Learning(ATAL) Academy",	to 13-12-	Engineering
	Guwahati	2019	8 33 8
Prof. Dipak Kumar	Faculty Development Program on	01-07-	Electrical
Dhak	"Fundamentals of Electric Drives"(NPTEL)	2019 to	Engineering
		01-09-	
		2019	
Prof. Dipak Kumar	Faculty Development Program on	01-08-	Electrical
Dhak	"Introduction to Research" (NPTEL)	2019 to	Engineering
		30-10-	
		2019	
Prof. Subhajit	Faculty Development Program on	01-08-	Mechanical
Bhattacharya	"An Introduction to Materials: Nature and	2019 to	Engineering
	Properties (Part 1: Structure of Materials)"	30-10-	
	(NPTEL Online Certification)	2019	
Prof. Subhajit	Faculty Development Program on "Robotics:	9-12-2019	Mechanical
Bhattacharya	AICTE Training & Learning(ATAL) Academy",	to 13-12-	Engineering
	Guwahati	2019	
Prof. (Dr.) Dola	Faculty Development Program on "Robotics:	9-12-2019	Electrical
Sinha	AICTE Training & Learning(ATAL) Academy",	to 13-12-	Engineering
	Guwahati	2019	
Prof. Biswajit Saha	Faculty Development Program on	01-07-	Computer
	"Cognition, Transformation and Lives"(NPTEL)	2019 to	Science and
		30-08-	Engineering
		2019	
Prof. Anandaprova	Faculty Development Program on "AI and	23-12-	Computer
Majumder	Machine Learning"	2019 to	Science and
		27-12-	Engineering
D 0 D: 1		2019	G
Prof. Biswadev	Faculty Development Program on "AI and	23-12-	Computer
Goswami	Machine Learning"	2019 to	Science and
		27-12-	Engineering
Drof (Dr.) A1-1	Comingr on "Tagghing and Lagraine Claim	2019	Elastronica and
Prof. (Dr.) Aloke	Seminar on "Teaching and Learning Skill	22-08-	Electronics and Communication
Saha	Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	2019	
	Roy Engineering Conege, Durgapui		Engineering
Prof. (Dr.) Narendra	Seminar on "Teaching and Learning Skill	22-08-	Electronics and
Nath Pathak	Development" organized by ECE Dept., Dr. B. C.	2019	Communication
	Roy Engineering College, Durgapur		Engineering
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Prof. (Dr.) Tribeni	Seminar on "Teaching and Learning Skill	22-08-	Electronics and
Prasad	Development" organized by ECE Dept., Dr. B. C.	2019	Communication
Banerjee	Roy Engineering College, Durgapur		Engineering
Prof. (Dr.) Rajib	Seminar on "Teaching and Learning Skill	22-08-	Electronics and
Banerjee	Development" organized by ECE Dept., Dr. B. C.	2019	Communication
,	Roy Engineering College, Durgapur		Engineering

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Prof. (Dr.) Tapas Mondal	Seminar on "Teaching and Learning Skill Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	22-08- 2019	Electronics and Communication Engineering
Prof. Abhijit Banerjee	Seminar on "Teaching and Learning Skill Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	22-08- 2019	Electronics and Communication Engineering
Prof. Anirban Chattopadhyay	Seminar on "Teaching and Learning Skill Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	22-08- 2019	Electronics and Communication Engineering
Prof. Ankita Mitra	Seminar on "Teaching and Learning Skill Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	22-08- 2019	Electronics and Communication Engineering
Prof. Ardhendu	Seminar on "Teaching and Learning Skill	22-08-	Electronics and
Sekhar Chattopadhyay	Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	2019	Communication Engineering
Prof. Aritra Bhowmik	Seminar on "Teaching and Learning Skill Development" organized by ECE Dept., Dr. B. C.	22-08- 2019	Electronics and Communication
	Roy Engineering College, Durgapur		Engineering
Prof. Debipriya Dutta	Seminar on "Teaching and Learning Skill	22-08-	Electronics and
1101. Beolphya Batta	Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	2019	Communication Engineering
Prof. Dipta	Seminar on "Teaching and Learning Skill	22-08-	Electronics and
Chaudhuri	Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	2019	Communication Engineering
Prof. Keka Hajra	Seminar on "Teaching and Learning Skill Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	22-08- 2019	Electronics and Communication Engineering
Prof. Koustav Roy	Seminar on "Teaching and Learning Skill Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	22-08- 2019	Electronics and Communication Engineering
Prof. Moutusi Mondal	Seminar on "Teaching and Learning Skill Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	22-08- 2019	Electronics and Communication Engineering
Prof. Nilkamal Bhunia	Seminar on "Teaching and Learning Skill Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	22-08- 2019	Electronics and Communication Engineering

Prof. Pradipta Sarkar	Seminar on "Teaching and Learning Skill	22-08-	Electronics and
	Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	2019	Communication Engineering
Prof. Rajdeep Ray	Seminar on "Teaching and Learning Skill Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	22-08- 2019	Electronics and Communication Engineering
Prof. Ramkrishna Rakshit	Seminar on "Teaching and Learning Skill Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	22-08- 2019	Electronics and Communication Engineering
Prof. Sourav Moitra	Seminar on "Teaching and Learning Skill Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	22-08- 2019	Electronics and Communication Engineering
Prof. Tapas Roy	Seminar on "Teaching and Learning Skill Development" organized by ECE Dept., Dr. B. C. Roy Engineering College, Durgapur	22-08- 2019	Electronics and Communication Engineering
Prof. Krishna Roy	Faculty Development Programme on "Data Science" conducted by ATAL, AICTE, GUWAHATI and NPTI, Durgapur	14-10- 2019 to 18-10- 2019	Faculty of Management Studies (FMS/MBA)
Prof. Shovan Roy	Seminar on "Teaching and Learning Skill Development"	22-08- 2019	Civil Engineering
Prof. Arijit Kumar Banerjee	Seminar on "Teaching and Learning Skill Development"	22-08- 2019	Mechanical Engineering
Prof. Chanchal Das	Seminar on "Teaching and Learning Skill Development"	22-08- 2019	Civil Engineering
Prof. Md. Hamjala Alam	Seminar on "Teaching and Learning Skill Development"	22-08- 2019	Civil Engineering
Prof. Ankita Som	Faculty Development Program on "HSE Practices for Offshore and Petroleum Industries" (NPTEL)	01-07- 2019 to 30-10- 2019	Civil Engineering

### 4.3 Benefits Received from FDPs

All the faculty members participating in FDPs have benefitted from different ways. The sense of confidence in implementing new activities in the classroom was high after the workshop and there was an increase in faculty expressing their willingness to try new approaches to teaching. Some of the faculty participants have started writing education research papers for submission to conferences and journals and this increase is largely attributable to the initiatives.

## **4.4 Publication Details**

**Table 4.2- Publication Details of the Faculty Members in Conference Proceedings** 

Name of the teacher	Title of the paper	Name of the conference	Affiliating Institute at the time of publication
D.Mukherjee, Soumyadip Das, P,Saha, S.K.Roy	Analysis of Pedestrian Movements on Sidewalks: A Case Study in Kolkata, India	TRANSBALTICA 2019: TRANSBALTICA XI: Transportation Science and Technology	NIT Durgapur
Dr. Shashi Bajaj Mukherjee	Statistical Comparision of Genetic Sequences to Identify Coding part		Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Dr. Shashi Bajaj Mukherjee	Gene identification algorithms using exploratory statistical analysis of periodicity	International conference on Modeling, Optimization and Computing	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Dr. Shashi Bajaj Mukherjee	Statistical Implication of Genetic Sequences Using Soft Computing		Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Ankita Som, Das, D.	Effect of Drag Force Linearization and Damper Placement Optimization on Semi-Active Sliding Mode Control of offshore Structures	Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economies (CRSIDE-2020),	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Anupam Kumar Biswas, Kumar Datta, A., Topdar, P., & Sengupta, S.	On Effective Placement of Acoustic Emission Sensor in Steel Framed Structure for Damage Detection	IEEE conference on NCETSTEA 2020,	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Arijit Kumar Banerjee, Topdar, P., & Datta, A. K.	Characterization of Stabilized Subgrade on Pavement Performance by means of Finite Element Method	Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economics (CRSIDE- 2020)	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.

Dr. Sharmistha De Dutta	70 Years And After: Role of Memory in redefining the identities of post- Partition migrant survivors resettled in rural West Bengal	IACLALS annual Conference	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Roy,P., Topdar,P., Datta, A.K, Sanjoy Sengupta	On the implementation of auto search algorithm for localisation of AE source: An experimental study	Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economics (CRSIDE- 2020)	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Kundu,T., Datta, A.K., Topdar, P., Sanjoy Sengupta	An experimental study on optimum placement of AE sensor for localizing damage in rail	Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economics (CRSIDE- 2020)	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Anupam Kumar Biswas, Kumar Datta, A., Topdar, P., & Sengupta, S.	On Effective Placement of Acoustic Emission Sensor in Steel Framed Structure for Damage Detection	IEEE conference on NCETSTEA 2020,	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Soumyadip Das, Nandan, K.K., Ali, M.M.J.,	Study of Traffic Behaviour at an Uncontrolled Intersection in Durgapur, India	IEEE conference on NCETSTEA 2020,	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Biswajit Maity, Yashwant Polapragada, <b>Arindam Ghosh</b> , Sanghita Bhattacharjee, and Subrata Nandi.	"Identifying Outdoor Context by Correlating Air and Noise Pollution Sensor Log."	International Conference on COMmunication Systems	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Debipriya Dutta, Somnath Mahato, Souvik Ganguli, Sudip Verma, Soumyajit Raja and Anindya Bose,	"Android Smartphones for GNSS studies in MultiConstellation Environment"	NCETSTEA2020	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.

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Tapas Mondal, Sanya Suman, and Shibu Singh,	"Novel Design of Fern Fractal Based Triangular Patch Antenna,"	NCETSTEA2020	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
<b>Tapas Mondal,</b> Trisha Chandra, Prasenjit Kuila, and Sandip Maity,	"A Flower-Fractal Based Circularly Polarized Wide Beam-Width Folded Antenna,"	NCETSTEA2020	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Marisha Gautam, Pratik Rajhans, Himanshu Kumar Verma, Ketan Dulwani, Ranojoy Chowdhury, Prerona Sanyal and Aloke Saha,	"Ternary Middle Value Decoder (T-MVD) on 90nm CMOS Technology,"	IEEE National Conference on Emerging Trends on Sustainable Technology and Engineering Applications (NCETSTEA) 2020,	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Chandan Kumar Ghosh, Amrita Sarkar, Swati Bhattacharjee, Sarada Tewary, Rimi Chatterji, Keya Pal and Mrinmoy Chatterjee,	"Sotted Microstrip Antenna for Miniaturization,"	NCETSTEA2020	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
P. Roy, D. Roy, <b>R.</b> <b>Banerjee</b>	"A Proficient Video Compression using Block based Fragmented Cosine Transform (BFCT) in Wireless Multimedia Sensor Network (WMSN)"	IEEE NCETSTEA	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
S.Halder, S. Mondal, A.Mondal, R. Banerjee	"Battery Management System Using State of Charge Estimation: An IOT Based Approach"	IEEE NCETSTEA	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
N. Halder, D.Roy, <b>R. Banerjee,</b> P. Roy, P.P.Sarkar, S. Bandhopadhyay	"Automatic Detection and Segmentation of Optic Disc (ADSO) of Retinal Fundus Images Based on Mathematical Morphology"	IEEE NCETSTEA	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.

Sarkar A., <b>Sinha D</b> ., Banerjee R.	, "Automatic Dominion Of DC Smart Grid Enclosing Multilevel Inverter Amidst To Renewable Source",	IEEE conference on NCETSTEA 2020,	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Moumita Pradhan, Pravash Kumar Roy, Tandra Pal	Multi Objective Short Term Hydro Thermal Scheduling Using Meta Heuristic Approaches		Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Mehebub Alam, Shubhrajyoti Kundu, Siddhartha Sankar Thakur, Anil Kumar and Sumit Banerjee,	"An efficient algorithm for line outage identification in smart power grid,"	IEEE PESGRE	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
S. Dey, J. Dey and S. Banerjee,	"Optimization Algorithm Based PID Controller Design for a Magnetic Levitation System,"	2020 IEEE Calcutta Conference (CALCON),	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Anandaprova Majumder, Suvamoy Changder, N. C. Debnath,	Steganography method based on Sudoku Puzzle Generation"	TRENDS AND FUTURE DIRECTIONS)	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Sukarna Dey Mondal, Dipendra Nath Ghosh	Study on Student Absenteeism in an Educational Organization through Fuzzy-MCDM Approaches	Frontiers of Operations Research & Business Studies (FORBS 2019)	Dr. B. C. ROY ENGINEERING COLLEGE, DURGAPUR
Falguni Chakraborty, Provas Kumar Roy, Debashis Nandi	Novel chaotic elephant herding optimization for multilevel thresholding of color image	SoCTA (Soft Computing: Theories and Applications)	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Sukarna Dey Mondal, Dipendra Nath Ghosh	Study on Student Absenteeism in an Educational Organization through Fuzzy-MCDM Approaches	Frontiers of Operations Research & Business Studies (FORBS 2019)	DR. B. C. ROY ENGINEERING COLLEGE, DURGAPUR

Sharmistha De Dutta	The return of Dokra: A revisionary study of the revival and restoration of an ancient historic art form of regional West Bengal, India	9th International Conference on Advances in Social Science, Economics and Management Study - SEM	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
A.K. Das and M. K. Mandal	FPGA Based Chaotic Cryptosystem	2 <sup>nd</sup> Int. Conf. on Advance Computational and Communication Paradigms (ICACCP-2019)	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Subhas Chandra Moi, R.R, A. Bandyopadhyay, P.K.Pal	Design Optimization of Welding Parameters for Multi- response Optimization in TIG Welding Using RSM-Based Grey Relational Analysis	2 <sup>nd</sup> International Conference on Computational Methods in Manufacturing	Department of Mechanical Engineering, IIT Guwahati
Anandaprova Majumder, Suvamoy C, Narayan C. Devnath	A NEW TEXT STEGANOGRAPHY METHOD BASED ON SUDOKU PUZZLE GENERATION	ICETIT 2019	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Prof. S.K. Ghoshal and <b>Dr. Madhusree</b> <b>Kole</b>	SOME SIMPLE APPLICATIONS OF THE CONCEPT OF SUPERACCELERATION IN THE FIELD OF CLASSICAL MECHANICS		Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Abhijit Banerjee, D.N.G, S.Das	A Gamma-Levy Hybrid MetaHeuristic for HyperParameter Tuning of Deep Q Network	Computational Intelligence in Pattern Recognition 2019	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Dr.(Mrs.) Sukalpa Dey,P. Banerjee, , S Dey	Derivatives of Some Natural Products as Corrosion Inhibitor for MildSteel in 1M HCl Medium: Experimental and Theoritical Investigation	GEET - Green Energy and Environmental Technology	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
D. Mukherjee, Soumyadip Das, Pritam saha	Analysis of Pedestrian Movements on Sidewalks: A Case Study in Kolkata, India	TRANSBALTICA XI: Transportation Science and Technology	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.

Md. Hamjala Alam, Santanu Gayen, Vijay Kr. D.	A Review on Integrated Water Resources Management for Solving Water-related Issues	International Conference on Architecture, Civil and Environmental Engineering (ACEE-2019)	NIT Durgapur
S.Das, DR. SARIT PAL	Analysis of Energy-Efficient Routing Protocols in Mobile Ad Hoc Network.	NA	DR. B. C. ROY ENGINEERING COLLEGE, DURGAPUR
A. Chattopadhyay, Mofazzal H. Khondekar, A.K.B	Multivariate Singular Spectral Analysis (MSSA) to explore geomagnetic storm and CME bond	IEEE ASPCON	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
T. Sarkar, Khondekar Mofazzal Hossain, S.BAnerjee	Wavelet based fractal analysis of Solar Wind Speed Signal		Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Chandan Das, S.Chakraborty, R.Ray	A Novel Approach towards Structural and Functional Testing of Digital Microfluidic Biochips	International Conference on Emerging Technologies for Sustainable Development - ICETSD '19	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Chandan Das, S. Chakraborty, Susanta Chakraborty	An Efficient Test and Fault Tolerance Technique for Paper-Based DMFB	23rd International Symposium on VLSI Design and Test	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
PROF. KRISHNA ROY	A study to devise strategies to curb absenteeism rates to ensure sustainable development of private professional colleges of West Bengal"	Sustainable Development- A Value Chain Perspective SDVP-18	MDI Murshidabad
Dr. ARUNAVA MOOKHERJEE	A study to devise strategies to curb absenteeism rates to ensure sustainable development of private professional colleges of West Bengal"	Sustainable Development- A Value Chain Perspective SDVP-18	MDI Murshidabad,
Chandan Das, S.Chakraborty, Suasanta Chakraborty	A Study on Secured Scan Test Approaches for Shift-Registers	International Conference on Emerging Technologies for Sustainable Development - ICETSD '19	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.

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Srijita Chakraborty, Mrinmoy Chakraborty, Narendra Nath Pathak	"Transition of Wide Band to Dual Band CPW fed Rectangular Wearable Microstrip Antenna for Implementation in WBAN",	3rd IEEE International Conference on Electronics, Materials Engineering & Nano-Technology (IEMENTech 2019)	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Srijita Chakraborty, Mrinmoy Chakraborty, Narendra Nath Pathak	"Suppression of Higher Order modes in Wearable Microstrip Antenna using Tuning fork shaped Resonator for Integration in WBAN",	3rd IEEE International Conference on Electronics, Materials Engineering & Nano-Technology (IEMENTech 2019)	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Arnab Mukhopadhaya, Srijita Chakraborty, Saikat Das, Pallab Mohanta1, Siddhartha Sen, Souvik Pradhan, Debajit Kar Barman, Anusua Banerjee, Maitriyee Ray, Malay Gangopadhya, Mrinmoy Chakraborty	Cavity-Backed Substrate Integrated Waveguide Antenna with U-Shaped Slot for Dual Frequency Operation	IEEE International Electromagnetics and Antenna Conference (IEMANTENNA 2019)	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
S. Moitra, S. Nayak, R. Regar, S.Kumari, K.Kumari, F Parween, F. Naseem	Circular Complementary Split Ring Resonators(CSRR) Based SIW BPF	ICACCP	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
A. Chattopadhyay, Mofazzal H. Khondekar, A.K.B	Multivariate Singular Spectral Analysis (MSSA) to explore geomagnetic storm and CME bond	IEEE ASPCON	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
T. Sarkar, Khondekar Mofazzal Hossain, S.BAnerjee	Wavelet based fractal analysis of Solar Wind Speed Signal		Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
Srijita Chakraborty, Mrinmoy Chakraborty, Narendra Nath Pathak	"Transition of Wide Band to Dual Band CPW fed Rectangular Wearable Microstrip Antenna for Implementation in WBAN",	3rd IEEE International Conference on Electronics, Materials Engineering & Nano-Technology (IEMENTech 2019)	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.

Srijita Chakraborty, Mrinmoy Chakraborty, Narendra Nath Pathak	"Suppression of Higher Order modes in Wearable Microstrip Antenna using Tuning fork shaped Resonator for Integration in WBAN",	3rd IEEE International Conference on Electronics, Materials Engineering & Nano-Technology (IEMENTech 2019)	Dr. B C ROY ENGINEERING COLLEGE,DURGAPUR.
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Over the last one year, our dedicated faculty members have submitted and published their research works in reputed journals. Following is the list of the same;

**Table 4.3- Publication Details of the Faculty Members in Journals** 

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication
A ranking method based on interval type-2 fuzzy sets for multiple attribute group decision making	<b>Avijit De</b> , Pradip Kundu, Sujit Das, Smarajit Kar	B.Sc. & HU	Soft Computing	2020
Symbiotic organisms search optimization for multilevel image thresholding	F. Chakraborty, P.K. Roy, and D. Nandi	MCA	International Journal of Swarm Intelligence Research (IJSIR), IGI Global	2020
Modelling the steel microstructure knowledge for in-silico recognition of phases using machine learning	Subir Gupta, Abhijit Banerjee, Jit Sarkar, Malay Kundu, Sudip Kumar Sinha, N.R. Bandyopadhyay, Subhas Ganguly	MCA, ECE	Mater. Chem. Phys	2020
Automatic Recognition of SEM Microstructure and Phases of Steel using LBP and Random Decision Forest Operator	Subir Gupta, Jit Sarkar, M. Kundub, N.R. Bandyopadhyay, Subhas Ganguly	MCA	Measurement	2020
DPL-Based Novel CMOS 1-Trit Ternary Full-Adder	Aloke Saha, Rakesh Kumar Singh, Pragya Gupta and Dipankar Pal	ECE	International Journal of Electronics (IJE), Taylor & Francis,	2020
"DPL-Based Novel Time Equalized CMOS Ternary- to-Binary Converter	Aloke Saha and Dipanakar Pal,	ECE	International Journal of Electronics (IJE), Taylor & Francis,	2020
"Novel Self-Pipelining Approach for Speed-Power Efficient Reliable Binary Multiplication,"	Aloke Saha, Rahul Pal and Jayanta Ghosh,	ECE	Micro and Nanosystems, Bentham Sciene Publication,	2020
"Systematic Design Strategy for DPL-based Ternary Logic Circuit,"	Aloke Saha and Narendra Deo Singh,	ECE	Special Issue on: 2018 IEEE EDKCON Recent Advances in Nano-Electronic Devices and Technology, International Journal of Nanoparticles (IJNP),	2020

"High port isolation of a dual polarized microstrip antenna array using DGS,	Susmita Biswas, Chandan Kumar Ghosh, Soumen Banerjee, Santimoy Mandal & Durbadal Mandal,	ECE	Journal of Electromagnetic Waves and Applications (Taylor & Francis)	2020
"Design of Crescent Shaped 64-Elements Flexible Patch Antenna Array for the Application of Uterine Tumour Detection	Rajasree Hazra, Chandan Kumar Ghosh,	ECE	International Journal of Scientific & Technology Research, Volume-9 Issue-3,	2020
"Design Of Equilateral Pentagon Shaped 4- Elements Flexible Patch Antenna Array For The Application Of Uterine Tumour Detection,"	Rajasree Hazra, Chandan Kumar Ghosh,	ECE	International Journal of Scientific & Technology Research, Volume-9 Issue-2,	2020
"A Novel Adaptive Optimized Fast Blind Channel Estimation for Cyclic Prefix Assisted Space–Time Block Coded MIMO-OFDM Systems"	Shovon Nandi, <b>Narendra Nath</b> <b>Pathak</b> & Arnab Nandi	ECE	Wireless Personal Communications	2020
"Analyses of combined DSRR and EBG structures over SIW and HMSIW for obtaining band pass response"	S. Moitra and P. S. Bhowmik,	ECE	Wireless Personal Communication, Springer,	2020
Modelling the steel microstructure knowledge for in-silico recognition of phases using machine learning,	Subir Gupta, Abhijit Banerjee, Jit Sarkar, Malay Kundu, Sudip Kumar Sinha, N.R. Bandyopadhyay, Subhas Ganguly	ECE	Materials Chemistry and Physics, Volume 252,2020,	2020
Comparative Performance Study of Optimal Interval Type-2 Fuzzy PID Controllers with Practical System	<b>De(Maity) R.R.</b> , Mudi R.K., Dey C.	EIE	International Journal of Computer Sciences and Engineering,	2020
"Nature Inspired Algorithm ased Optimal Type-2 Fuzzy Controller With Real-Time Validation On Servo System "	<b>De (Maity) R.R</b> ., Mudi R.K., Dey C.,	EIE	International Journal of Electrical Engineering & Technology (IJEET),	2020
Nature-inspired and hybrid optimization algorithms on interval Type-2 fuzzy controller for servo processes: a comparative performance study,	<b>De (Maity) R.R</b> ., Mudi R.K., Dey C.	EIE	SN Applied Sciences	2020

"Chaotic whale optimization algorithm for optimal solution of combined heat and power economic dispatch problem incorporating wind".	Chandan Paul , Dr. Provas Kumar Roy, Dr.Vivekananda Mukherjee,	EE	Renewable energy focus	2020
"Performance Analysis of Mixed Natural Dye and Nanostructured TiO2 based DSSC"	Ayaz A, <b>Sinha D</b> ., De D.,	EE	International journal of Innovative and exploring Engineering, vol.9, no.7	2020
"PMU based line outage identification using comparison of current phasor measurement technique,"	Mehebub Alam, Shubhrajyoti Kundu, Siddhartha Sankar Thakur, Sumit Banerjee,	EE	International Journal of Electrical Power & Energy Systems,	2020
."A Low-Cost Electroencephalography (EEG) Instrumentation for Epileptic Seizure Detection."	Bera, Tushar Kanti, Choudhary, S., Maiti, T., & Barnwal, S. P	EE	Journal of Physics:	2020
An automated conflict of interest based greedy approach for conference paper assignment system.,	Dinesh K. Pradhan, Joyita Chakraborty, Prasenjit Choudhary, and Subrata Nandi	IT	Journal of Informetrics, 14. 101022	2020
"Thermo-Mechanical Autofrettage Process of Spherical Vessel"	Rupali	ME	,International Journal of Engineering and Advanced Technology (IJEAT)February 2020	2020
"Optimization of Process Parameters for GMAW of High Carbon Steel Using TOPSIS"	Subhajit Bhattacharya, Kazi Sabiruddin, Santanu Das	ME	A Technical Journal	2020
"Thermal Performance Improvement of a Fin- Arrayed Horizontal Heat Sink Corroborating Optimal Orientation Angle Title of the paper",	Pabitra Kumar Mandal, Sayantan Sengupta, Subhas Chandra Rana, Dipankar Bhanja	ME	"International Journal of Innovative Technology and Exploring Engineering (IJITEE)"	2020
Multiple attribute decision making based on robabilistic interval-valued intuitionistic hesitant fuzzy set and extended TOPSIS method	<b>Avijit De</b> , Sujit Das Samarjit Kar	Basic science and Humanities (Mathematics)	Journal of Intelligent & Fuzzy Systems	2019
Dynamic Analysis of Telecommunication Tower for Optimum Modal Combination and Elemental Discretization	Trishit Chandra, Sanjay Sengupta	Civil Engineering	International Journal of Engineering and Advanced Technology	2019

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DPL-Based Novel Time Equalized CMOS Ternary- to-Binary Converter	<b>Aloke Saha</b> and Dipanakar Pal	ECE	International Journal of Electronics (IJE), Taylor & Francis	2019
A ranking method based on interval type-2 fuzzy sets for multiple attribute group decision making	Avijit De Pradip Kundu Sujit Das Samarjit Kar	Basic science and Humanities (Mathematics)	Soft Computing	2019
Novel Self-Pipelining Approach for Speed-Power Efficient Reliable Binary Multiplication	Aloke Saha, Rahul Pal and Jayanta Ghosh	ECE	Micro and Nanosystems, (Bentham Sciene Publication)	2019
"A high selective tri-band bandpass filter with switchable passband states,"	Anjan Bandyopadhyay,Pankaj Sarkar, <b>Tapas Mondal</b> and RowdraGhatak	ECE	" International Journal of Microwave and Wireless Technologies,	2019
Low-overhead video compression combining partial discrete cosine transform and compressed sensing in WMSNs	Rajib Banerjee and S. Das Bit	ECE	Springer wireless networks	2019
Grain Boundary Detection and Phase Segmentation of SEM Ferrite–Pearlite Microstructure Using SLIC and Skeletonization	Subir Gupta . Jit Sarkar . Abhijit Banerjee . N. R. Bandyopadhyay . Subhas Ganguly	MCA, ECE	Journal of The Institution of Engineers (India): Series D Spinger	2019
Grain Boundary Detection and Phase Segmentation of SEM Ferrite–Pearlite Microstructure Using SLIC and Skeletonization	Subir Gupta. Jit Sarkar . Abhijit Banerjee . N. R. Bandyopadhyay . Subhas Ganguly	MCA ECE	Journal of The Institution of Engineers (India): Series D	2019
Chan-Vese segmentation of SEM ferrite-pearlite microstructure and prediction of grain boundary	Subir Gupta	MCA	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	2019
Effect of Heat Input on the Mechanical and Metallurgical Characteristics of TIG Welded Joints	Subhas Chandra Moi, Pradip Kumar Pal, Asish Bandyopadhyay, Ramesh Rudrapati	Mechanical Engineering	Journal of Mechanical Engineering	2019
Design Optimization of TIG Welding Process for AISI 316L Stainless Steel	Subhas Chandra Moi, Pradip Kumar Pal, Asish Bandyopadhyay	Mechanical Engineering	International Journal of Recent Technology and Engineering (IJRTE)	2019

#### 5. STUDENTS' PLACEMENT

In the present era, campus placement holds a great importance for students and educational institutes. While, it helps a student in building a strong foundation for the professional career ahead without facing the real-world job struggle, peer-competition or family pressure, a good placement record gives a competitive edge to an institute/ university in the education market. Campus placements provide the students with a foot-in- the-door opportunity, enabling them to start off their career right after they have completed their course curriculum. Furthermore, they get to interact and engage with the industry professionals during the placement drives, which further help lay a foundation for their prospective career in the future as they familiarise with potential contacts from their chosen career field.

Placements have gradually become an integral part of an institute's offerings, which was not the scenario earlier. Nowadays, students pay special attention to placement records while selecting a college or university for the admission. And it is rightly so, if a student is paying huge amount of parents' hard-earned money as fees to the institutes/universities, he/she has the right to calculate the ROI (return on investment), which in this case is a lucrative job.

#### **5.1 Training Programs**

Considering the trends, education system now has to be developed in such a way that it prepares the students for jobs which are not even created as of now. In short, there is an urgent need to bridge the gap between industry requirements and the existent skill set of the students. Campus recruitment is witnessing tremendous transformation with the emergence of technological advancements in the process. Utilising multiple digital services, recruiters are able to figure out innovative and cost-effective strategies for conducting a campus recruitment drive, recruiting top candidates and meeting the recruitment numbers.

Skill Training is one of the most important factors responsible for improving the placement record of an institute or university. Companies no longer just look for academic excellence and aptitude but they prefer candidates who have practical exposure and problem solving ability in real- life situations. Here in BCREC, different training programs are organized for the students from the pre-final year of their studies. Co-Cubes, Placement Season, Reference Globe etc. are few of the country's largest assessment and hiring platform, where some big companies from Programming to Machine fields, so you can choose to opt for best. It also helps in getting somewhat Greater packages too.

## **5.2 Students' Placement in Different Organizations**

Placement is the heart of any professional Institute and BCREC is no exception for the same. A TPO Campus Cell was formed in July, 2018 to provide more thrust to placement activities apart from the Kolkata T&P Cell. The TPO Cell continuously counsels the students with respect to their career aspirations and options by providing advice on placement procedures, assistance for preparation of applications and resumes and mock practices for interviews which not only helps the students in getting their 'dream' jobs but also assists the visiting placement companies in identifying the 'right' candidate for their Organization. The aim of the TPO Cell is to ensure that students have the information and skills necessary for an effective job search and the students must secure job offers before they complete their program

of studies and leave their Alma Mater. **Test Based Training (TBT)** and **Block Training Program** for different semester students from third year onwards is the key of our success. The TPO team comprises of eminent Professors from different departments to ensure the success of every student. The T&P Cell also ensures and takes care to provide the best arrangements and hospitality for the visiting companies' Officials.

## Pre-placement Training for students to improve final placement -

- ➤ Mock Aptitude Test
- ➤ Mock GD-PI Sessions

The placement scenario for the year 2019 was discussed. To gear up the placement process in 2020, a special Training & Placement team was set up along with a dedicated infrastructure comprising of a total capacity of around 200 computers for the training process at the AJC Bose Bhawan. The main emphasis was given on Mock Aptitude Test, Mock GD and PI sessions which will be conducted for students by faculty and alumni members to prepare them for their final placement process. Test Based Training (TBT) and Block Training Programs were also suggested for the third year semester students pertaining to different branches.

Over the last few years, most of the students of BCREC have got their desired job. Following is the list of companies and the students, who got placed through campus drive in the year 2019-20;

Table 5.1- List of the Students Who Got Placed in Different Companies

SL. No.	NAME	DEPTT.	COMPANY NAME	
1	Debayan Chanda	CSE	Capgemini	
2	Anupam Samanta	CSE	Capgemini	
3	Preetam Prag	CSE	Capgemini	
4	Md Yaseen Saifullah	ECE	Capgemini	
5	Trisa Sarkar	CSE	Capgemini	
6	Abhishek Anand	IT	Capgemini	
7	Ashutosh Jha	IT	Capgemini	
8	Rahul Gupta	ECE	Capgemini	
9	Soumyadip De	CSE	Capgemini	
10	Shubham Raj	CSE	Capgemini	
11	Anughya	ECE	Capgemini	
12	Subham Kumar Gupta	IT	Capgemini	
13	Rajoshree Rakshit	ECE	Capgemini	
14	Sanya Suman	ECE	Capgemini	
15	Sonali Mandal	ECE	Capgemini	
16	Siddhartha Paul	CSE	Capgemini	
17	Nayanika Mukhopadhyay	ECE	Capgemini	
18	Mandira Konar	ECE	Capgemini	
19	Kirty Shaw	CSE	Capgemini	
20	Sudarshan Kumar	IT	Capgemini	

21	Ahelee Bhattacharjee	IT	Capgemini
22	Akanksha Kumari	ECE	Capgemini
23	Rashmi Kumari	EE	Capgemini
24	Monalisha Karmakar	IT	Capgemini
25	Sohini Shome	CSE	Capgemini
26	Diptarup Sengupta	CSE	Capgemini
27	Moumita Mallick	CSE	Capgemini
28	Richa Bibhuty	ECE	Capgemini
29	Nidhi Tiwari	CSE	Capgemini
30	Jayanti Mishra	ECE	Capgemini
31	Geetanjali Kumari	IT	Capgemini
32	Gulabsha Eram	IT	Capgemini
33	Abhishek Kumar	CSE	Capgemini
34	Aditi Sinha	ECE	Capgemini
35	Ananya Roy	IT	Capgemini
36	Vicky Kumar Singh	ECE	Capgemini
37	Ashwani Singh	CSE	Capgemini
38	Pallab Mohanta	ECE	Capgemini
39	Aveepsit Chowdhury	CSE	Capgemini
40	Supriyo Pal	ECE	Capgemini
41	Aishwarya Srivastava	CSE	Capgemini
42	Priyam Sharma	EE	Capgemini
43	Amartya Panja	EE	Capgemini
44	Ranojoy Chowdhury	ECE	Capgemini
45	Subhradip Dutta	ECE	Capgemini
46	Bijoy Paul	EE	Capgemini
47	Debangan Mitra	CSE	Capgemini
48	Foujia Rahaman	EE	Capgemini
49	Krishnamita Banerjee	CSE	Capgemini
50	Vishal Kishor	ECE	Capgemini
51	Shivendu Kumar	CSE	Capgemini
52	Prashant Kumar Shubham	ECE	Capgemini
53	Saikat Das	ECE	Capgemini
54	Athar Neshat	EE	Capgemini
55	Sweta Kumari	EE	Capgemini
56	Anirban Koley	EE	Capgemini
57	Surabhi Anand	EE	Capgemini
58	Neelabh Chatterjee	ECE	Capgemini
59	Shubham Kumar	CSE	Capgemini
60	Prasanjit Mandal	EE	Capgemini
61	Subhajeet Khawas	CSE	Capgemini
62	Shivesh Bhardwaj	CSE	Capgemini

63	Vaibhav Dixit	CSE	Capgemini
64	Abhijeet Shubham	CSE	Capgemini
65	Rohan Kumar	EE	Capgemini
66	Pratyuash Kumar	EE	Capgemini
67	Dip Kiran Acharyya	CSE	Capgemini
68	Parna Dey	IT	Capgemini
69	Manas Kumar Dey	CSE	Capgemini
70	Sudipa Koner	IT	Capgemini
71	Gopi Satyam	ECE	Capgemini
72	Priyanka Bose	ECE	Capgemini
73	Shivam Kumar	CSE	Capgemini
74	Chandan Gorai	CSE	Capgemini
75	Anshuman Shikhar	CSE	Capgemini
76	Rohan Vivek	CSE	Capgemini
77	Pratik Rajhans	ECE	Capgemini
78	Aman Verma	ECE	Capgemini
79	Nipun Agarwal	ECE	Capgemini
80	Nilesh Kumar	EE	Capgemini
81	Subhajit Panday	ECE	Capgemini
82	Pragati Raj	ECE	Capgemini
83	Spardha	CSE	Capgemini
84	Subhodip Mukherjee	CSE	Capgemini
85	Snehil Srishti	EE	Capgemini
86	Arghya Dasgupta	CSE	Capgemini
87	Priti Patra	CSE	Capgemini
88	Sanjana Tantri	EE	Capgemini
89	Souvik Jana	CSE	Capgemini
90	Swati Singh	EE	Capgemini
91	Akanksha Konar	CSE	Capgemini
92	Sweta Kumari	EE	Capgemini
93	Shatrughan Gope	CSE	Capgemini
94	Arpita Biswas	EE	Capgemini
95	Apurba Halder	ECE	Capgemini
96	Aditya Dubey	IT	Capgemini
97	Hritik Raj	CSE	Capgemini
98	Syed Tanfeez Ahmed	CSE	Capgemini
99	Nishita Nishi	ECE	Capgemini
100	Prabhat Singh	ECE	Capgemini
101	Avirup Mondal	AEIE	Capgemini
102	Aromita Paul	AEIE	Capgemini
103	Tandra Mondal	AEIE	Capgemini
104	Kumari Tanushree	EE	Capgemini

105	Priyanshi Kumari	AEIE	Capgemini
106	Dipika Choudhary	AEIE	Capgemini
107	Kamal Nayan	CSE	Capgemini
108	Anku Singh	AEIE	Capgemini
109	Hemlata Bose	AEIE	Capgemini
110	Rakesh Pathak	CSE	Capgemini
111	Shampa Parira	AEIE	Capgemini
112	Shrishty Mishra	CSE	Capgemini
113	Abhishek Kumar Sinha	CSE	Capgemini
114	Pritam Sarkar	AEIE	Capgemini
115	Sreeparna Banerjee	ECE	Capgemini
116	Rishav Kumar	EE	Capgemini
117	Avinash Kumar	ME	TCS
118	Dipanjan Maji	ME	TCS
119	Monoj Kumar Das	ME	TCS
120	Amit Vishwakarma	ME	TCS
121	Ananya Mukherjee	EE	TCS
122	Snehil Srishti	EE	TCS
123	Topojeet Chakraborty	EE	TCS
124	Akanksha Kumari	ECE	TCS
125	Gopi Satyam	ECE	TCS
126	Nayanika Mukhopadhyay	ECE	TCS
127	Nipun Agarwal	ECE	TCS
128	Pallab Mohanta	ECE	TCS
129	Rishav Anand	ECE	TCS
130	Rishav Raj	ECE	TCS
131	Saikat Das	ECE	TCS
132	Sonali Mandal	ECE	TCS
133	Souvik Kundu	ECE	TCS
134	Sradhya Sengupta	ECE	TCS
135	Vikash Kumar	ECE	TCS
136	Payal Paul	CSE	TCS
137	Ajay Kumar Ray	CSE	TCS
138	Arpan Kumar Das	CSE	TCS
139	Ashwani Singh	CSE	TCS Code Vita
140	Aveepsit Chowdhury	CSE	TCS Digital
141	Chandan Gorai	CSE	TCS Code Vita
142	Biswaraj Chatterjee	CSE	TCS
143	Debangan Mitra	CSE	TCS
144	Debabratha Bhattacharya	CSE	TCS
145	Dip Kiran Acharyya	CSE	TCS
146	Hritik Raj	CSE	TCS

147	Krishnamita Banerjee	CSE	TCS
148	Rakesh Pathak	CSE	TCS
149	S M Arbaz Alam	CSE	TCS
150	Shivam Kumar	CSE	TCS
151	Shatrughan Gope	CSE	TCS
152	Shahzeb Ahmad	CSE	TCS
153	Sayon Deep	CSE	TCS
154	Souvik Jana	CSE	TCS Code Vita
155	Subhajeet Khawas	CSE	TCS
156	Syed Tanfeez Ahmed	CSE	TCS
157	Sushobhan Ghosh	CSE	TCS
158	Vikash Shaw	IT	TCS
159	Subham Kumar Gupta	IT	TCS
160	Sonali Anand	IT	TCS
161	Shubhang Sharma	IT	TCS
162	Ashutosh Jha	IT	TCS
163	Anshu Kumar	IT	TCS
164	Aniket Kumar	IT	TCS
165	Abir Rakshit	IT	TCS
166	Abhishek Anand	IT	TCS
167	Aromita Paul	AEIE	TCS
168	Soumya Kanti Roy	MCA	TCS
169	Vikash Kumar	ME	L & T Constructions
170	Rohan Sarkhel	ME	IPSEN Pvt. Ltd.
171	Subhra Jyoti Biswas	ME	IPSEN Pvt. Ltd.
172	Mainak Majumdar	IT	Zensar Technologies
173	Sovon Singha	IT	TCG Digital
174	Rolly Tiwari	CSE	Koyo Electronics
175	Nipun Agarwal	ECE	COGNIZANT
176	Rishabh Anand	ECE	COGNIZANT
177	Sajan Chaudhary	ECE	COGNIZANT
178	Geetanjali Kumari	IT	COGNIZANT
179	Sneha Rastogi	IT	COGNIZANT
180	Sovon Singha	IT	COGNIZANT
181	Trishita Chakraborty	IT	COGNIZANT
182	Preetam Prag	CSE	COGNIZANT
183	Sakshi Priya	CSE	COGNIZANT
184	Sanya Suman	ECE	COGNIZANT
185	Sudarshan Kumar	IT	COGNIZANT
186	Abhijeet Shubham	CSE	COGNIZANT
187	Abhishek Kumar Sinha	CSE	COGNIZANT
188	Chandan Gorai	CSE	COGNIZANT

189	Kamal Nayan	CSE	COGNIZANT
190	Rakesh Pathak	CSE	COGNIZANT
191	Shubham Raj	CSE	COGNIZANT
192	Soumyadip De	CSE	COGNIZANT
193	Souvik Jana	CSE	COGNIZANT
194	Vaibhav Dixit	CSE	COGNIZANT
195	Santosh Kumar	ME	COGNIZANT
196	Aromita Paul	AEIE	COGNIZANT
197	Vishal Kumar Pathak	EE	COGNIZANT
198	Aditi Tanya	ECE	COGNIZANT
199	Divyansh Divyam	ECE	COGNIZANT
200	Marisha Gautam	ECE	COGNIZANT
201	Musarrat Parveen	ECE	COGNIZANT
202	Pratik Rajhans	ECE	COGNIZANT
203	Saikat Das	ECE	COGNIZANT
204	Shibu Kumar Singh	ECE	COGNIZANT
205	Suman Singh	ECE	COGNIZANT
206	Arpit Raj	IT	COGNIZANT
207	Abhimanyu Kumar	CSE	COGNIZANT
208	Komal kumari	CSE	COGNIZANT
209	Krishnamita Banerjee	CSE	COGNIZANT
210	Moumita Mallick	CSE	COGNIZANT
211	Sahil Raj	CSE	COGNIZANT
212	Shivendu Kumar	CSE	COGNIZANT
213	Sohini Shome	CSE	COGNIZANT
214	Subhajeet Khawas	CSE	COGNIZANT
215	Abhishek Banerjee	ME	COGNIZANT
216	Amit Vishwakarma	ME	COGNIZANT
217	Shubhankar Gupta	ME	COGNIZANT
218	Atanu Roy	AEIE	COGNIZANT
219	Aditi Kumari	EE	COGNIZANT
220	Ananya Mukherjee	EE	COGNIZANT
221	Anughya LNU	ECE	COGNIZANT
222	Gopi Satyam	ECE	COGNIZANT
223	Md Yaseen Saifullah	ECE	COGNIZANT
224	Neelabh Chatterjee	ECE	COGNIZANT
225	Neelanjana Giri	ECE	COGNIZANT
226	Prashant Kumar Shubham	ECE	COGNIZANT
227	Priyanka Bose	ECE	COGNIZANT
228	Souvik Bhunia	ECE	COGNIZANT
229	Sreeparna Banerjee	ECE	COGNIZANT
230	Disha Sinha	IT	COGNIZANT

231	Gulabsha Eram	IT	COGNIZANT
232	Sonali Chandra	IT	COGNIZANT
233	Aradhana Kumari	CSE	COGNIZANT
234	Jyoti Prakash	CSE	COGNIZANT
235	Siddhartha Paul	CSE	COGNIZANT
236	Sushobhan Ghosh	CSE	COGNIZANT
237	Syed Tanfeez Ahmed	CSE	COGNIZANT
238	Vipul Kumar	CSE	COGNIZANT
239	Monoj Kumar Das	ME	COGNIZANT
240	Monalisha Karmakar	IT	COGNIZANT
241	Vikash Shaw	IT	COGNIZANT
242	Rishav Anand	ECE	INFOSYS
243	Shamik Ghosh	CE	Edupolis (Unschool)
244	Sudhir Kumar Mondal	EE	Amit Metaliks
245	Priyam Sharma	EE	Amit Metaliks
246	Aditya Vishal	ME	Amit Metaliks
247	Niraj Kumar Mishra	ME	Amit Metaliks
248	Ananya Mukherjee	EE	IBM
249	Sahana Ghosh	CSE	IBM
250	Deepa Rani	ECE	IBM
251	Shubham Kumar	CSE	CloudKaptan
252	Shubhang Sharma	IT	WIPRO
253	Arpit Raj	IT	WIPRO
254	Sudip Samanta	CSE	WIPRO
255	Subhajeet Khawas	CSE	WIPRO
256	Vikash Shaw	IT	WIPRO
257	Akanksha Kumari	ECE	WIPRO
258	Md Yaseen Saifullah	ECE	WIPRO
259	Shivam Kumar	CSE	WIPRO
260	S M Arbaz Alam	CSE	WIPRO
261	Ananya Roy	IT	WIPRO
262	Abhimanyu Kumar	CSE	WIPRO
263	Shubham Kumar	CSE	WIPRO
264	Sunidhi Kumari	CSE	WIPRO
265	Ayan Pramanik	ECE	WIPRO
266	Krishnamita Banerjee	CSE	WIPRO
267	Abhijeet Chakraborty	ECE	WIPRO
268	Chandan Gorai	CSE	WIPRO
269	Avijit Kundu	EE	WIPRO
270	Siddhartha Paul	CSE	WIPRO
271	Debayan Chanda	CSE	WIPRO
272	Shivendu Kumar	CSE	WIPRO

273	Priyanka Bose	ECE	WIPRO	
274	Preetam Prag	CSE	WIPRO	
275	Sajan Chaudhary	ECE	WIPRO	
276	Sonali Mandal	ECE	WIPRO	
277	Abhijeet Shubham	CSE	WIPRO	
278	Pratik Rajhans	ECE	WIPRO	
279	Abhishek Kumar Sinha	CSE	WIPRO	
280	Swarnajyoti Banerjee	AEIE	Rashmi Cement Ltd.	
281	Ayan Ghosh	AEIE	Rashmi Cement Ltd.	
282	Ankan Pal	AEIE	Rashmi Cement Ltd.	
283	Vishal Kumar	AEIE	Rashmi Cement Ltd.	
284	Raja Hazra	EE	Rashmi Cement Ltd.	
285	Sayan Das	EE	Rashmi Cement Ltd.	
286	Biplab Pati	ME	Rashmi Cement Ltd.	
287	Mayank Kumar Mithu	ME	Rashmi Cement Ltd.	
288	Santosh Kumar	ME	Anglo Eastern Ship Management Ltd.	
289	Animesh Santra	ME	Anglo Eastern Ship Management Ltd.	
290	Dipayan Ganguly	MBA	Bengal Beverage	
291	Gourav Chakraborty	ECE	Nihilent Ltd.	
292	Siddhi Agarwal	MBA	BIBA Apparel	
293	Rishabh Ranjan	ME	Extramarks Education Pvt. Ltd.	
294	Nitika Raj	ECE	Extramarks Education Pvt. Ltd.	
295	Partha Pratim Banerjee	ME	Extramarks Education Pvt. Ltd.	
296	Kaumodi Baksi	AEIE	Extramarks Education Pvt. Ltd.	
297	Dipti Vishen	CSE	Extramarks Education Pvt. Ltd.	
298	Diptesh Mukherjee	AEIE	Extramarks Education Pvt. Ltd.	
299	Annwesha Roy	IT	Extramarks Education Pvt. Ltd.	
300	Kumar Saurabh Shandilya	ME	Extramarks Education Pvt. Ltd.	
301	Sharmistha Sengupta	MBA	Extramarks Education Pvt. Ltd.	
302	Arindam Mukherjee	MBA	Extramarks Education Pvt. Ltd.	
303	Rahul Paramanik	MBA	Extramarks Education Pvt. Ltd.	
304	Belal Alam	MBA	Extramarks Education Pvt. Ltd.	
305	Siddhi Agarwal	MBA	Extramarks Education Pvt. Ltd.	
306	Ashwani Singh	CSE	COGNIZANT	
307	Shruti Shikha	ECE	COGNIZANT	
390	Sweta Kumari	EE	Indian Oil Tanking Ltd.	
391	Aishwarya Srivastava	CSE	DXC Technologies	
392	Ketan Dulwani	ECE	DXC Technologies	
393	Rohit Kumar	CSE	DXC Technologies	
394	Anubrata Das	ME	BMW industries Ltd.	
395	Ankan Mondal	ME	BMW industries Ltd.	
396	Satadal Panja	MBA	Indigo Paints Ltd.	

397	Avijit Adhikary	MBA	Mahindra Finance Ltd.	
398	Hrishab Kumar Saha	ME	Shyam Metaliks and Energy Ltd.	
399	Ashish Sharma	ME	Asahi India Glass Limited	
400	Arpita Biswas	EE	COGNIZANT	
401	Ahelee Bhattacharjee	IT	COGNIZANT	
402	Upasona Mukherjee	ECE	COGNIZANT	
403	Vikash Kumar	MBA	Spandana Sphoorthy Financial Ltd.	
404	Rajiv Ranjan Singh	MBA	Spandana Sphoorthy Financial Ltd.	
405	Chandan Kumar Mandal	MBA	Spandana Sphoorthy Financial Ltd.	
406	Akash Mandal	CSE	Techno Exponent	
407	Souvik Chandra	CSE	Techno Exponent	
412	Shipra Patra	MBA	Axis Bank	
413	Shirsendu Das	MBA	Axis Bank	
414	Suvadeep banik	MBA	Axis Bank	
415	Sristi Nayan	CSE	Genpact India	
416	Ayesha Sultana	AEIE	Genpact India	
417	Ankita Banerjee	ECE	Genpact India	
418	Nilanjan Mallick	CE	Genpact India	
419	Satyaki Chatterjee	EE	Genpact India	
420	Ayushi Jha	IT	Genpact India	
421	Animesh Jha	ECE	Genpact India	
422	Muthumma Mandi	MBA	Genpact India	
429	Ria Pobi	EE	Capgemini - 2nd Phase	
430	Gourav Chakraborty	ECE	Capgemini - 2nd Phase	
431	Souvik Ghosh	ECE	Capgemini - 2nd Phase	
432	Ritik Kumar	CSE	Capgemini - 2nd Phase	
433	Kumari Aayushi	CSE	Capgemini - 2nd Phase	
434	Kumar Aniket	CSE	Capgemini - 2nd Phase	
435	Ajay Kumar Ray	CSE	Indusnet Technologies Pvt. Ltd.	
436	Subham Raj	CSE	Indusnet Technologies Pvt. Ltd.	
437	Gourav Guru	IT	Indusnet Technologies Pvt. Ltd.	
438	Suraj Karmakar	IT	Indusnet Technologies Pvt. Ltd.	
439	Simran Kumari	IT	Indusnet Technologies Pvt. Ltd.	
440	M A Raja	ECE	Indusnet Technologies Pvt. Ltd.	
441	Deep Basak	MCA	Indusnet Technologies Pvt. Ltd.	
442	Maham Naz	M.Tech./ CST	The Federal Bank Ltd.	

#### 6. EVENTS IN BCREC

The tradition of celebrating cultural and social events are widespread in colleges across the stretch of the country. These events play a predominant role in a student's life and in the recent years, have managed to sketch a significant place for themselves in the academic calendar. There is a growing consensus that these events are not just about fun but that it also augments a student's learning experience. Organizing and participating the events or activities is not a child's play; it needs exhausting efforts and stern dedication. Events and programs facilitate students to work for a fixed goal in unison and this eventually develops a sense of responsibility in them. It elevates confidence and also teaches them how to work in a team and in various challenging situations.

In the events and programs here at BCREC, students get chance to explore the campus and city more after the event, eventually getting exposed to different culture. This helps them understand different cultures and explore their sensitivities and finer distinctions. Most of the teachers select the students whose potential don't just revolve around bookish knowledge. Continuous involvement in more than one activity reflects skills and abilities of the student. Students learn to prioritize and time management too. These academically and co-circularly talented students have an outstanding personality, which helps them to forge ahead in their career.

## **6.1 Orientation Program**

The **Orientation Programme** was held at the Institute Campus for the newcomers on 2<sup>nd</sup> August, 2019 where the new students were formally welcomed to the Institute by the Director and other dignitaries of the College. The students and their parents were guided through the various rules and regulations of the Institute and ensured them that their wards will be thoroughly guided and transformed to become a responsible citizen of our future country.

### Mandatory Induction Programme

As a part of the mandatory **Induction Programme**, mandated by MAKAUT which commenced from 3<sup>rd</sup> August, 2019 onwards, the Institute arranged lectures for the first year students delivered by eminent personalities from diversified fields viz. Prof. D. C. Panigrahi, former Director of IIT-ISM Dhanbad, Mr. Goutam Dasgupta, Director, CAPGEMINI Technology Services India Ltd., Kolkata and Dr. Aloknath De, Vice President, SAMSUNG Electronics, Dr. Biswajit Ruj, an eminent Scientist of CSIR-CMERI, Durgapur and Dr. Satyajit Bose, Chairman & Senior Cardiac Surgeon, The Mission Hospital, Durgapur.

Prof. D. C. Panigrahi, former Director of IIT-ISM Dhanbad delivered a lecture on "Engineering & Management Education and Employability" where the students were encouraged to enhance their leadership quality and attempt to convert the world into a better place to live in.

Another talk delivered by a Professor of IIT-ISM Dhanbad on "Ethics and Social Responsibility for Engineering and Management Students" made the students aware of the present alarming situation of the shortage of drinking water. He elaborated on the various

sources responsible for water pollution in various remote places of West Bengal. He also discussed the grave situation of plastic pollution.

The Director, Application Development, Cappemini Technology Services India Ltd., Kolkata and The Vice-President, Samsung enlightened the students with their industrial knowledge and boosted them with their research. They also encouraged the students to cultivate their curiosity and strive to discover the innovator in them.

Two alumni of BCREC shared their life at BCREC and also emphasized on how the education at BCREC helped them to become successful in their life. Besides lectures by eminent personalities, there were Yoga classes, sports, visits to the neighbourhood places and industrial visits for the first year students to get them accustomed to different environments.









Fig. 6.1- Some Glimpses of 2019 Induction Program

# **6.2 Placement Activities - Pre-placement Training for students through Test-Based-Training (TBT)**

Although the placement statistics of 2019 batch was indeed excellent, but still it was proposed that in addition to the internal Training & Placement team, the pre-placement training will also be given by external agency to improve the placement number as well as the salary package offered. To gear up the placement process of 2019-2020, the pre-placement training commenced with special modules of online assessment process and special Soft skills training.

The Test Based Training (TBT) mainly comprised of three distinct components, namely, Aptitude, Technical and Verbal & Soft Skills with the help of the training companies like Cocubes, Placement Season & Reference Globe. The Aptitude and Technical TBT s were outsourced to professional agencies who not only assessed the abilities of the students but also mapped their skills and even sourced clients for recruitment.

The Verbal & Soft Skills Component was retained by the teachers themselves. The Language and Management faculties have put together their acumen and developed 7 precise modules.

The writing skills trainings were carried out in two phases Classroom Trainings and TBT partly using in-house software and partly through outsourced professional partners.

The Soft skills GD & PI were assessed by Industry Experts, especially Alumni. Over 100 organizations participated in the Campus placement and approximately 400 jobs have been offered through On Campus Placement Drive. Students from Bachelor of Technology (B. Tech), Master of Technology (M. Tech) programs in different fields of Engineering, Master of Computer Application (MCA) and Master of Business Application (MBA) participated in the placement process. The results of 2019 have raised the bars at BCREC. The success of the placement can be attributed to the remarkable efforts of BCREC students as well as the tremendous efforts supported by the Institute administration, academic units, faculty and staffs, alumni and other well-wishers.

## **6.3 Important Events**

## Celebration of 73<sup>d</sup> Independence Day

BCREC fraternity proudly celebrated the 73rd Independence Day of our beloved country on 15th August, 2019 along with the countrymen and the rest of the world, cherished the idea of oneness and remembered the sacrifices that freedom fighters made during their struggle against the mighty British Empire. The program took place in the traditional way where NCC cadets showed their respect towards the tricolor. Prof. (Dr.) Pijush Pal Roy, Director, Dr. B.C. Roy Engineering College, Durgapur, Shri. Tarun Bhattacharya, General Secretary of BCREC Society along with the other dignitaries were present in the program.





Fig. 6.2- Some Glimpses of the Independence day Program 2019

#### Wall Magazine Competition

BCREC organized its 2<sup>nd</sup> Intra-College Wall Magazine Competition on 5<sup>th</sup> September, 2019 in its College premises. The event was inaugurated by the Chief Guest of the event Dr. Partha Pal, Chief Medical Officer of the Mission Hospital, Durgapur along with Shri Tarun Bhattacharya, General Secretary of BCREC Society and Prof. (Dr.) Pijush Pal Roy, Director, BCREC. The inaugural ceremony was attended by all the students and faculties of BCREC. This competition was participated by 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year students of BCREC from all engineering departments. The students of BCREC displayed spectacular boards showcasing current global issues which included Global Warming: Its mitigation measures, Water conservation, Preservation and purification and Alternate source of energy, allocated for 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year students respectively. All the dignitaries accessed the wall magazines and judged them on the basis of creativity of the magazine and on the relevance of the content of the wall magazines. They also encouraged and appreciated the participants and the participating members for making the event successful. Winners for 2<sup>nd</sup> and 3<sup>rd</sup> year were both from Mechanical Department and for 4th year, Civil Engineering Department bagged the first prize. It was a sheer delight to see the students displaying their learning and concern towards global issues through the medium of art.





Fig. 6.3- BCREC Wall Magazine Competition 2019

#### Engineers Day

Engineer's Day was celebrated on 15<sup>th</sup> September, 2019 in appreciation of the engineering profession and in the memory of India's eminent engineer, scholar and statesman, Mokshagundam Visvesvaraya. Senior faculty members of BCREC under the leadership of honb'le Director participated in an open discussion.





Fig. 6.4- Engineers' Day Celebration in BCREC

## Viswakarma Puja & Saraswati Puja

Vishwakarma Puja, is a day of celebration for Vishwakarma, the divine architect. As a mark of reverence, the day of workship was celebrated by all engineering depts. and other staff members of BCREC. In the same way, Saraswati Puja is also celebrated during the winter.



Fig. 6.5- (a) Viswakarma Puja and (b) Saraswati Puja

#### Charity Drive

Donation is a very noble cause which not only benefits the charities themselves but also deeply rewards the donors as well. To stand beside the needy people in our community and to support them financially, the students of BCREC led by their mentors participated in a charity drive organized by Dr. B. C. Roy Engineering College.

#### Celebration of National Youth Day

To commemorate the birthday of Swami Vivekananda, maker of Modern India, Dr. B. C. Roy Engineering College celebrated the **National Youth Day** with great joy, enthusiasm on 12<sup>th</sup> January, 2020. On this day, Director, BCREC explained the thoughts of Swami Vivekananda and urged all the students of BCREC to get every idea and plans to focus on the actions necessary to do all the tasks with proper knowledge of the things.

#### Organ Donation Pledge

The Institute encourages various NSS Activities in order to promulgate social awareness amongst the young community so that they can actively participate in these various events.

Thus, apart from academic activities, in order to keep pace with the social initiatives of the Institute, the IQAC Chairman updated all the members regarding the organization of an Organ Donation Pledge Workshop in association with "Ganadarpan" (a Kolkata Based NGO) by the NSS Cell of the Institute as a part of MAR activities on 29th February, 2020.

#### **Blood Donation Camp 2020**

Another noble drive for the community was the Voluntary Blood Donation Camp hosted by BCREC in the College premises. This philanthropic activity was sponsored by the HDFC Bank Ltd. and two of their officers actively participated in the programme. It was also partnered by the Sub-Divisional Voluntary Blood Donor's Organization. The event was a grand success with a robust turnout of 100 donors comprising of students and staffs of BCREC. The programme concluded with a collective pledge to host these activities regularly and to evoke a sense of commitment to our social responsibilities.



Fig. 6.6- Blood Donation Program 2020

## Annual Sports 2020

Annual Sports was organized on 31<sup>st</sup> January, 2020 with great enthusiasm. NCC cadets and other athletes taking part in different events, staged a march past with departmental flags where the Director, BCREC along with other dignitaries took the salute. There were 15 events for students and 10 for staff members. The event ended with the distribution of prizes where the

first three winners of each event received medals and certificates from the Director and other dignitaries.

To have a respite from day-to-day classes, practical and projects, it is perhaps the utmost necessity to re-energize and rejuvenate students' physical and mental health. Sports like other educational activities play a central role here through a holistic approach. BCREC created a niche in this area by providing adequate infrastructural and instructional support where students can pursue a variety of sporting activities of their choice.

The Annual Sports of BCREC was organized on 31st January, 2020 with much pomp and vigor. Dr. Pijush Pal Roy, Hon'ble Director of the College in the august presence of Principal, Academy of Professional Courses, BCREC and other Faculty and staff members marked open the event by unfurling the College flag followed by an awe-inspiring inaugural speech. The NCC Cadets did a splendid march past by holding high the much coveted NCC flag where other 10 departments with their respective flags followed the suit. The Hundred, Two Hundred and Four Hundred meters races caught the public attention. There were Short-put, Discuss-Throw, Hit the Wicket among the popular events. Passing the Ball and Musical Chair events were for the ladies. Another event that drew public attention was the Fast Walking event where the 55 plus age category among the BCREC collective participated in that event. The Programme ended with the distribution of medals and certificates to the winners.









Fig. 6.7- Annual Sports 2020

#### Participation in Sub-divisional Tournaments

Dr. B.C. Roy Engineering College have participated in different tournaments across the subdivision. Different teams affiliated under Durgapur Sub-division Sports Association (DSSA) use to participate in those tournaments across the entire Durgapur sub-division. Football, Cricket, Basketball, Volleyball are the different sports where the students of our college use to participate as a team.

## Commemoration Day of Former President of BCREC: Late Dulal Mitra

Dr. B. C. Roy Engineering College along with its sister Institutes observed 12<sup>th</sup> February, 2020 in commemoration of Former President **Late Dulal Mitra** at DM Auditorium. Shri Ratan Roy Chowdhury, President, Shri Tarun Bhattacharya, General Secretary, and other representatives of the BCREC Society along with Prof. (Dr.) Pijush Pal Roy, Director, BCREC expressed their deepest respect to Late Dulal Mitra with garlands and reminisced his dedication and determination to establish these Institutes. Renowned singer, Mr. Srikanta Acharya presented few Rabindra Sangeets in his melodious voice. Faculty and staff members of BCREC orchestrated a well-integrated performance to pay respectful homage to the Former president of Dr. B. C. Roy Engineering College.

#### Samvidhan Divas observed at BCREC with grace

In order to create awareness among the young community regarding the Indian Constitution, BCREC along with the entire nation celebrated the 70<sup>th</sup> Constitution Day Programme under the name of Samvidhan Divas on 26<sup>th</sup> November, 2019 in a befitting way. The students of BCREC along with the faculty members congregated and read out the Preamble of Indian Constitution. The members of BCREC collectively felt truly proud to be able to participate.

## Awareness Programme on Cyber Crime & Safe Drive & Save Life

The Institute Management approved the proposal of conducting community awareness programs in the Institute campus. In accordance to this, an "Awareness Programme on Incresing Cyber Crime & Safe Drive & Safe Life" was conducted at BCREC on 4<sup>th</sup> February, 2020. The dignitaries raised their concerns regarding the increasing number of cyber-crime incidents happening due to unawareness and lack of knowledge in using digital medium.

Additionally, during the conduct of the programme, different aspects of "Safe Drive Save Life" initiatives undertaken by the Govt. of West Bengal were highlighted. The event was extremely engaging and enriching for the participants as they were informed regarding different aspects of cyber security which they should practice in their day-to-day life and the necessary precautions which need to be taken while driving/riding vehicles for their safety.









Fig. 6.8- Some Glimpses of Safe Drive Save Life Program

#### Disaster Management Programme

To safeguard the staff members and students of the Institute and to enhance their knowledge base to be fully prepared to face any kind of disaster, Disaster Management Programs were conducted in the Institute campus.

Dr. B. C. Roy Engineering College felt extremely privileged to welcome the personnel of 2<sup>nd</sup> Battalion, NDRF to conduct a "Community Awareness Programme" on Disaster Management at the College Campus on 27<sup>th</sup> September, 2019. The Training Programme was a very interesting and learning event to sensitize the youth community regarding the various precautions and preventive actions to be taken in case of any natural calamity. The different demonstrations and presentations by the NDRF Trainees captivated the participating students and the audience. Thus, it was concluded that well-preparedness can dramatically reduce the loss of life and damage to property.

#### Horizon 2K20

Technical Fest provides a great opportunistic platform for the young brain to showcase their skills and compete in an excellent competitive environment. It is a cradle where lots of new and innovative ideas are perceived to come alive through various events. Like every year, Dr. B. C. Roy Engineering College, Durgapur conducted the Techno-Management Fest –

HORIZON 2K20 on 14<sup>th</sup> and 15<sup>th</sup> of February, 2019 proceeded by Book Fair Inauguration. The eminent personality Shri Prem Sagar Mishra, Chairman-cum Managing Director of Eastern Coalfields Ltd. (ECL) inaugurated the event as a Chief Guest and delivered an inspiring speech on "Opportunities and Challenges of Engineering and Management Graduates in Global Competitive Market Scenario". A series of inspiring events like ROBOTRIX, TECH MELA, BOHEMIAN COLORS, IGNITIA, GAME THRONES, X-POSED, TREASURE HUNT, CINEKSHETRA, WANNA CODE, B-PLAN, TECH QUIZ, CIRCUITRIX, MECH QUIZ, AUTOCAD, SCHOLAR, WEB-D etc. were executed by more than 1400 students. Two workshops on Robotics and Ethical Hacking were transpired. The fest came to an end with the inspirational speech by Director, Dr. B. C. Roy Engineering College, Durgapur.









Fig. 6.9- Horizon 2020

#### Cultural Fest

The Annual Fest comprises of a blend of cultural, technical and sports events. The Cultural Fest was also organized by BCREC where the students get an opportunity to exhibit their skills regarding extra-curricular activities. Many students enthusiastically participated in several cultural events. The purpose behind organizing this Cultural Fest is to give a platform to the students to showcase their talents in other fields apart from academics.

#### Tree Plantation

To maintain the ecological balance and to promote Green Environment, the BCREC students led by their mentors planted trees spread over the College campus with a unified movement under the name 'Go Green' with a mission to enhance the oxygen content in the atmosphere, conserve water and to preserve the wildlife. Under the Covid guidelines, BCREC faculty members led by Prof. (Dr.) Pijush Pal Roy planted trees beside the Ashutosh Bhawan and in front of the Chittaranjan Boys Hostel. This program was a part of the MAR activity for the students. Hence, students across different departments from all the existing batches gathered to support the initiative and participated there.

#### Training Programs: Workshops/Seminars/STTPs/FDPs

To prepare the students for the final placement process and to make them aware regarding the latest technology trends in IT Industry, the Institute conducted a series of Workshops, Seminars and Certification Programme in the College Campus so that the students can be benefitted to the fullest extent to upgrade and enrich their knowledge base from these programs.

#### Workshop on Android-based Robotics

A Workshop on "Android-based Robotics" was organized at the premises of BCREC on 16th November'2019. The programme was technically co-sponsored by IEEE Student's Branch, BCREC where an expert team from Ardent Computech Pvt. Ltd. came to conduct the workshop. It mainly highlighted the need of professionals with modern development skills and the utility of hands on workshop especially in the field of android applications based services. It concluded with the demonstration of how the robots can be controlled by android device through Wifi direct/Bluetooth.

## Workshop on $\beta$ -version of Computerized Web-based Management System ( $\beta$ -CWMS)

A Workshop on " $\beta$ -version of Computerized Web-based Management System ( $\beta$ -CWMS)" was conducted by MAKAUT at BCREC (Zone-II, Nodal Centre, MAKAUT) Campus on 6th February'2020. Dignitaries from MAKAUT, namely, Inspector of Colleges, Controller of Examination and Coordinator,  $\beta$ -CWMS were present to grace the occasion and make the workshop a grand success in disseminating knowledge for future implementation. The representatives from all the colleges of zone-IIwere present in the meeting at the Dulal Mitra Auditorium.

#### Press Meet on IEEE-NCETSTEA 2020

Dr. B. C. Roy Engineering College, Durgapur had organized the IEEE-National Conference on Emerging Trends on Sustainable Technology and Engineering Applications (IEEE-NCETSTEA 2020) on 7th and 8th February, 2020.

Accordingly, on 4th December, 2019, a Press Meet was organized at BCREC Campus wherein all the members of important print and electronic media participated enthusiastically. Prof. (Dr.) Pijush Pal Roy informed the media that this is going to be the biggest National Conference of IEEE organized by any Engineering College around Durgapur industrial belt.

Out of 82 papers received, 54 high standard papers submitted by scholars from India and abroad have been selected for oral presentations. Expecting nearly 200 participants will comprise a cross section of professional engineers, corporate officials, research scholars and aspiring faculty members from every part of the country. IEEE-NCETSTEA 2020 Conference is targeted and exposed to a highly motivated and talented audience related to technical, research, operational and policy-making in professional and technical society/community. It will act as a platform where all the stakeholders from Industries, Research Organizations, Engineering Colleges, and Universities can take part and discuss various issues on emerging research areas on Engineering and Science along with their applications and to generate ideas for sustainable growth in engineering applications.

#### National Conference

The IEEE – National Conference on "Emerging Trends on Sustainable Technology and Engineering Applications (IEEE-NCETSTEA 2020)" held on 7th and 8th of February, 2020 was a grand success where qualified professionals from nation-wide attended the Conference and shared their research work to motivate the talented audience related to technical, research, operational and policy-making in professional and technical society/community. The Conference generated robust cross-sector dialogue on a variety of challenging areas in academics, industries and R&D Institutions for future suggestions and implementations. There were around 60 best quality papers selected for the publication in IEEE explorer, from the different parts of the country as well as from the Universities from Australia and Malaysia.

Faculty members from IIT (ISM) Dhanbad, IIEST Shibpur, Jadavpur University, Burdwan University were invited as the keynote speaker. There were some professional from IT industries also, who delivered important aspects of the present scenario of the IT industry.

## Research Initiatives - Financial aid to Faculty Members to present Research Papers in International Conferences and participation in Workshops

- ✓ Prof. (Dr.) Sukalpa Dey, Assistant Professor of the Department of Basic Science & Humanities, BCREC presented a paper entitled "Directive of Some Natural Products as Corrosion Inhibitor for Mild Steel in 1 M HCL Medium: Experimental and Theoretical Investigation" at the International Conference on Green Energy and Environmental Technology (GEET-19) held in Paris, France from 24th − 26th July, 2019. Her paper mainly concentrated on corrosion inhibition which is of utmost importance from the view point of safety, economics and environmental sustainability.
- ✓ Prof. (Dr.) Sharmistha De Dutta, Assistant Professor of the Department of Basic Science & Humanities, BCREC presented a paper at the IRED International Conference on Social Science, Economics and Management (SEM 2019) held in Rome, Italy from 7th − 8th December, 2019. Her paper mainly focused on the unique "Dokra art" which is an almost endangered art form still practiced by a handful of artisans in the remote villages of Bankura and Midnapore Districts of West Bengal to provide a global platform to the economically backward strata of the society.
- ✓ Prof. Rajib Kumar Mondal, Assistant Professor of the Department of Computer Science & Engineering, BCREC and Prof. Poulomi Tewari, Assistant Professor of the Department of Computer Science & Engineering, BCREC participated on workshop, named "Machine Learning & IoT".

- ✓ Prof. Subhajit Bhattacharjee, Assistant Professor of the Department of Mechanical Engineering, BCREC and Prof. Deepak Kumar, Assistant Professor of the Department of Mechanical Engineering, BCREC participated on the workshop on "Future of Welding Automation, Robotics & IoT" organised by MSME Technology Centre, Jamshedpur.
- ✓ Prof. Arijit Kumar Banerji, Assistant Professor of the Department of Civil Engineering, BCREC and Prof. Ankita Som, Assistant Professor of the Department of Civil Engineering, BCREC presented their technical papers in the International Conference on "Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economics", Kolkata organized by American Society of Civil Engineers (ASCE).

#### ICT Initiatives

It was suggested by the BCREC Society members to maximize the use of ICT resources in every department of the Institution. More emphasis should be given to utilize the digital classrooms and digital contents by implementing presentation slides or displaying videos to enhance the teaching-learning process. Also, online tests should replace the written tests.

#### Digital Evaluation Workshop

The new digital evaluation system of Answer Scripts had been introduced from the Odd Semester of 2019 by MAKAUT. To get acquainted with the new system, a one-day Workshop/Training on "Digital Evaluation" of answer scripts was organized by MAKAUT for all the faculty members of 31 Colleges under Zone 2 division of MAKAUT, at the Zone 2 Nodal Centre, Dr. B. C. Roy Engineering College, Durgapur on 3rd December, 2019. The dignitaries who graced the occasion and conducted the Workshop included the Controller of Examination, MAKAUT.

## Technical Knowledge Sharing Workshop on "Future of Welding-Automation, Robotics & IoT"

The Institute encourages its faculty members to attend Workshops conducted in other Institutes to upgrade the knowledge base of the faculty members and to gain more insights related to recent trends in academia and industry.

In accordance with this, a technical Workshop organized at IDTR Jamshedpur under TCM Project for MSMEs, Academia and TC Officials accompanied by Knowledge Partners, Kemppi India – a leading solution provider in welding-automation worldwide, Tata Motors and NIT Jamshedpur was attended by two faculty members of Mechanical Department, BCREC. The theme of the Workshop was on the discussion of how the automation can change the welding and its limitation accompanied by more insights on the usage of IoT, Big Data and Robotics for welding and concluded with a brief speech on Tata Motors' work on automation of welding and the safety measures employed.

## Learning Skill Development Programme

Teachers need a variety of professional development skills (i.e. "Modern Skills" that today's teachers should possess) along with the knowledge of subject matter and expertise in order to be an effective teacher. Professional development in the area of teaching skills is a mandatory

for any teacher to create a positive environment for learning within the classroom as teachers are effective classroom managers and communicators who can adapt a variety of teaching learning styles as per requirement. Thus, teachers who make the extra effort to improve their teaching can make a significant impact on the lives of students.

Hence, the Institute encourages its faculty members to participate in various Teaching & Learning Skill Development Programs through Computer Aided Instruction (CAI) which is a diverse and rapidly expanding spectrum of computer technologies that assist the teaching-learning process so that the faculty members can inculcate the area of critical thinking skills in students rather than just memorizing facts. CAI is an interactive instructional technique to present the instructional material and monitor the student's centric learning that takes place where the teacher acts only as a facilitator to guide, instigate and motivate the students to learn.

#### Visit of Honorable Vice-Chancellor, MAKAUT

Prof. (Dr.) Saikat Maitra, Hon'ble Vice-Chancellor of MAKAUT visited BCREC on 18th September, 2019 where he addressed an elite gathering of 400 faculty members from Dr. B. C. Roy Group of Institutions and thirty five Engineering & other Professional Colleges attached with the Nodal Centre Zone-II of MAKAUT, West Bengal. He appealed to the entire teaching community of West Bengal to wake up to the demands of the forth-coming fast changing and massive reorganization in the fields of higher technical and professional education in the country, specially initiated by MHRD, Central Government. Many apex bodies like AICTE and UGC will be merged together and will be replaced by new authorities to bring in the compulsory qualitative change.

Prof. Saikat Maitra also delivered a speech, entitled "Emerging Trends in Education Delivery & Administration System". While explaining meticulously the inner dynamics of national and global academic scenario, Prof. Saikat Maitra intimated the teaching community that "National Education Policy Draft" had already been prepared and circulated by MHRD among concerned authorities for appraisal and approval. The draft, when implemented will bring about an enormous change to the existing "chalk and talk" teaching method and will open up new doors for a giant transformation in the entire teaching-learning process to make our student community truly ready both for global as well as national opportunities and requirements.

## Visit of Prof. (Dr.) Santaneel Ghosh, Department of Engineering and Technology, Southeast Missouri State University (SMSU), USA

Another commendable step taken by the Institute towards spreading its goodwill and academic excellence on a global platform, BCREC invited Prof. (Dr.) Santaneel Ghosh, Department of Engineering and Technology, Southeast Missouri State University (SMSU), USA to visit the Campus on 15th January, 2020 where he interacted with the faculty and staff members of ME and CE Departments. In that interactive session, he discussed how a student should plan and process for going abroad to pursue higher studies. He further discussed about the programs in STEM (Science-Technology-Engineering-Mathematics) and how a student can switch over these programs by completing a few transit courses. He also highlighted the possibilities and processes of collaborative research between SMSU and BCREC. The meeting concluded with a hope of future career opportunity where BCREC and SMSU promised to work together in few identified areas.

#### BCREC Alumni Meet 2019

In order to enhance the communication between the current students and the Alumni of the Institute and also to bridge the gap between the industry and the academia through the Institute Alumni, BCREC organized its first Alumni Meet on 22nd December'2019 where the Alumni enjoyed a return to the Campus mother. They also got the opportunity to cherish and share their memories in BCREC Campus with the current students and soon the evening turned into a glamorous one with the return of successful and established students of bygone years for a day. The ex-students from far and near converged on the green Campus in the early winter morning generating a tremendous warmth of love, respect, nostalgia and engulfing them all with an unprecedented enthusiasm among the young community who were bursting into exuberance after meeting each other even after decades.

During deliberations, the Alumni members resolved to introduce scholarships, ensure placements of the final year students in their current Organizations, and looking forward to real-time Projects that will take the Institution in the global platform in the days ahead.









Fig. 6.10- BCREC Alumni Meet "Reminisce" 2019

## Celebrations in Campus: Rabindra Jayanti Celebration

The 158th Birth Anniversary of the Bard of Bengal, Gurudev Rabindranath Tagore, was celebrated with due reverence and piety on 9th May, 2020 in accordance with the Institutional traditions and values, at the Tagore Udyan. This year the program was celebrated by maintaining social distancing and abiding by all the covid-19 safety guidelines. There was a small gathering of around 15 faculty members and 10 staff members in the college premises. Mrs. Ruma Mitra, Registrar, Dr. B.C. Roy Engineering College, Durgapur addressed the

gathering with the initial speech on some of the biggest achievements of Rabindranath Tagore. Commodore Ratnakar Ghosh, Campus Administrator, Dr. B.C. Roy Engineering College, Durgapur was also present on the occasion with the other faculty members of the college. Some of the faculty members recited some of the great poems and sang some of the great songs composed by Kabiguru Rabindranath Tagore. Under the Covid-19 guidelines, the program was short and ended within 30 minutes.

## **6.4 Other Important Activities**

#### **MOOCs** and MAR Activities

The introduction of MOOCs (Massive Open Online Courses) and MAR as a part of mandatory curriculum activities create the opportunities for the students to enrich their knowledge base in diversified teaching and learning environment. With this new paradigm, anyone can study without charge from anywhere and anytime. Another benefit of MOOCs is that most of the Professors come from elite campuses like IISc and IITs. As a consequence, their knowledge and experience are being shared among our students.

The MOOCs comprises of two parts: one theoretical and another practical subjects. The majority of the theoretical subjects are covered by SWAYAM-NPTEL (National Programme on Technology Enhanced Learning) where coordinating Institute is IIT-Madras. Practical and Lab are covered by Spoken Tutorial Project – A unique initiative by IIT Bombay.

College has been valued by NPTEL as a local chapter over the last few years. On this academic year over thousand students appeared for different courses offered by NPTEL on both the cycles i.e. July- October, 2019 and January to April, 2020. Dr. Tribeni Prasad Banerjee (Assistant Professor, Department of Electronics & Communication Engineering, Dr. B.C. Roy Engineering College, Durgapur) is the SPOC of this local chapter.

Jul-Dec 2019

CONGRATS! You are one of the top 100 Local Chapters. Your college is hereby recognized as an ACTIVE Local Chapter.

Present	Gold	Elite	Silver	Successful	Participation	ropper
907	2	267	76	255	307	11

July to December, 2019

## Centre of Excellence for Academic Education – Acting as a Nodal Centre for both MAKAUT and IIT-Bombay Spoken Tutorial

Dr. B. C. Roy Engineering College, Durgapur is participating as a Nodal Centre for MAKAUT Zone 2 Colleges in the Eastern Region since 2016 as well as a Nodal Centre for IIT-Bombay Spoken Tutorial since 2015. It is our achievement that both the programs run successfully from 2016 and Dr. B. C. Roy Engineering College, Durgapur is a Nodal Centre for IIT-Bombay and an Active Local Chapter of SWAYAM-NPTEL for IIT-Kharagpur.

The Spoken Tutorial Project is run by IIT-Bombay where Dr. B. C. Roy Engineering College also operates as Eastern Region-Nodal Centre to guide the cluster colleges and the various institutes to be assigned under BCREC by MAKAUT.

In the Spoken Tutorial course, around 600 students applied in the academic year across all the departments across different courses. Around 250 students were certified at the end of the course. Here is the list of different courses and number of students participated there;

Table 6.1- Number of Successful Participants in the Spoken Tutorial Courses during 2019-20 Academic Year

Name of Add on programs offered	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
Python 3.4.3 Training	60 hours	255	39
Python Training	60 hours	61	12
C Training	60 hours	58	56
Linux Training	60 hours	60	34
Java Training	60 hours	145	6

## Career Guidance of Students

The IQAC members highlighted the strategies implemented by the Institute to guide the students for their future career. The Institute had developed a structured mechanism for assessing the learning levels of the students and incessantly monitors the same for improving their academic as well as overall performance. The performance of the students in the first class assessment (CA1) enables the faculty members to identify the Advanced Learners and the Slow Learners.

For the other semesters, the advanced learners and the slow learners are identified based on their previous overall performance, orientation towards academics, feedback from the subject teachers & observations by the mentors in consultation with the HOD. Programs for the slow learners include remedial classes, extra laboratory classes, Book Bank facility, seminars, quizzes, customized assignments, intensive communication skills and personality development programs etc. Programs for the advanced learners mainly comprised of encouraging them to attend workshops, symposia, seminars to enhance their knowledge base, participation in technical competitions and competitive exams like GATE, undertake innovative projects and research work, enrolment in various MOOCs and SWAYAM courses etc.

#### Procedures to enhance Teaching-Learning process

- > Individual learning
- > Experiential learning
- ➤ Participative /collaborative learning

In order to facilitate effective learning and to enhance the learning experience among both advanced learners and slow learners, the Institute follows student centric methods such that students have choices/options in their learning and they also play an active role in the learning process. Numerous Student-centric methods are followed to enhance the Teaching-Learning process including class presentation by students, Class Assignments, Lab Experiments, Technical Videos/Case Studies, NPTEL and SWAYAM videos, EDUSAT, IIT-Bombay Spoken Tutorial Projects etc.

- ➤ Individual learning To enhance individual learning, students are strongly encouraged to enroll themselves for online certification courses like NPTEL, SWAYAM etc., to solve Assignments/Quizzes and to learn through Interactive Language Lab class.
- ➤ Experiential learning It includes Lab Experiments where the students can perform hands-on experiments in self-learning mode, Internships/Vocational Training, Live Projects, Technical Fest & Workshops on Robotics, Simulation etc., visit to nearby Industries and Research Labs.
- ➤ Participative /collaborative learning It includes Presentations, Group Projects, Debates, Group Discussions, Management Games, Industry sponsored Projects, Research Projects, participation in intra-college, state-level and national-level project competitions, design contests and technical festivals.

#### 6.5 Achievements

### Education Excellence Award 2019 in Engineering

With hard work and dedication, Dr. B. C. Roy Engineering College, Durgapur has received the coveted and prestigious "Education Excellence Award 2019 in Engineering" from a renowned Bengali News Channel Zee 24 Ghanta as a mark of recognition of its excellence in the field of education. Prof. (Dr.) Pijush Pal Roy, Director, BCREC amidst applause received the award. Prof. (Dr.) P. Pal Roy thanked both the Govt. of West Bengal and Zee 24 Ghanta for selecting Dr. B. C. Roy Engineering College for this auspicious award and promised to take this Institution at National Level in course of coming years.

➤ Dr. B. C. Roy Engineering College actively participates as a Local Chapter (LC) of National Programme on Technology Enhanced Learning (NPTEL), a project funded by the Ministry of Human Resource Development (MHRD) which provides courseware in the form of video lectures and web courses to provide quality education to anyone interested in learning from IITs in diverse fields of Engineering, Sciences, Management and Humanities and is a joint initiative by seven IITs and IISc Bangalore. It is a joint initiative by AICTE (All India Council for Technical Education) and MHRD. It is a matter of pride and achievement that Dr. B. C. Roy Engineering College,

Durgapur is in the Top 10 (Rank "AAA") amongst all colleges in PAN India and it has also secured the Top 3 position in NPTEL Local Chapters amongst the 115 Local Chapters in West Bengal. To encourage the students, BCREC felicitated all the students and faculty members who had secured Top positions in NPTEL various courses.

### > Smart Railway System

The Institute encourages the students as well as the faculty members to develop Innovative Projects to promote research activities in the College Campus. In compliance to this, an innovative project, namely, "Smart Railway System" was developed by a team comprising of 6 students of ECE Department, BCREC under the mentorship of Dr. Madhusree Kole, Assistant Professor, Basic Science and Humanities (Physics). This project had also won the second prize in the event of "Innovative Project Exhibition" organized by MAKAUT on the occasion of National Science Day held on 28th February, 2019. The objective of this project was to develop Smart Railway Platforms with Chambers for Safety and Hassle-free Travelling where the railway platforms will be divided into separate chambers for the respective coaches. This will be fabricated with automatic door lock system enabled by finger print sensor which will be authenticated with the UIDAI card or with QR code (for better security) of the passenger travelling. The main focus of this project is passenger safety and reduction of corruption prevailing in the existing system such that no intruders will be able to get inside the train.

To spread the news of excellence and achievement in the field of Academic Education, specifically in Engineering and Management Education of Dr. B. C. Roy Engineering College, Durgapur, an initiative was undertaken by the popular electronic media, the Zee Bangla 24 Ghanta news channel on their visit to BCREC Campus on 12<sup>th</sup> June, 2019. Their objective was to shoot a video documentary of 22 minutes duration and telecast the same for its viewers widely. This coverage particularly projected the academic excellence, discipline and ambience of the Institute along with useful bytes taken from students and faculties and thereby referred it as one of the eminent upcoming Engineering Institutions in the country.

## 6.6 Internship Programme

The Training & Placement Officer, Prof. Atanu Maity briefed about the placement statistics of 2019 and the activities carried out to improve the placement process for the upcoming campus recruitment. He also highlighted the fact that both engineering and management students should be encouraged to undergo Internships for the final year students to gain hands on experiences before stepping into the working world during their summer vacation.

## 6.7 Tie-Ups and MOU Sign

## MOU sign with Cambridge Marketing College (CMC), Cambridge, United Kingdom

To promote its excellence and achievement in the field of Academic Education, specifically in Engineering and Management Education, Dr. B. C. Roy Engineering College, Durgapur

signed a Memorandum of Understanding (MOU) with Cambridge Marketing College (CMC), Cambridge, United Kingdom on 13<sup>th</sup> December, 2019 to promote joint collaboration for advanced training programmes on cutting-edge technology and management for in-house students, faculty members of BCREC and other Zone-2 Colleges under MAKAUT. This recent collaboration with BCREC is expected to open a new chapter of effective benchmarking and skill development for deriving mutual benefit where CMC will offer short intensive Master Classes on contemporary management tools and practices. Immersion Management Programme will also be offered in UK where the participants will refine and upgrade their management knowledge and skill with the most contemporary international standard which will compel them to soak in new concepts and assist them with highest job opportunity at a reasonable cost.









Fig. 6.11- MOU with CMC

## > MOU sign with Ardent Computech Pvt. Ltd., Kolkata

To upgrade the technical skills of the students with the latest technologies in academics and industry with exposure to various hands-on exercises and to make them job ready for Campus Placement, Dr. B. C. Roy Engineering College, Durgapur signed a Memorandum Of Understanding (MOU) with Ardent Computech Pvt. Ltd., Kolkata on 16<sup>th</sup> November, 2019 to provide inter-alia services to students. They mainly focused on the areas of (i) Project – based learning in IT and Core Engineering, (ii) Utilization of Technical Capabilities of the Faculty Members of the College, (iii) Develop suitable Teaching and Training Systems attuned to Industry requirements, (iv) Assist in Technological up-gradation, innovation and foster a sense of competitiveness, (v) Provide inputs in Training/Teaching Methodology that shall ultimately benefit students, (vi) Promote Industry – Institution interaction by organizing Industry related

Training Programmes, (vii) Assist in Internships and Placements of Students, (viii) Develop and Organize Skill Development Programmes for Students, and (ix) Expose students to the Emerging and Frontier Technologies – Internet of Things, Cloud Computing, Machine Learning etc.

## 6.8 Environmental Awareness: Solar Energy Projects

#### Solar Energy Based Automated Seed Sowing Machine For Cultivation

In order to create awareness about the environmental issues, the Institute encourages the development of Solar Energy Projects. In accordance with this proposal, a three-member students team from EE department under the guidance of Dr. Dola Sinha invented a "Solar Energy based Automated Seed Sowing Machine for Cultivation" whose main aim was to reduce the human effort by implementing an alpha stage prototype model of solar energy based automated seed sowing bot for cultivation to speed up the production process. The navigation of the machine was based on electric vehicle with solar panel as the source of energy in order to make it more environment friendly and clean technology without any running cost. The project mainly concentrated on (1) navigation of the assembly of the system vehicle using solar panel and battery and (2) propagation of the vehicle at the right path with obstacle avoidance and initialization of seeding mechanism after detection of water contents inside the soil.

## Collection and Preservation of Rain Water

To preserve the environment and to create awareness about the environmental issues, the Institute has taken the initiative to organize Recycle Campaign in the Campus. Thus, to promote environmental conservation and protection, a Project to collect and preserve rain water for harvesting was undertaken by the Institute as a part of Green initiatives.





Fig. 6.12- Rainwater Harvesting Plant

## > Solar Water Pumping System For Women, Children & Old People

Another project based on solar energy was the "Solar Water Pumping System for women, children and old people" where an eco-friendly and cost-effective pumping system which can utilize solar energy to draw out ground water was developed by the final year ME students under the guidance of Dr. Chandan Chattoraj, Professor & Dean (Academic), Department of

Mechanical Engineering, since in rural areas, many homes have to depend on hand-operated pumps which often becomes difficult to operate by the women, children and aged persons when the demand of water is high. The cost of this attachment is as low as Rs 15000/- and this could be further reduced if manufactured at large scale. These students of BCREC did an inspirational job with an aim to mitigate distresses of people of this country.

### 7. QUALITY ASSURANCE INITIATIVE

Quality management activities are those that ensure the intent of an Institute are exactly what they are supposed to be, that is, they meet all their specifications. Quality assurance (QA) is a set of activities that ensures that development and/or maintenance processes are adequate in order for a system to meet its objectives.

BCREC over the years have done an exceptional job in the field of education. However, in today's world, one can't simply count on the number of job opportunities given to the students as the only quality parameter. To meet the needs, BCREC has done the following;

### Introduction of IQAC cell

In order to enhance the quality of higher education, IQAC cell has been formed. With the leadership of Prof. (Dr.) Pijush Pal Roy as the Chairman, the institute is looking forward to shine bright continuously in the field of education. After the accreditation of NBA for two programs, it is required to continue the same process for the other programs. Senior academicians and faculty members are engaged to execute the plan.

#### The learning-centric environment

- > Continuous Evaluation Process
- Personal Care through Mentorship Programme
- ➤ More emphasis on Contact learning (Tutorials-Projects, etc.) compared to one way-teaching

### Energy Audit

BCREC considers the ecology and environment as the most important parameter for mankind. Hence, BCREC has started strong eco-friendly program that are commercially appreciated and sustainable in the long term. Through these program the students, faculty members and staff members are aware and learn about safe guarding our natural environment. BCREC has the responsibility of conducting Energy-Audit on yearly basis and take effective measures to protect and preserve green atmosphere in the campus. The following steps are done to make the campus eco-friendly;

- 1. Improve the campus greenery by planting more sapling
- 2. Making the campus as plastic free zone
- 3. Taking initiative to keep the campus clean
- 4. Giving botanical name of each plant/tree
- 5. Planting flower trees

- 6. Energy Conservation: The class rooms are well ventilated. There is a free flow of natural sunlight and air which reduces the power consumption. Most of the rooms are illuminated with CFL bulbs.
- 7. Use of renewable energy has already been started. Solar panels are installed in the roof-top of Vidyasagar Bhawan and the stored energy are being used for the street lights in the campus.
- 8. Rain water harvesting: The plant has been prepared. The water is stored and further used for the gardening purpose.

#### Tree Plantation

Every year on the "World Environment Day" i.e on the 5<sup>th</sup> June, Green day is observed and students are motivated to plant saplings in the college.

#### **Development Programs**

- ➤ On 28th Jan, 2020, the program on administrative capacity development program took place
- National Conference on Emerging Trends on Sustainable Technology and Engineering Applications in collaboration with IEEE held on the 7-8 February, 2020
- Collaboration with Cambridge Marketing College (CMC), UK on "Application of digital and social media in Business: a hands-on approach"

#### Participation in NIRF

The institute has successfully participated in NIRF 2020 and will be applying shortly for the NIRF 2021

#### NBA Accreditation

It is a matter of pride for BCREC that two departments namely Computer Science & Engineering and Electronics & Communication Engineering got the NBA re-accreditation in the current academic year. It has been further decided that Mechanical Engineering, Information Technology have applied for NBA accreditation.

#### NAAC Accreditation

The National Assessment & Accreditation Council (NAAC) stresses on making quality assurance, an integral part of the functioning of higher education institution. NAAC accreditation is for an institution on the whole and BCREC is applying it for the very first time. The very first time an institution goes through this quality assessment it is called as cycle 1. A committee was formed during the month of September, 2019 who will look after all the criterion given by NAAC for the preparation of self-study report.

# **APPENDIX**

## DR. B. C. ROY ENGINEERING COLLEGE

Jemua Road, Fuljhore, Durgapur - 713206, Dist. - Burdwan (W.B.)

> AUDITED STATEMENT OF ACCOUNTS FOR THE YEAR ENDED ON 31ST MARCH, 2020 (ASSESSMENT YEAR 2020-21)



V. N. PUROHIT & CO.

CHARTERED ACCOUNTANTS



A-4, Nandalal Bithi. City Centre Ground Floor Durgapur-713216 Mob.- 9903979180, 9433183328 E-mail: vnpdurgapur@vnpaudit.com Website: www.vnpaudit.com

#### **AUDITORS' REPORT**

We have audited the attached Balance Sheet of **Dr. B.C. Roy Engineering College** as at March 31st, 2020 and also the Income & Expenditure account for the year ended on that date. These financial statements are the responsibility of the management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in India. Those standards require that we plan and perform our audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting, the amounts and disclosure in financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis of our opinion.

In our opinion and to the best of our information and according to the explanations given to us the said accounts, give the information in the manner so required and gives a true and fair view in conformity with the accounting principles generally accepted in India:

- a) in the case of the Balance Sheet of the state of the affairs of Dr. B.C. Roy Engineering College as at 31<sup>st</sup> March, 2020; and
- b) in the case of the Income & Expenditure of the surplus for the year ended on that date.

Place: Durgapur

Dated: 06/10/2020

For V. N. PUROHIT & CO. Chartered Accountants
Firm Regd No: 304040E

(SUGATA GANGULY)
Partner

Membership No. 065153



### DR.B.C.ROY ENGINEERING COLLEGE JEMUA ROAD, FULJHORE, DURGAPUR - 713 206

#### BALANCE SHEET AS AT 31ST MARCH, 2020

PREVIOUS	T in the second second	T Cab	AC AT 240	THAROUL COOK
YEAR	PARTICULARS	Sch. No.	A5 A1 315	T MARCH, 2020
	- ANTIOGEARO	No.	4	
	GENERAL FUNDS		<del>                                     </del>	
393,180,221.32	Balance as per General Fund		408,286,534.71	
7,521,982.02	Less: Transferred to Gratuity Fund	1	10,713,884.26	i e
	Less: Prior Period Adjustment		-	
-	Less: Transferred to Reserve Fund			e .
22,628,295.41	Add.:- Surplus for the year as per		10,428,352.95	
	attached Income & Expenditure Accounts			
408,286,534.71				408,001,003.40
				al .
	RESERVE FUND	1		
32,107,192.74				42,821,077.00
32,107,192.74			6	42,821,077.00
	1			
=	LOAN FUNDS	1		-
	4		•	
	FUND MOVEMENTS (Inter-111)		20	
	FUND MOVEMENTS (Inter Head)			
1	Fund Received from Dr. B.C. Roy, APC	ľ		
	Fund Received from Dr. B.C. Roy, Polytechnic			
440,393,727.45	TOTAL	1		
440,030,727.43	TOTAL	İ		450,822,080.40
	EIVED ACCETS			
283,316,462.65	FIXED ASSETS : Net Block	2	*	
200,010,402.00	THE BIOCK			246,159,459.65
113 657 568 33	INVESTMENTS	3		470 000
	IIIVEO IIIIEIQIO	3		170,983,779.08
	FUND MOVEMENTS (Inter Head)			
64,819,598.83	Fund Transferred To Dr. B.C. Roy Polytechnic		6,533,433.81	
-	Fund Transferred To Dr. B.C.Roy A.P.C.		61,306,509.96	
64,819,598.83	1		01,000,000.00	67,839,943.77
	CURRENT ASSETS:	4		01,000,040.77
	a) Deposits		2,483,487.00	19
	b) Loans & Advances		2,632,071.00	
	c) Cash & Bank Balances		52,361,293.12	
	d) Other Receivable		20,711,446.50	
100,010,369.01			78,188,297.62	
	Less:- CURRENT LIABILITIES	5		*
108,726,785.50	a) Advances against educational activities		102,629,649.50	a #
	b) Security deposits		388,334.00	
	c) Liabilities for Expenses		631,922.11	
/23,811.87	d) Liabilities Against Student		2,042,071.11	
1,253,/15.00	e) Unpaid statutory deductions		1,182,425.00	*
	f) Liabilities for Tax Deducted at Source		79,806.00	±
	g) Sundry Creditors		5,395,192.00	1
121,410,271.37	NET CURRENT ACCETO( 4 :		112,349,399.72	
(21,399,902.36)	NET CURRENT ASSETS( 4 - 5 )			(34,161,102.10)
440,393,727.45	TOTAL			450.000.000
This is the Pelener		<u> </u>		450,822,080.40

This is the Balance Sheet for the year ended 31st March, 2020 referred to in our report of even date annexed.

For V. N. PUROHIT & CO. Chartered Accountants

(SUGATA GANGULY)

Partner Membership No. 065153

Place : Durgapur Dated : 06/10/2020 QUROHITO ACCOUNTS

Pijush Pal Roy Director

Dr. B. C. Roy Engineering College

Durgapur



## ENERGY & GREEN AUDIT COMPLETION CERTIFICATE

This is to certify that following utility has carried out Energy & Green Audit as per guidelines laid down in The Energy Conservation Act, 2001 in the month of July 2020

Name of the Installation	Dr. B.C. Roy Engineering College	
	Jemua Road, Fuljhore	
Datails of P. W.	Durgapur-713206, West Bengal, India	
Details of Facilities Audited	BCREC Main Building	
	Management House	
	ME Department	
	AJC Bose Bhawan	
	EE Department	
	Vidyasagar Bhawan	
	CE Department	
	Rabindra Bhawan	
	Satyen Bose Hall & residence	
	Chittaranjan Boy's Hostel	
	Aurobindo Boy's Hostel	
	Mother Teresa Girl's Hostel	
Date of Energy and Green Audit	Nivedita Girl's Hostel	
Name of Certified Energy Auditor	23.07.2020	
Certification Sl. No.	Mr. Saibal Saha	
	8890 (EA-12290)	
/alidity of the Auditor Certificate	22.07.2021	

Signature of Auditor (Mr. Saibal Saha)

S. P. LAN

**Executive Director** 

Dr. B.C. ROY ENGINEERING COLLEGE, DURGAPUR

		PEV	SED ACAD	EMICCA					DLLEGE, DURGAPUR O DECEMBER 2019 ] AS PER MAKAUT CALENDAR
MONTH	MON	TUE	WED	THU	FRI	SAT	SUN	WEEK	
						Secretaria de la constantina del constantina de la constantina de la constantina de la constantina del constantina de la constantina de la constantina del			REMARKS OR THE STUDENTS FROM 16TH JULY, 2019 [ EXCEPT FIRST SEMESTER ]
JULY	1	2	3	4	5	6	7	1	THE STODENTS FROM 16 IN SOLT, 2019 [EXCEPT FIRST SEMESTER]
	8	9	10	11	12	13	14	2	
	15	16	17	18	19	20	21	3	STUDENTS RETURN FROM VACATION 16TH JULY 2019
	22	23	24	25	26	27	28	4	21.07.2019: NSS ACTIVITIES - INTERNATIONAL YOGA DAY
	29	30	31					5	THE
AUG				1	2	3	4	6	
	5	6	7	8	9	10	11	7	02.08.2019 : ORIENTATION PROGRAMME
	12	13	14	15	16	17	18	8	03.08.19 TO 14.08.19: INDUCTION PROGRAMME FOR FIRST YEAR/ 15.08.19: INDEPENDENCE DAY
	19	20	21	22	23	24	25	9	13.08.19 TO 17.08.19 : SUBMISSION OF FIRST ASSIGNMENT/ 23.08.19 : JANMASTAMI
	26	27	28	29	30	31		10	31.08.19 : FRESHERS' WELCOME
SEPT							1		1ST ROUND OF TEST ON SPOKEN TUTORIAL PROJECT-IIT(BOMBAY) DURING 1ST WEEK (UNDER MOOCS)
	2	3	4	5	6	7	8	11	30.08.19 - 07.09.19: MAKAUT PHASE - I EVALUATION (OFF LINE CLASS TEST-I
	9	10	11	12	13	14	15	12	10.9.19:MUHARRUM/11.09.19 TO 14.09.19: SUBMISSION OF MENTORING REPORT(PHASE-I) TO SPOC/ SUBMISSION OF SECOND ASSIGNMENT
	16	17	18	19	20	21	22	13	17.09.19: VISWAKARMA PUJA/18.09.19 - 21.09.19 MAKAUT PHASE-II EVALUATION(ON-LINE CLASS TEST-II)
	23	24	25	26	27	28	29	14	27.09.19 :NSS ACTIVITIES INCLUDING 1ST YEAR / 28.09.19: MAHALAYA
	30								29.09.19: FIRST SLOT OF NPTEL EXAMINATION (UNDER MOOCS)
OCT		1	2	3	4	5	6	15	2.10.19: MAHATMA GANDHI'S BIRTHDAY
	7	8	9	10.	11	12	13	16	03.10.19 TO 12.10.19 : DURGA PUJA AND LAKSHMI PUJA
	14	15	16	17	18	19	20	17	17.10.19-24.10.19 MAKAUT PHASE-III EVALUATION(OFF-LINE CLASS TEST-III FOR WEAK STUDENTS)
	21	22	23	24	25	26	27	18	
	28	29	30	31				19	31.10.19 TO 03.11.19:2ND ROUND OF TEST ON SPOKEN TUTORIAL PROJECT- IIT(B) (UNDER MOOCS)
NOV									29.10.19 TO 30.10.19 : BHATRIDWITIYA
					1	2	3		02.11.19 : CHHAT PUJA
	4	5	6	7	8	9	10	20	
	11	12	13	14	15	16	17	21	12.11.19: GURU NANAK'S BIRTHDAY/ 13.11.19 - 19.11.2019 : MAKAUT PHASE- IV ( OFF-LINE CLASS TEST-IV)
	18	19	20	21	22	23	24	22	16.11.19 TO 17.11.19: SECOND SLOT OF NPTEL EXAMINATION (UNDER MOOCS) / 19.11.19-23.11.19:SUBMISSION OF MENTORING REPORT-PHASE-II
	25	26	27	28	29	30		23	22.11.19 TO 30.11.19 - MAKAUT PRACTICAL EXAMINATIONS
DEC							1	100	THE TOTAL EXAMINATIONS
	2	3	4	5	6	7	8	24	04.12.19 TO 21.12.19 : MAKAUT THEORY EXAMINATIONS (UG & PG)
	9 ~	10	11	12	13	14	15	25	
	16	17	18	19	20	21	22	26	25.12.19 : CHRISTMAS DAY
/-	23	24	25	26	27	28	29	27	22.12.19 TO 12.01.20: INTER SEMESTER BREAK
	30	31	LEGEND:		WEE	KLY HOLIDA	AYS		COLLEGE WILL RE-OPEN ON 14TH JANUARY 2020

1772019

	DEVICES			D)	M. D.C.M.	JI LINGI	NEEKIN	IG COLLEGE, DURGAPUR
	REVISED	ACADEN	IC CALEN	DAR - 121/12	N SEVIES	TER JAN		20 TO JUNE 2020 J AS PER MAKAUT ACADEMIC CALENDAR 2020
MONTH	MON	TUE	WED	THU	FRI	SAT	SUN	REMARKS
JANUARY			1	2	3	4	5	21-01-2020 - COMMENCEMENT OF CLASSES
	6	7	8	9	10	11	12	01.01.2020:NPTEL COURSE ENROLLMENT STARTING(UNDER MOOCs)
	13	14	15	16	17	18	19	23.01.2020 - NETAJI'S BIRTH DAY
	20	21	22	23	24	25	26	29.01.2020 - SARASWATI PUJA/ 31.01.2020 - ANNUAL SPORTS DAY
	27	28	29	30	31			CONTINUOUS EVALUATION (PHASE I): 31.01.2020
FEBRUARY								
						1	2	03.02.2020 - NPTEL SET - I ENROLMENT CLOSING
	3	4	5	6	7	8	9	12.02.2020 - DULAL MITRA REMEMBRANCE CEREMONY
	10	11	12	13	14	15	16	13.02.2020 - CULTURAL FUNCTION
	-17	18	19	20	21	22	23	14.02.2020-15.02.2020 - TECH FEST/21.02.2020 - SHIVARATRI
	24	25	26	27	28	29	30	24.02.2020-NPTEL SET II ENROLLMENT CLOSING(UNDER MOOCS)
MARCH							1	CONTINUOUS EVALUATION (PHASE II): 28.02.2020
	2	3	4	5	6	7	8	
	9	10	11	12	13	14	15	10.03.2020 - HOLI
	16	17	18	19	20	21	22	24.03.202028.03.2020 - FIRST ASSIGNMENT/24.03.2020-31.03.2020-FIRST TEST SLOT FOR SPOKEN TUTORIAL(UNDER MOOCs)
	23	24	25	26	27	28	29	29.03.2020 - NPTEL FIRST EXAMINATION (UNDER MOOCs)
	30	31			.v			CONTINUOUS EVALUATION (PHASE III) : 31.03.2020/MENTORING REPORT SUBMISSION (PHASE I) : 31.03.2020
APRIL			1	2	3	4	5	
	6	7	8	. 9	10	. 11	12	10.04.2020 - GOOD FRIDAY
	13	14	15	16	17	18	19	14.04.2020: DR. AMBEDKAR'S BIRTH DAY/BENGALI NEW YEAR
	20	21	22	23	24	25	26	25.04.2020 & 26.04.2020 - NPTEL SECOND & THIRD EXAMINATION (UNDER MOOCs)
	-27	28	29	30				CONTINUOUS EVALUATION (PHASE IV): 30.04.2020
MAY					1	2	3	
	4	5	6	7	8	9	10	01.05.2020:MAY DAY/07.05.2020:RABINDRA JAYANTI/08.05.2020:BUDDHA PURNIMA
	-11	12	13	14	15	16	17	11.05.2020-16.05.2020 UNIVERSITY PRACTICAL EXAMINATION & VIVA-VOCE
	18	19	20	21	22	23	24	22.05.2020-09.06.2020 - UNIVERSITY THEORY EXAMINATION
	25	26	27	28	29	30	31	26.05.2020 - ID-UL-FITR
JUNE	1	2	3	4	5	6	7	26.05.2020-29.05.2020-SECOND TEST SLOT FOR SPOKEN TUTORIAL (UNDER MOOCS)
	8	9	10	11	12	13	14	
	15	16	17	18	19	20	21	MENTORING REPORT SUBMISSION (PHASE II): 30.06.2020
	00	00	0.4	0.0				( AMADA A) I DOLO III DADO

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\*\*Any other Holiday that will intimated by the appropriate Authourity to be notified later on.

24

22

29

**LEGEND** 

23

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GENERAL HOLIDAYS
WEEKLY HOLIDAYS

Pijush Pal Roy

10.06.2020-14.07.2020 - INTER-SEMESTER BREAK

DIRECTOR

DATES OF CONTINUOUS EVALUATION/UNIVERSITY PRACTICAL & THEORY EXAMINATION MAY CHANGE IN CASE MAKAUT REVISE ANY DATES.

Pr. B. C. Roy Engineering College
DURGAPUR

<sup>\*</sup> College hours: 10 a.m. to 5:30 p.m./ LABS WILL BE OPENED FROM 9:50 a.m./Absence from the scheduled classes/tests is punishable

## Dr. B. C. Roy Engineering College, Durgapur

## Internal Quality Assurance Cell (IQAC)

#### About IQAC Cell

Internal Quality Assurance Cell (IQAC) was established at Dr. B. C. Roy Engineering College, Durgapur on 8th June, 2018 after receiving the accreditation status from NBA for its major two UG programmes as a post accreditation quality enhancement and sustenance measure. The decision of formation of IQAC was to make a significant and meaningful contribution in the post-accreditation phase through channelizing the efforts and measures of the Institute towards academic excellence.

#### Objective:

- The prime task of the IQAC is development of a system for conscious, consistent and catalytic improvement in the overall academic and administrative performance of the Institute.
- To promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.

#### Strategies:

The IQAC has evolved mechanisms and procedures for ensuring the following:

- Timely, efficient and progressive performance of academic, administrative and financial tasks.
- The relevance and quality of academic and research programmes.
- Equitable access to and affordability of academic programmes for students
- Optimization and integration of modern methods of teaching and learning.
- The credibility of evaluation procedures.
- The adequacy, maintenance and proper allocation of support structure and services.
- Research sharing and networking with other institutions in India and abroad.

#### Functions:

- Development and application of quality benchmarks/parameters for various academic and administrative activities of the institution.
- Facilitating the creation of a learner-centric environment conducive to quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process.

• Arrangement for feedback response from students, parents and other stakeholders on quality-related institutional processes

Pijush Pal Bey

Dr. B. C. Roy Engineering College
DURGAPUR

- Dissemination of information on various quality parameters of higher education
- Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles
- Documentation of the various programmes/activities leading to quality improvement
- Acting as a nodal agency of the Institution for coordinating quality-related activities, including adoption and dissemination of best practices
- Development and maintenance of institutional database through MIS for the purpose of maintaining/enhancing the institutional quality
- Development of Quality Culture in the Institute
- Preparation of the Annual Quality Assurance Report (AQAR) of the Institute based on the quality parameters/assessment criteria developed by the relevant quality assurance body (like NAAC, NBA) in the prescribed format.
- Bi-annual development of Quality Radars (QRs) and Ranking of Integral Units of Institute based on the AQAR.

### Benefits of IQAC:

- Ensure heightened level of clarity and focus in institutional functioning towards quality enhancement
- Ensure internalization of the quality culture
- Ensure enhancement and integration among the various activities of the institution and institutionalize good practices
- Provide a sound basis for decision-making to improve institutional functioning
- Act as a dynamic system for quality changes in the Institute
- Build an organized methodology of documentation and internal communication.

## Composition of the IQAC:

**IQAC** is constituted under the Chairmanship of the Head of the institution with heads of important academic and administrative units and a few teachers and a few distinguished educationists and representatives of local management and stakeholders.

- 1. Chairperson: Head of the Institution
- 2. One of the senior teachers as the coordinator/Director of the IQAC
- 3. A few senior administrative officers
- 4. Three to eight teachers
- 5. One Member from the Management
- 6. One/two nominees from local society, Students and Alumni
- 7. One/two nominees from Employers /Industrialists/stakeholders

Pijush Pat Roy DIRECTOR

Dr. B. C. Roy Engineering College DURGAPUR Re-structuring of IQAC Cell was made with inclusion of new personnel and change of designation of existing members in the meeting held on 28/02/2020 and the present structure of IQAC is as follows:

Sl. No.	Name	Designation		
1	Shri Tarun Bhattacharya, General Secretary, BCREC Society	Management		
2	Prof.(Dr.) Pijush Pal Roy, Director	Chairperson		
3	Prof. (Dr.) Sanjay Sengupta, HoD, Civil Engineering	Coordinator		
4	Smt. Ruma Mitra, Registrar	Member		
5	Dr. Aloke Kahali, Head (Administration)	Member		
6	Commdr.(Retd.) Ratnakar Ghosh, Campus Administrator	Member		
7	Shri Rajesh Chatterjee, Sr. Manager (Admn.)	Member		
8	Shri Ravi Sharma, Sr. Manager (Finance)	Member		
9	Prof. (Dr.) Chandan Chattoraj, Dean(Academics)	Member		
10	Prof. (Dr.) Narendra Nath Pathak, Dean (SW & A)	Member		
11	Prof. (Dr.) Chandan Koner, HoD (CSE)	Member		
12	Prof. (Dr.) Rajib Roy, HoD (MBA)	Member		
13	Prof. (Dr.) Jayanta Pal, HoD, Basic Science & Humanities	Member		
14	Prof. (Dr.) Pabitra Kumar Dey, HoD (MCA)	Member		
15	Prof. (Dr.) Debaprasad Mukherjee	Member		
16	Prof. Anirban Bose, Instrumentation & Electronics	Member		
17	Prof. Arijit Kumar Banerjee, Civil Engineering	Member		
18	Prof. Mou Das Mahapatra, Asstt. Professor, EE, BCREC	Member		
19	Shri Abhijit Shyam, Entrepreneur, President, Alumni Association, BCREC	Member		
20	Shri Sanjay Saha, HR Manager, Neo Metaliks	Member		
21	Shri Sujit Kumar Pal, Personnel Manager, GE India Power	Member		

#### Plan of Action:

- To conduct the meeting at the beginning of each semester (Twice in a year)
- Prime agenda of the meeting would be review based planning of academic policies for the sustainable growth of the Institute
- To develop a monitoring system for quality assurance of the policies

#### **Academic Activities**

- To organize an interactive session with faculty members following the guidelines given by Governing Body, College Academic Council (CAC) and Departmental Academic Council (DAC) to strengthen the Teaching Learning process.
- Preparation and release of guidelines regarding all Academic activities before the commencement of Semester

Preparation of list of faculty mentors at Department level and distribution of mentoring registers along with guidelines to tollow.

Pijush Pal Ro

Or. B. C. Roy Engineering College DURGAPUR

- To conduct interactive session with all faculty mentors regarding mentoring of students based on three parameters-Attendance, Performance and Attitude
- Preparation of Activity Calendar for extra-curricular and co-curricular activities and communicate the same to the respective Department for inclusion in their timetable
- Collection and compilation of attendance at the end of every month and to send the list of students having less attendance to the respective mentors and to the office of the Director.
- To coordinate the process of online feedback from students about Teaching-Learning process in respective classes and communicate the assessment of the same to the Department.

To help the Departments/professional bodies in collection and analysis of feedback

- 1. Employers who are visiting the college
- 2. Alumni
- 3. Teachers
- To suggest various value added programs to T&P cell and to coordinate the execution of the same
- To suggest various ways to the Departments to strengthen the technical skills of the students for enhancing employability quotient
- To organize the review /audit of all the academic activities by the members of IQAC.
- To consolidate the information about funding agencies, their norms and passing the same to R&D centre and respective Departments.

#### **Administrative Activities**

To help the Director's Office in the preparation of schedule of following meetings:

- Governing Body (once in a semester)
- College Academic Council (Once in a month) To help the Director's Office in constituting following central committees for decentralization of work and effective functioning of the Institute:
- 1. Discipline and Anti-ragging
- 2. Central facilities
- 3. Gri evance Redressal & Sexual Harassment
- 4. Student Activity Centre
- 5. Training and Placem ent, career guidance and entrepreneurship development
- To coordinate the flow of information to the website administrator from various forums/Departments before and after the activities/achievements
- To coordinate the process of preparation and submission of Activity Record files by various forums after the activity

To discuss innovative concepts and ways of execution with coordinators of various

forums

DIRECTOR

Dr. B. C. Roy Engineering College

DURGAPUR



# CERTIFICATE

OF APPRECIATION -



is awarded to

## TRIBENI PRASAD BANERJEE

for his/her instrumental role as SPOC for the SWAYAM-NPTEL Local Chapter

#### DR. B. C. ROY ENGINEERING COLLEGE

DURGAPUR, WEST BENGAL

rated

Α

PROF. BHASKAR RAMAMURTHI

Chairman, NPTEL PIC Director, IIT Madras based on performance in NPTEL Online Certification courses *Jul - Dec 2019* 







## CONGRATULATIONS

**SWAYAM-NPTEL** recognizes

#### DR. B. C. ROY ENGINEERING COLLEGE

DURGAPUR, WEST BENGAL as a valuable Local Chapter with a rating of

Δ

based on perfomance in NPTEL Online Certification courses *Jul - Dec 2019* 

PROF. BHASKAR RAMAMURTHI Chairman, NPTEL PIC Director, IIT Madras

Rating of NPTEL Local Chapters : AAA - 10; AA - 40; A - 50



भारतीय प्रौद्योगिकी संस्थान मुंबई पवई, मुंबई-400 076, भारत

Indian Institute of Technology Bombay Powai, Mumbai-400 076, India

हुरभाष/Phone : (+91-22) 2572 2545 : (+91-22) 2572 3480 han/Fax वंबसाईट/Website : www.litb.ac.in-

## Greetings from the Spoken Tutorial Project!

We are truly grateful for the prompt Payment made to continue the Training in your colleges. This indicates a high degree of acceptance of the numerous benefits the Spoken Tutorial Courses are providing to the students. Thank you for the same.

Find below the acknowledgement of Payment of Rs. 25000/- made by **Dr.** B.C.Roy Engineering College on 05-Sept-2019.

## The UTR Number is: AXSK192480027577

Please treat this as a formal receipt. The official invoice will soon be generated from our Accounts end and will reach you.

For and On behalf of Spoken Tutorials, **Indian Institute of Technology Bombay** 

Mrs. Shyama Iyer

**National Coordinator** 

Spoken Tutorial Project, IIT Bombay

Shyama Tyes.



Ravi Sharma <ravi.sharma@bcrec.ac.in>

## Fwd: \*Automated Mail \_ IIT Bombay Spoken Tutorials | Renewal of Subscription\*

Dr. Tribeni Prasad Banerjee <tribeniprasad.banerjee@bcrec.ac.in> To: Ravi Sharma <ravi.sharma@bcrec.ac.in>

Wed, Sep 11, 2019 at 6:26 PM

Dear Ravi da.

Please needs the details:

Details to be shared by Colleges after making the payment (Mandate) UTR (Unique Transaction reference), - AXSK 192 480027577

Number of Payer, ONE
Name of the payer, DR 13 C ROY ENGINEERING COLLEGE
Institute name registered for GST, NO

Phone number of the Payer,

Date of Payment, 05-09-2019

GST Number, NA

PAN Number. AAABD0204F

With thanks and regards,

-- Forwarded message --

From: <administrator@spoken-tutorial.org>

Date: Wed 11 Sep, 2019, 6:17 PM

Subject: \*Automated Mail \_ IIT Bombay Spoken Tutorials | Renewal of Subscription\*

To: <tribeniprasad.banerjee@bcrec.ac.in>

#### Dear Faculty Organiser,

Thank you for the continuing to offer the Spoken Tutorial Training sessions in this academic year in your college. You have contributed in a great way to the project's success. You are now organising training sessions, planning for tests, motivating faculty from other departments to take these courses to their students and completing the processes for the same. We are with you to guide and support so that maximum students in your college avail of the Training.

Please note that your college's annual Subscription fee validity is expiring shortly. Without any delay ensure that the fee renewal process for Year 2 is completed. We will continue to keep your Login activated. Payment stays Rs.25000/- for this academic year 2019-20 too. The 12 months validity period will be from the date of payment made.

Account Payable details: (same as for the 1st year payment)

A/C Beneficiary Name: Registrar, IIT Bombay

A/C Number: 2724101113370 Bank Name: Canara Bank Bank Branch: IIT Powai

Important Note - If you have already done the payment for the renewal please share the details given with your State Training Manager to track your payment status. OR share the date of making payment for the same to avoid interruption in the training program. If you pay before the expiry date, college will STILL have validity of 12 months from the date of payment. Eg. if validity is there till Oct 2019 and you pay now in Sept 2019, the validity period will still be till Oct 2020.

Details to be shared by Colleges after making the payment (Mandate) UTR (Unique Transaction reference), Number of Payer, Name of the payer, Institute name registered for GST, Email ID, Phone number of the Payer, Date of Payment, GST Number, PAN Number.

Here's wishing you the best and guaranteeing our continued support for offering the Spoken Tutorial Software training to all. If you have questions, please contact the Training Coordinator of your respective state.

Yours Sincerely, Shyama lyer

Year	Registration number/roll number for the exam	Names of students selected/ qualified						
		GATE	State government examinations	Other examinations conducted by the State / Central Government Agencies (Specify)				
2020	CS20S64031252	Aale Rasool						
2020	CS20S64031314	Rakesh Pathak						
2020	CS20S64030391	Rishabh Akash						
2020	CS20S64030215	S M Arbaz Alam						
2020	CS20S66024220	Shivesh Bhardwaj						
2020	EE20S54031397	Aditi Kumari						
2020	EE20S54030217	Amartya Panja						
2020	EE20S54030384	Arijit Dutta						
2020	EE20S54031176	Athar Neshat						
2020	EE20S54030125	Avijit Kundu						
2020	EE20S54031287	Ayush Kaushal						
2020	EE20S54030145	Bijoy Paul						
2020	EE20S56048520	Deepak Kumar						
2020	EE20S54030283	Foujia Rahaman						
2020	EE20S54031018	Ishani Chakraborty						
2020	EE20S54031300	Krishna Kumar Modi						
2020	EE20S54030229	Kumar Abhijeet						
2020	EE20S54031411	Kumari Tanushree						
2020	EE20S54031232	Priya Srivastava						
2020	EE20S54030326	Richa Singh						
2020	EE20S54031094	Satyaki Chatterjee						
2020	EE20S54031307	Rupam Mondal						
2020	EE20S54018029	Rashmi Gupta						
2020	CS20S64033056	Sudipa Konar						
2020	CS20S64015057	Sudarshan Kumar						
2020	ME20S14030091	Abhishek Banerjee						
2020	ME20S14030040	Animesh Santra						
2020	ME20S24030210	Ankan Mondal						
2020	ME20S24030186	Anubrata Das						
2020	ME20S24030050	Anwesha Chakraborty						
2020	ME20S14031270	Atanu Patra						
2020	ME20S14030185	Kumar Sourav						
2020	ME20S14030407	Niraj Singh						
2020	ME20S24030339	Niranjan Kumar						
2020	ME20S24030333	Nitish Kumar						
2020	ME20S14021191	Priya Kumari						
2020	ME20S24019008	Ranjan Kumar						
2020	ME20S14030361	Ranvi Shankar						
2020	ME20S24031029	Rishav Chakraborty						
2020	ME20S14019009	Roshan Kumar Jha						
2020	ME20S24030120	Suman Mandal						
2020	ME20S14030121	Vikash Kumar						
2020	EC20S44021184	Neha Priya						
2020	EC20S44019007	Shruti Shikha						



## Dr. B. C. ROY ENGINEERING COLLEGE, DURGAPUR

(Approved by AICTE & Affiliated to MAKAUT, WB)

CAMPUS: JEMUA ROAD, FULJHORE, DURGAPUR-713206 (W.B.), INDIA

10343) 250-1353/4106/4121/2449, Fax: (0343) 250-4059 / 3424

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This is to certify that following students were benefitted by the Scholarships/Free ships provided by the Institute, Dr. B. C. Roy Engineering College, Durgapur, viz., West Bengal Financial Scheme (WBFS – fully funded by the college), Tuition Fees Waiver (TFW) and Students Welfare Committee (SWC- 50% scholarship provided by the college and 50% by the affiliating University), Institute Scholarships discounted 10%, 25% and 35% during last five academic years (2015-16 to 2019-20). The detailed list is attached.

TO INGERIOR STORY OF 
REGISTRAR
DR. B.C. ROY ENGINEERING COLLEGE
DURGAPUR



## Dr. B. C. ROY ENGINEERING COLLEGE, DURGAPUR

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CAMPUS: JEMUA ROAD, FULJHORE, DURGAPUR-713208 (WB) INDIA

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E-mail: info@bcrec.ac.in ● Website www.bcrec.ac.in

This is to certify that following students were benefitted by the Scholarships/Free ships provided by various Government Schemes viz., E-Kalyan (Jharkhand Govt Scholarship), Swami Vivekananda Merit-cum-Means Scholarship (West Bengal Govt. Scholarship), Oasis (West Bengal Govt. Scholarship for SC/ST students), National Scholarship Portal (Govt of India Scholarship), Scholarship provided by NSPCL, Durgapur, Sramik Surakhya Yogana (Higher Education Scholarship), DWO, during last five academic years (2015-16 to 2019-20). The detailed list is attached.

ON DR. S. PO. S.

REGISTRAR
DR. B.C. ROY ENGINEERING COLLEGE
DURGAPUR

## NATIONAL BOARD OF ACCREDITATION

NBCC Place, East Tower, 4th Floor, Bhisham Pitamah Marg, Pragati Vihar, New Delhi-110 003
Tel: +91 11 2436 0620-22, 2436 0654; Telefax: +91 11 4308 4903
Website: www.nbaind.org



F. No. 36-26-2010-NBA

Dated: 28.05.2020

To,

The Principal,
Dr. B.C Roy Engineering College,
Jemua Road, Fujthore, Durgapur-713206,
West Bengal.

Subject: Further accreditation status on the basis of Compliance Report of the programs in Tier II offered by Dr. B.C Roy Engineering College, Jemua Road, Fujthore, Durgapur-713206, West Bengal.

Sir,

This is regarding Compliance Report submitted by **Dr. B.C Roy Engineering College, Jemua Road, Fujthore, Durgapur-713206, West Bengal** for the UG Engineering programs which were accredited by NBA in Tier-II for academic years 2017-18 to 2019-20 whose validity is expiring on 30.06.2020.

2. An Expert Team conducted data verification of the programs on **22**<sup>nd</sup> **February, 2020**. The report submitted by the Expert Team was considered by the concerned Committees constituted for the purpose in NBA. The competent authority in NBA has approved the following accreditation status to the programs as given in the table below:

SI. No. (1)	Name of the Program(s) (UG)	Basis of Evaluation	Accreditation Status	Period of validity	Remarks	
	(2)	(3)	(4)	(5)	(6)	
1.	Electronics & Communication Engineering		Accredited	Academic Years 2020-2021 to 2022-2023 i.e.	Accreditation status granted is valid for the period indicated in Col.5	
2.	Computer Science & Engineering	Tier-II	Accredited	Up to 30-06-2023	or till the program has the approval of the competent authority, whichever is earlier.	

- 3. It may be noted that only students who graduate during the validity period of accreditation, will be deemed to have graduated with an NBA accredited degree.
- 4. The accreditation status awarded to the programs as indicated in the above table does not imply that the accreditation has been granted to Dr. B.C Roy Engineering College, Jemua Road, Fujthore, Durgapur-713206, West Bengal as a whole. As such the Institution should nowhere along with its name including on its letter head etc. write that it is accredited by NBA because it is program accreditation and not Institution accreditation. If such an instance comes to NBA's notice, this will be viewed seriously. Complete name of the program(s) accredited, level of program(s) and the period of validity of accreditation, as well as the Academic Year from which the accreditation is effective should be mentioned unambiguously whenever and wherever it is required to indicate the status of accreditation by NBA.
- 5. The accreditation status of the above programs is subject to change on periodic review, if needed by the NBA. It is desired that the relevant information in respect of accredited programs as indicated in the table in paragraph 2, appears on the website and information bulletin of the Institute.

Contd./-

- The accreditation status awarded to the programs as indicated in table in paragraph 2 above is subject to maintenance of the current standards during the period of accreditation. If there are any changes in the status (major changes of faculty strength, organizational structure etc.), the same are required to be communicated to the NBA, with an appropriate explanatory note.
- 7. A copy each of Report of the Visiting Team in respect of the above programs is enclosed.

Yours faithfully,

(Dr. Anil Kumar Nassa) Member Secretary

Encls.: 1.Copy each of Report of the Visiting Team in respect of the programs.

Copy to:

- 1. The Registrar, Maulana Abdul Kalam Azad University of Technological, BF- 142 BF Block, sector- 1, Bidhannagar, Kolkata, West Bengal- 700064
- 2. The Commissioner, Directorate of Technical Education Karigari Bhawan, Plot No. B-7, AA-III, 2<sup>nd</sup> floor, Kolkata, West Bengal- 700160
- 3. Accreditation File
- 4. Master Accreditation file of the State