BCREC ANNUAL REPORT 2018-19

Dedicated to "Quality Education"

Dr. B.C. Roy Engineering College, Durgapur

ANNUAL REPORT

(1st July, 2018 to 30th June, 2019)

Dr. B.C. Roy Engineering College, Durgapur

Jemua Road, Fujhore, Durgapur- 713206

Website: www.bcrec.ac.in

CONTENTS

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.

HOMAGE

Mr. Dulal Mitra

(1949-2018)

Former President

Dr. B.C. Roy Engineering College, Durgapur (Society)

Dr. B.C. Roy Engineering College Fraternity pays respectful homage to Late Dulal Mitra, former President of Dr. B.C. Roy Engineering College, Durgapur (Society). His relentless pursuit of "Excellence in Education" had brought Dr. B.C. Roy Engineering College to the centre- stage of Engineering and Management Education in the district of Burdwan and the State of West Bengal. It was not in vain that in 2013, he was conferred the "Edupreneur Award" of Vice-Chancellor's choice.

Dr. B.C. Roy Engineering College Fraternity pledges to uphold his vision of creating a vast pool of technically proficient human resource for the benefit of mankind.

"Na hi Jnanena Sadrsam Pavitram iha vidyate! "

Certainly there is nothing as pure as knowledge in this universe. Knowledge that not just lays the foundations to successful careers but also enriches the mind.

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 has earned NBA Accreditation for two programmes and aspiring for all the programmes under its banner. 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 socio-economic 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.

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 e-learning 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

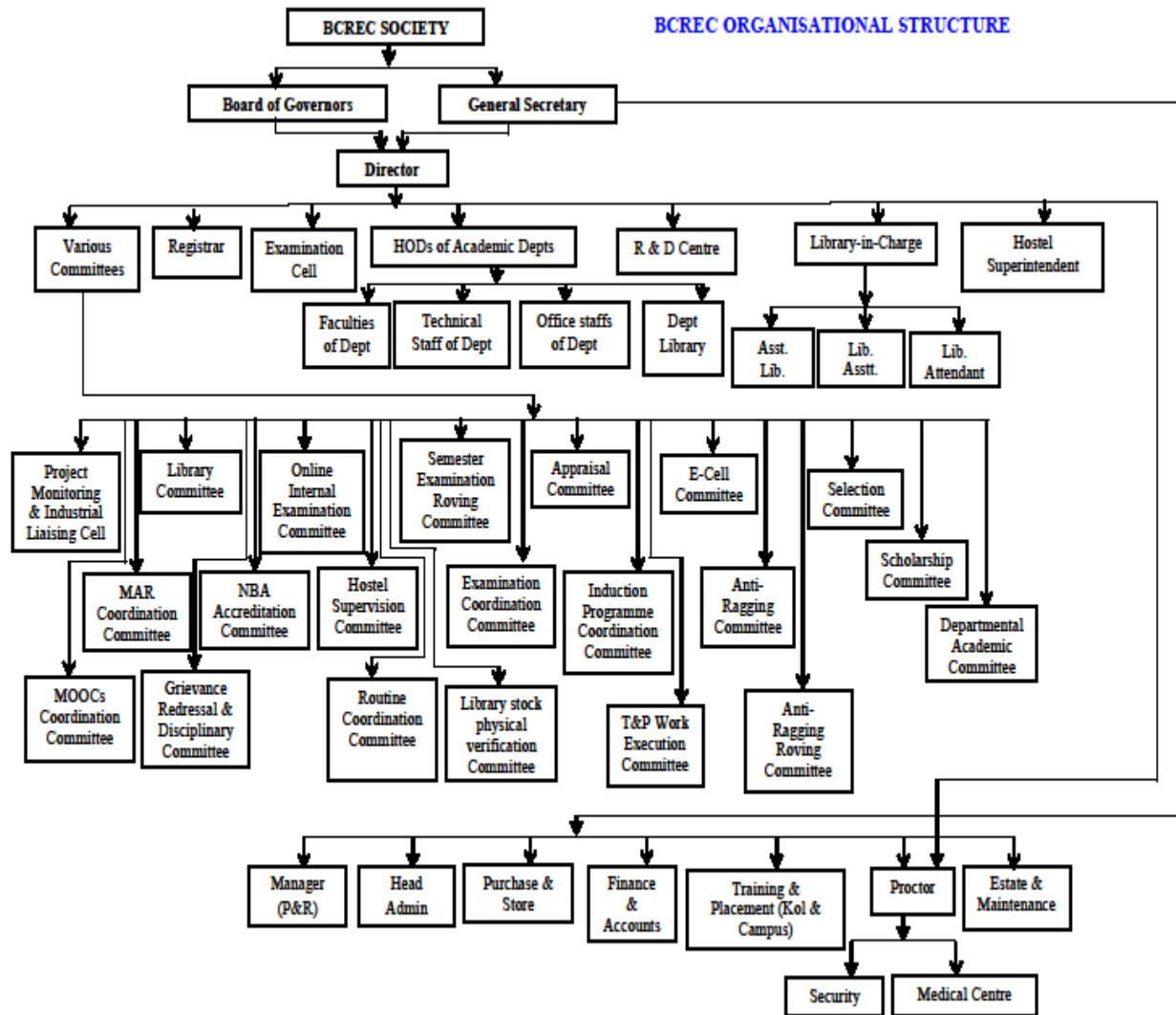|		
Name of Head of the Institute	:	**Prof. (Dr.) Pijush Pal Roy**
Exact Designation	:	**Director**
Phone number with STD code	:	**(0343) 2504121 / (M) 9431506000**
FAX number with STD code	:	**(0343) 2504059 / 2503424**
Email	:	**director@bcrec.ac.in / info@bcrec.ac.in**
Highest Degree	:	**Ph.D.** (IIT-ISM, 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	:	**2019-2020 Academic Year**

Members of the Board of Governors and Their Brief Background

Sl. No.	Name	Detail Background	Designation
1.	Prof. (Dr.) G. C. Debnath	Former Director of Tech. Education, Govt. of West Bengal	Chairman
2.	Prof. (Dr.) Swapan Kr. Mondal	Professor, Kalyani Govt. Engg. College Representing Higher Education Dept., Govt. of West Bengal	Member
3.	Shri Pranabesh Das	Director of Technical Education , Govt. of West Bengal, Bikash Bhawan, Salt Lake City, Kolkata – 700091	Member
4.	Prof. (Dr.) Arup Mukherjee	Dept. of Chemical Technology, University of Calcutta	Member, Nominee MAKAUT
5.	Eastern Regional Officer	Eastern Regional Office, AICTE, College of Leather Technology Campus, LB Block, Sector – III, Salt Lake City, Kolkata – 700098	Member (Ex-Officio)
6.	Prof. (Dr.) Anupam Basu	Director, National Institute of Technology, Durgapur – 713209	Member
7.	Dr. Harish Hirani	Director, CMERI, Durgapur	Member
8.	Smt. M. Mitra	Society Member of Dr. B. C. Roy Engineering College, Durgapur	Member
9.	Sri T. Bhattacharya	Society Member of Dr. B. C. Roy Engineering College, Durgapur	Member
10.	Sri J. Singh	Society Member of Dr. B. C. Roy Engineering College, Durgapur	
11.	Sri Ratan Roy Chowdhury	Society Member of Dr. B. C. Roy Engineering College, Durgapur	Member
12.	Sri Nikhil Sikdar	Society Member of Dr. B. C. Roy Engineering College, Durgapur	Member
13.	Prof. (Dr.) Pijush Pal Roy	Director, Dr. B. C. Roy Engineering College, Durgapur	Member Secretary
14.	Prof.(Dr.) Dipen Ghosh	HOD, Basic Science & Humanities Dept., Faculty representative, BCREC	Member
15.	Prof.(Dr.) Kanchan Chatterjee	HOD, Mechanical Engineering Dept., Faculty representative, BCREC	Member

> 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	Designati	Qualification
1.	Prof. (Dr.) Pijush Pal Roy, Director	Chairman	Ph.D.
2.	Prof. (Dr.) Kanchan Chatterjee, HOD (ME)	Member	Ph.D.
3.	Prof. (Dr.) N.N.Pathak, HOD(ECE)	Member	Ph.D.
4.	Prof. (Dr.) K.M.Hossain,HOD(AEIE)	Member	Ph.D.
5.	Prof. (Dr.) Chandan Konar,HOD(CSE)	Member	Ph.D.
6.	Prof. (Dr.) Raj Kumar Samanta, HOD (IT)	Member	Ph.D.
7.	Prof. (Dr.) Sushanta Dutta, HOD (EE)	Member	Ph.D.
8.	Prof. (Dr.) D.N. Ghosh, HOD (BSH)	Member	Ph.D.
9.	Prof. (Dr.) Rajib Roy, HOD (FMS)	Member	Ph.D.
10.	Prof. (Dr.) D Mukherjee, Mentor (CSE&IT)	Member	Ph.D.
11.	Prof. (Dr.) Saikat Maity, Head (T&P Campus)	Member	Ph.D.
12.	Prof. (Dr.) Saurabh Dutta, HOD(MCA)	Member	Ph.D.
13.	Prof. (Dr.) Sabyasachi Chandra, HOD (CE)	Member	Ph.D.
14.	Prof. Ramkrishna Rakshit, In-charge, Examination Cell)	Member	Ph.D.
15.	Smt. Ruma Mitra, Registrar	Convener	MA, LLB

Organizational Chart and Processes

BCREC ORGANISATIONAL STRUCTURE

BCREC SOCIETY
- Board of Governors
- General Secretary
- Director
  - Various Committees
  - Registrar
  - Examination Cell
  - HODs of Academic Depts
    - Faculties of Dept
    - Technical Staff of Dept
    - Office staffs of Dept
    - Dept Library
  - R & D Centre
  - Library-in-Charge
    - Asst. Lib.
    - Lib. Asstt.
    - Lib. Attendant
  - Hostel Superintendent

- Project Monitoring & Industrial Liaising Cell
- Library Committee
- Online Internal Examination Committee
- Semester Examination Roving Committee
- Appraisal Committee
- E-Cell Committee
- Selection Committee
- Scholarship Committee
- MAR Coordination Committee
- NBA Accreditation Committee
- Hostel Supervision Committee
- Examination Coordination Committee
- Induction Programme Coordination Committee
- Anti-Ragging Committee
- Departmental Academic Committee
- MOOCs Coordination Committee
- Grievance Redressal & Disciplinary Committee
- Routine Coordination Committee
- Library stock physical verification Committee
- T&P Work Execution Committee
- Anti-Ragging Roving Committee

- Manager (P&R)
- Head Admin
- Purchase & Store
- Finance & Accounts
- Training & Placement (Kol & Campus)
- Proctor
  - Security
  - Medical Centre
- Estate & Maintenance

- 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 2018-19

Dr. B. C. Roy Engineering College, Durgapur

GO AHEAD, REPORT RAGGING 2018

ANTI - RAGGING COMMITTEE	CONTACT
Prof.(Dr)D.C.Gandhi- Principal & Chairman-(Anti-Ragging)	0343-2504121 / 9474364223
Prof.(Dr)C.K.Ghosh-Member Secy (Anti-Ragging)	9474646041
Prof.Saindhab Chattaraj, Joint Convener	9475744761
Prof.Sunil Chowdhury, Joint Convener	9093077660
Prof(Dr)Saurabh Dutta, Principal(APC) & HOD(MCA)	9433411450
Prof.(Dr)K.M.Hossain-HOD (AEIE)	9434387588
Prof(Dr)D.N.Ghosh - HOD(Hu)	9434225354
Prof(Dr)Sabyasachi Chandra- HOD(CE)	9800463502
Prof(Dr)N.N.Pathak- HOD(ECE)	9434334966
Prof(Dr)K.Chatterjee- HOD(ME)	9474484906
Prof(Dr)S.Banerjee - HOD(EE)	9434475618
Prof.Saikat Maity - HOD(IT)	9614962733
Prof(Dr)Chandan Koner - HOD(CSE)	9434535556
Prof(Dr)Rajib Roy - HOD(FMS)	9932258030
Smt.Ruma Mitra, Registrar	9007443233
Shri.Shouvick Chandra, Manager(PR)	9830035725
Col.S.K.Ganguly, Proctor	9477305580

AICTE Help-Line No. : 1800-180-5522

(ress owing to ragging related incidents can access the Toll Free Helpline 1800-180-5522
.ite to the Member Secretary, AICTE, 7th Floor, Chanderlok Building, Janpath, New Delhi-100,001.

Dr. B. C. Roy Engineering College, Durgapur

Students may contact any of the below mentioned numbers for Help

ANTI - RAGGING ROVING SQUAD	CONTACT
• Prof.Abhijit Bhowmick , Convener	9433354734
• Prof(Dr)R.K.Samanta, Jt.Convener (CSE/IT)	9333336958
• Prof.Bappaditya Das , Jt.Convener (CSE/IT)	9474023471
• Prof.Priyanka Roy ((CSE/IT)	9474483874
• Prof.Paramita Manna (CSE/IT)	9474892603
• Prof.Tapas Mondal (ECE)	9434538731
• Prof.Mrinmoy Chakraborty (ECE)	8902525088
• Prof(Dr)Chanchal De (AEIE)	9434392120
• Prof.Chandan Das (AEIE)	8902728918
• Prof(Dr)Susanta Dutta (EE)	9434254591
• Prof.Mou Das Mahapatra (EE)	7584005091
• Prof(Dr)Arijit Banerjee (ME)	9339204602
• Prof(Dr)Subrata Samanta (ME)	9434340418
• Prof.Ashish Som (CE)	9563941745
• Prof.Arijit Kr Banerjee(CE)	9647509396
• Prof.Sarabjeet Lahiri (BS &Hu)	9851006415
• Prof.Uttam De (APC)	9475743541
• Prof.Nirupam Roy (APC)	9153559008
• Prof.Subhasish Pal (BS &Hu)	9932378969
• Shri.Kalidas Ray, Asst.Proctor	9733050498
• Shri.P.K.Chakraborty, Asst.Proctor	9674471399

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.

| (a) | (b) |

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 multi-speciality 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.

(a)   (b)

Fig. 1.3- Medical Facilities in the Campus (a) Medical Centre & (b) Dispensing Room

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.

(a)   (b)

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

4

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 Total number of students residing: 376 students	Mother Teresa Hall of Residence Total number of students residing: 208 students
Aurobindo Boys Hostel Total number of students residing: 204 students	Nivedita Girls Hostel Total number of students residing: 244 students
Chittaranjan Boys Hostel Total number of students residing: 240 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.

| (a) | (b) |

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.

(a)

(b)   **(c)**

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 2018-19

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 2018-19
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)	120
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

2.2 Details of the Admission during the Year 2018-19

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.

Age 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 2018-19

Sl. No.	Name of Course	UG / PG	Number of Students got admitted to first year in 2018-19	Lateral Entry
1.	Computer Science and Engineering	UG (B.Tech)	126	5
2	Electronics & Communication Engineering	UG(B.Tech)	126	12
3	Electrical Engineering	UG(B.Tech)	111	22
4	Information Technology	UG(B.Tech)	63	2
5	Applied Electronics and Instrumentation	UG(B.Tech)	11	0
6	Mechanical Engineering	UG(B.Tech)	70	37
7	Civil Engineering	UG(B.Tech)	57	34

Sl. No.	Name of Course	UG / PG	Number of Students got admitted to first year in 2018-19	Lateral Entry
8	Master in Business Administration	PG (MBA)	60	NA
9	Master in Computer Applications	PG (MCA)	36	NA
10	Modern Communication Engineering	PG(M.Tech)	10	NA
11	Power System Engineering	PG(M.Tech)	7	NA
12	Computer Systems and Technology	PG(M.Tech)	6	NA
13	Mechanical Engineering	PG(M.Tech)	2	NA

2.3 Number of Students Completing Their Respective Degrees during the Year 2018-19

Table 2.3- Number of Students Successfully Completing Their Studies in the Even Sem 2018-19 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)	121	116
Electronics & Communication Engineering	UG(B.Tech)	128	119
Electrical Engineering	UG(B.Tech)	138	114
Information Technology	UG(B.Tech)	61	59
Applied Electronics and Instrumentation Engineering	UG(B.Tech)	35	32
Mechanical Engineering	UG(B.Tech)	143	122
Civil Engineering	UG(B.Tech)	146	101
Master in Business Administration	PG (MBA)	52	52
Master in Computer Applications	PG (MCA)	11	11
Modern Communication Engineering	PG(M.Tech)	4	4
Power System Engineering	PG(M.Tech)	10	10
Computer Systems and Technology	PG(M.Tech)	8	8
Mechanical Engineering	PG(M.Tech)	4	4

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	COMPUTER SCIENCE AND ENGINEERING
Dr. Sanjay Biswas	Professor	
Dr. Dipendra Nath Ghosh	Professor	
Dr. Gour Sundar Mitra Thakur	Assistant Professor	
Bappaditya Das	Assistant Professor	
Hiranmay Samaddar	Assistant Professor	
Suvobrata Sarkar	Assistant Professor	
Saindhab Chattaraj	Assistant Professor	
Amitabha Mandal	Assistant Professor	
Sabbir Reza Tarafdar	Assistant Professor	
Kalpana Roy	Assistant Professor	
Biswajit Mondal	Assistant Professor	
Dr.Soumitra Roy	Assistant Professor	
Biswadeb Goswami	Assistant Professor	

Name of the Full-time teacher	Designation	Name of the Department
Sanjib Saha	Assistant Professor	COMPUTER SCIENCE AND ENGINEERING
Sayed Zahir Hasan	Assistant Professor	
Anandaprova Majumder	Assistant Professor	
Arindam Ghosh	Assistant Professor	
Ruma Ghosh	Assistant Professor	
Poulomi Tewari	Assistant Professor	
Biswajit Saha	Assistant Professor	
Babul Prasad Tiwari	Assistant Professor	
Koushik Senapati	Associate Professor	
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	ELECTRONICS & COMMUNICATION ENGINEERING
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	
Mrinmoy Chakraborty	Assistant Professor	
Koustav Roy	Assistant Professor	
Tapas Roy	Assistant Professor	
Anirban Chattopadhyay	Assistant Professor	
Dipta Chaudhuri	Assistant Professor	
Ankita Mitra	Assistant Professor	
Abhijit Banerjee	Assistant Professor	
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. Sumit Banerjee	Professor	ELECTRICAL ENGINEERING
Dr. Susanta Dutta	Associate Professor	
Dr. Dola Sinha	Assistant Professor	
Anupam Sinha	Assistant Professor	
Sanjoy Kumar Saha	Assistant Professor	
Mou Das Mahapatra	Assistant Professor	
Basudeb Mondal	Assistant Professor	
Tushnik Sarkar	Assistant Professor	
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	
Sunil Kumar Choudhary	Assistant Professor	
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	
Chaity Sarkar	Assistant Professor	
Subrata Mandal	Assistant Professor	
Soham Dey	Assistant Professor	
Arindam Chakraborty	Assistant Professor	
Santigopal Pain	Assistant Professor	
Dr. Saikat Maity	Associate Professor	INFORMATION TECHNOLOGY
Dr. Debaprasad Mukherjee	Associate Professor	
Dr. Raj Kumar Samanta	Associate Professor	
Avijit Bhowmick	Assistant Professor	
Prabal Kumar Sahu	Assistant Professor	
Manas Kumar Roy	Assistant Professor	
Md Keramot Hossain Mondal	Assistant Professor	
Prasanta Majumder	Assistant Professor	
Dinesh Kr. Pradhan	Assistant Professor	
Dr. Shashi Bajaj Mukherjee	Assistant Professor	
Moumita Sasmal	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	APPLIED ELECTRONICS & INSTRUMENTATION ENGINEERING
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	
Suman Dasgupta	Assistant Professor	
Shibendu Mahata	Assistant Professor	
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	MECHANICAL ENGINEERING
Dr. Swapan Kumar Majumder	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	
Manoj Kundu	Assistant Professor	
Pabitra Kr. Mandal	Assistant Professor	
Partha Sarathi Bose	Assistant Professor	
Shivabrata Mojumdar	Assistant Professor	
Rupali	Assistant Professor	
Suman Karmakar	Assistant Professor	
Subhajit Bhattacharya	Assistant Professor	
Chitta Sahana	Assistant Professor	
Arnab Chowdhury	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. Sabyasachi Chandra	Professor	CIVIL ENGINEERING
Subhransu Goswami	Assistant Professor	
Chhanda Mondal Roy	Assistant Professor	
Ashis Som	Assistant Professor	

Name of the Full-time teacher	Designation	Name of the Department
Prakash Mondal	Assistant Professor	CIVIL ENGINEERING
Dr. Sanjay Sengupta	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	
Pranoy Roy	Assistant Professor	
Sayantan Dutta	Assistant Professor	
Soumyadip Das	Assistant Professor	
Abhijit Chakraborty	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	MASTERS IN BUSINESS ADMINISTRATION
Dr. Arunava Mookherjee	Associate Professor	
Dr. Indrani Sengupta	Assistant Professor	
Partha Chattopadhyay	Assistant Professor	
Sandip Mukherjee	Assistant Professor	
Krishna Roy	Assistant Professor	
Dr. Bhaswati Roy	Assistant Professor	
Niloy Kumar Bhattacharjee	Assistant Professor	
Aparna Bhaduri	Assistant Professor	
Subir Gupta	Assistant Professor	MASTERS IN COMPUTER APPLICATIONS
Debasis Guha	Assistant Professor	
Ansuman Mahanty	Assistant Professor	
Pabitra Kumar Dey	Assistant Professor	
Subhrangsu Chandra	Assistant Professor	
Falguni Chakraborty	Assistant Professor	
Uday Kumar Banerjee	Assistant Professor	
Mouparna Nandan	Assistant Professor	

3.1 Teachers Receiving Ph.D Degree during the Academic Year 2018-19

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 2018-19 Academic year

Name	Department
Dr. Sanjay Sengupta	CE
Dr. Anirban Bose	AEIE
Dr. Kamalika Tiwari	AEIE
Dr. Pabitra Kumar Dey	MCA
Dr. Tapas Mondal	ECE
Dr. Mrinmoy Chakraborty	ECE
Dr. Rajib Banerjee	ECE
Dr. Rupali	ME
Dr. Manoj Kundu	ME
Dr. Babul Prasad Tewari	CSE
Dr. Moumita Pradhan	IT
Dr. Dinesh Kumar Pradhan	IT
Dr. Tapan Kumar Chatterjee	EE
Dr. Santigopal Pain	EE
Dr. Chaity Sarkar	EE
Dr. Soumitra Roy	CSE
Dr. Mouparna Nandan	MCA
Dr. Saikat Maity	IT

4. PARTICIPATION IN FACULTY DEVELOPMENT PROGRAM & PUBLICATION DETAILS

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. Prabal Kumar Sahu	Faculty Development Program on "Social Networks"(NPTEL Online Certification)	01-07-2018 to 30-10-2018	Information Technology

Name	Name of the FDP Program	Duration	Department
Prof. (Dr.) Arijit Banerjee	Faculty Development Program on "Heat Exchangers: Fundamentals and Design Analysis"(NPTEL Online Certification)	01-07-2018 to 30-10-2018	Mechanical Engineering
Prof. (Dr.) Arijit Banerjee	Faculty Development Program on "Energy Conservation and Waste Heat Recovery "(NPTEL Online Certification)	01-07-2018 to 30-10-2018	Mechanical Engineering
Prof. (Dr.) Arijit Banerjee	Faculty Development Program on "Introduction to Research"(NPTEL Online Certification)	01-08-2018 to 30-09-2018	Mechanical Engineering
Prof. (Dr.) Arijit Banerjee	Faculty Development Program on "Fundamentals of Combustion (Part 2)"(NPTEL Online Certification)	01-08-2018 to 30-09-2018	Mechanical Engineering
Prof. (Dr.) Chandan Chattoraj	Conference on "Indian Higher Education: Quality Assurance, Accreditation & Ranking"	30-09-2018	Mechanical Engineering
Prof. Deepak Kumar	Faculty Development Program on "Engineering Metrology "(NPTEL Online Certification)	30-07-2018 to 28-10-2018	Mechanical Engineering
Prof. Deepak Kumar	Certificate Course on "Research Methodology", TEQIP III	21-07-2018	Mechanical Engineering
Prof. Soham Dey	Faculty Development Program on "Advanced Linear Continuous Control Systems: Applications with MATLAB Programming and Simulink" (NPTEL Online Certification)	01-08-2018 to 30-10-2018	Electrical Engineering
Prof. Soham Dey	Faculty Development Program on "Non-linear and Adaptive Control" (NPTEL Online Certification)	01-08-2018 to 30-09-2018	Electrical Engineering
Prof. Biswajit Saha	Faculty Development Program on "Stress Management" (NPTEL Online Certification)	01-08-2018 to 30-09-2018	Computer Science and Engineering
Prof. Biswajit Saha	Faculty Development Program on "Software Engineering"(NPTEL Online Certification)	01-07-2018 to 30-10-2018	Computer Science and Engineering
Prof. Arun Kumar Sadhu	MathWorks event on "Artificial Intelligence and Robotics using MATLAB and Simulink"	04-09-2018	Computer Science and Engineering
Prof. Anupam Kumar Biswas	Faculty Development Program on "Introduction to Research" (NPTEL Online Certification)	01-08-2018 to 30-09-2018	Civil Engineering

Name	Name of the FDP Program	Duration	Department
Prof. Krishna Roy	Faculty Development Programme on ""Basic Entrepreneurship FDP"" conducted by GTI, NEN, at Jadavpur University	31-07-2018 to 05-08-2018	Faculty of Management Studies (FMS/MBA)
Prof. (Dr.) Rajib Banerjee	Workshop on "Workshop on Basic Programming using Python" conducted by FOSSEE, IIT Bombay funded by National Mission on Education through ICT, MHRD organized at Dr. B. C. Roy Engineering College	01-05-2019 to 03-05-2019	Electronics and Communication Engineering
Prof. (Dr.) Tapas Mondal	Workshop on "Workshop on Basic Programming using Python" conducted by FOSSEE, IIT Bombay funded by National Mission on Education through ICT, MHRD organized at Dr. B. C. Roy Engineering College	01-05-2019 to 03-05-2019	Electronics and Communication Engineering
Prof. (Dr) Narendra Nath Pathak	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. (Dr) Tapas Mondal	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. (Dr.) Mrinmoy Chakraborty	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. (Dr) Tribeni Prasad Banerjee	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. (Dr) Aloke Saha	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. (Dr.) Rajib Banerjee	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering

Name	Name of the FDP Program	Duration	Department
Prof. (Dr.) Chandan Kumar Ghosh	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. Rajdeep Ray	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. Nilkamal Bhunia	Faculty Development Programme on Hands on training on Workshop on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. Ardhendu Sekhar Chattopadhyay	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. Ramkrishna Rakshit	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. Debipriya Dutta	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. Anirban Chattopadhyay	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. Aritra Bhowmik	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering

Name	Name of the FDP Program	Duration	Department
Prof. Dipta Chaudhuri	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. Keka Hajra	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. Moutusi Mondal	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. Tapas Roy	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. Koustav Roy	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. Abhijit Banerjee	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. Sourav Moitra	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. Pradipta Sarkar	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering

Name	Name of the FDP Program	Duration	Department
Prof. Sarit Pal	Faculty Development Programme on Hands on training on "Full Custom VLSI Design on Mentor Graphics" conducted by Core EL Technologies Pvt. Ltd. Bangaluru in association with ECE, BCREC	15-05-2019 to 17-05-2019	Electronics and Communication Engineering
Prof. Aparna Bhaduri	Faculty Development Programme on "Behavioural Remodelling and Use of ICT Tools for Class Room Delivery of Teachers" organised by E&ICT Academy IIT Guwahati in association with Dr. B. C. Roy Polytechnic	14-01-2019 to 19-01- 2019	Faculty of Management Studies (FMS/MBA)
Prof. Rajib Kumar Mondal	Short Term Course on "Recent Trends in Machine Learning and IoT"	17-06-2019 to 21-06-2019	Computer Science and Engineering
Prof. Poulami Tewari	Short Term Course on "Recent Trends in Machine Learning and IoT"	17-06-2019 to 21-06-2019	Computer Science and Engineering
Prof. Soham Dey	NPTEL –AICTE Faculty Development Program on "Control Engineering"	01-01-2019 to 30-04-2019	Electrical Engineering
Prof. Jaya Mukhopadhyay	Faculty Development Programme on "Behavioural Remodelling and Use of ICT Tools for Class Room Delivery of Teachers" organised by E&ICT Academy IIT Guwahati in association with Dr. B. C. Roy Polytechnic	14-01-2019 to 19-01-2019	Basic Science and Humanities
Prof. Prabal Kumar Sahu	Faculty Development Program on "Introduction to Automata, Language and Computation" (NPTEL Online Certification)	01-01-2019 to 30-04-2019	Information Technology
Prof. Subhajit Bhattacharya	Faculty Development Program on "Fuzzy Logic and Neural Networks" (NPTEL Online Certification)	01-02-2019 to 30-04-2019	Mechanical Engineering
Prof. Kingsuk Majumdar	Faculty Development Program on " Behavioral Remodelling and Use of ICT Tools for Classroom Delivery of Teachers" (E&ICT Academy IITG)	14-01-2019 to 19-01-2019	Electrical 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 faculty member	Name of the Paper	Name of the Conference	Name of the affiliating institute at the time of publication
Dr. Sneha Sultana, S.Sigh, R.K.Rajan, S.K.Sharma, P.K.Roy	Chemical reaction optimization to solve reconfiguration problem along with capacitor of radial distribution system	International conference on Computational intelligence, communications and business analytics	Dr. B C Roy Engineering college, Durgapur
A.K. Das and M. K. Mandal	Chaos based control system	Int. Conf. on Sustainable Computing in Science, Technology and Management (SUSCOM-2019)	Dr. B. C. Roy Engineering College, Durgapur
Dr. Pijush Pal Roy, R.C.Raj	Vibration control in environmentally sensitive areas due to small, medium and epic blasts with systematic planning and design	26th International Mining Congress and Exhibition of Turkey	
R.Pal, J.Ghosh, **Dr. Aloke Saha**	Novel Self-Pipelining Strategy for Efficient Multiplications	IEEE International Conference on Devices for Integrated Circuits (IEEE DevIC-2019)	Dr. B. C. Roy Engineering College, Durgapur
Arindam Ghosh, A.Chakrabarty, D.Chakrabarty, M.Saha, S.Saha	Ultra-Sense : A non-intrusive approach for Human Activity Identification using Heterogeneous Ultrasonic Sensor Grid for Smart Home Environment.	Journal of Ambient Intelligence and Humanized Computing, Spinger.	Dr. B. C. Roy Engineering College, Durgapur
Abhijit Banerjee, D.N.G, S.Das	Evolving Network Topology in Policy Gradient Reinforcement Learning Algorithms'	International Conference on Advanced Computational and Communication Paradigms (ICACCP)	Dr. B. C. Roy Engineering College, Durgapur
Dr. Sarit Pal	Analysis of Energy Efficient Routing Protocols in Mobile Adhoc Network	1st International Conference on Emerging Trends on Engineering and Science (ETES 2018)	Dr. B. C. Roy Engineering college, Durgapur
Subhajit Bhattacharya, K. Sabiruudin, S.Das	Optimization of Process Parameters For GMAW of High Carbon Steel Using Topsis	National Conference on Trends and Advances in Mechanical Engineering (TAME - 2019)	Dr. B. C. Roy Engineering college, Durgapur

Name of the faculty member	Name of the Paper	Name of the Conference	Name of the affiliating institute at the time of publication
Subhas Chandra Moi, A. Bandyopadhyay, P.K.Pal	Parametric Optimization of TIG Welding Process on Mechanical Properties of 316L Stainless Steel Using RSM	1st International Conference on Mechanical Engineering	Jadavpur University
Arindam Ghosh. K.Kumari, S.Kumar, M.Saha	NoiseProbe: Assessing the Dynamics of Urban Noise Pollution through Participatory Sensing	2019 11th International Conference on Communication Systems & Networks COMSNETS	Dr. B.C. Roy Engineering College, Durgapur
Sukarna Dey Mondal, Dipendra Nath Ghosh	Comparative Evaluation of Students' Performance in Campus Recruitment of a Technical Institution through Fuzzy-MCDM Techniques	1st International Conference on Innovations in Computer Science (ICICS-2018) December 21st -22nd, 2018 Organised by The Department of Computer Science, The University of Burdwan	Dr. B.C. Roy Engineering College, Durgapur
Arijit Kumar Banerji, P.Topder, A.K.Dutta	Improvement in Pavement Performance Using Interlayer Membrane System: A FEM Approach	Structural Engineering Convention 2018. 19th – 21st December 2018. Jadavpur University. Kolkata	NIT, Durgapur
Soumyadip Das,P.Topder, A.K.Dutta	A Comprehensive Study on Characterization of Concrete Pavements	Structural Engineering Convention (SEC 2018)	Dr. B.C. Roy Engineering College, Durgapur
Dr. Sanjay Sengupta, P.Topder, A.K.Dutta	AE Source Discrimination In Multi-Layered Composite Using FEM	Structural Engineering Convention 2018. 19th – 21st December 2018. Jadavpur University. Kolkata	Dr. B.C. Roy Engineering College, Durgapur
Dr. Sanjay Sengupta, P.Topder, A.K.Dutta	A Comprehensive Study on Characterization of Concrete Pavements	Structural Engineering Convention 2018. 19th – 21st December 2018. Jadavpur University. Kolkata	Dr. B.C. Roy Engineering College, Durgapur
Dr. Babul P Tewari, B.K.Mandal	Efficient 802.11 Hand-off through Load Aware Channel Probing",	12th IEEE International Conference on Advanced Networks and Telecommunications Systems (IEEE ANTS)	Dr. B. C. Roy Engineering College, Durgapur
N.D.Singh, R.K.Sing, R Raj, S. Joyti, **Dr. Aloke Saha**	Novel Approach to Design DPL-based Ternary Logic Circuits	*IEEE Electron Device Kolkata Conference 2018 (IEEE EDKCON-18)*	Dr. B. C. Roy Engineering College, Durgapur
D. Maity,**Dr. Sumit Banerjee,** C.K.Canda	Bare Bones Teaching Learning Based Optimization For Economic Emission Load Dispatch Problem	IET 3rd International Conference on Electrical, Electronics, Engineering Trends, Communication, Optimization and Sciences (EEECOS)-2016	Dr. B.C. Roy Engineering college, Durgapur
Dr. Sumit Banerjee	Solution of Economic Load Dispatch Problem withGenerator Constraints using Mine Blast Algorithm	International Conference on Modeling and Simulation	Dr. B. C. Roy Engineering College, Durgapur

Name of the faculty member	Name of the Paper	Name of the Conference	Name of the affiliating institute at the time of publication
Koustav Roy, J. Bhatti, S. Paruya	Evaluating Successive Linearization in NMPC for Controlling Oscillations in Boiling Channel	ICCAS	NIT, Durgapur
Roy, P.Kumar, **Dr. Susanta Duta**	NA	NA	Dr B C Roy Engineering college, Durgapur
S.Kumar, S.Kumar, N.K.Singh**, Anandaprova Majumder,**	A Novel Approach to Hide Text Data in Colour Image	ICRITO2018	Dr. B.C. Roy Engineering College, Durgapur
Anandaprova Majumder, S.Changdar	A Generalized Model of Text Steganography by Summary Generation using Frequency Analysis	ICRITO2018	Dr. B.C. Roy Engineering College, Durgapur
Jaya Mukhopadhyay, V.K.Sing, S.Mukhyapadhyay, P.Pal	Clustering and Auction in Sequence: A Two Fold Mechanism for Participatory Sensing	4th International Conference on Harmony Search, Soft Computing and Applications	NIT, Durgapur
Dr. Soumen Mallick, R.Kar, D.Mondal	Optimal Design of 2.4 GHz CMOS LNA Using PSO with Aging Leader and Challenger	(IC4S-2017) International Conference on Computer, Communication and Computational Sciences	NIT, Durgapur
Anirban Chattopadhyay, Mofazzal H. Khondekar, Anup Kumar Bhattacharjee	Fractality and singularity in CME linear speed signal: Cycle 23	Elsevier –Chaos, Solitons and Fractals	Dr. B. C. Roy Engineering College, Durgapur
Dr. Sanjay Sengupta, Pijush Todper, A.K.D.	A Study on Finite Element Modelling of Acoustic Emission Waveforms in Composite and Sandwich Plates	Structural Engineering Convention 2016	Dr. B.C. Roy Engineering College, Durgapur
Dr. Sanjay Sengupta, Aloke Kr. Dutta, Pijush Topder	Damage Assessment in Composites Using Frequency Discrimination of Acoustic Emission Signals	Structural Engineering Convention 2016	Dr. B.C. Roy Engineering College, Durgapur
Arun Kumar Sadhu, M. Sardar, D,Das	Gathering in the Discrete Domain: State of the Art	ICACCT 2018	Dr. B C Roy Engineering College, Durgapur

Name of the faculty member	Name of the Paper	Name of the Conference	Name of the affiliating institute at the time of publication
Jaya Mukhopadhyay, V.K.Sing, S.Mukhyapadhyay, P.Pal	Distribution of Time Bound Tasks Through Double Auction in Participatory Sensing	International Conference on Current Scenario in Pure and Applied Mathematics	NIT, Durgapur
Arijit Kumar Banerji, P.Topder, A.K.Dutta	Analysis of Cement Concrete Pavement for Low Volume Roads using Finite Element Method	2nd International Conference on Advances in Concrete, Structural & Geotechnical Engineering (ACSGE), BITS Pilani, Rajasthan	NIT, Durgapur
Arijit Kumar Banerji, P.Topder, A.K.Dutta	A Review on the Study of Stress Absorbing Interlayer Composite Structures for Retarding Pavement Distress	2nd International Conference on Advances in Concrete, Structural & Geotechnical Engineering (ACSGE), BITS Pilani, Rajasthan	NIT, Durgapur
Soumyadip Das, P.Topder, A.K.Dutta	An Intensive Study of Pavement Performance Models	2nd International Conference on Advances in Concrete, Structural, and Geotechnical Engineering (ACSGE – 2018)	Dr. B.C. Roy Engineering College, Durgapur
Rohit P, Neha M, R Kumar, R Kumari,**Soumyadip Das**	Improvement in CBR value for flexible pavement design using solid waste : A case study	Emerging Trends in Engineering & Sciences	Dr. B.C. Roy Engineering College, Durgapur
S. Day, S. Vimmadi, **Shovan Roy**, V.Ghosh	Linear and Nonlinear Coupled Analysis of Moored Floating Structure: A State-of-The Art Review	International Conference on Advances in Dynamics, Vibration and Control (ICADVC)	NIT Durgapur
Shovan Roy	Stability design concepts of an FOWT: A comprehensive review	Fourth International Conference on Energy Systems and Developments (Energy 2017)	NIT Durgapur
Dr. Sanjay Sengupta,P.Topder, A.K.Dutta	Structural Damage Localization by Acoustic Emission Using FEA: A Review	Advances in Concrete Structure and Geotechnical Engineering, 2018, BITS Pilani	Dr. B.C. Roy Engineering College, Durgapur
S. Chakraborty, P. Sarkar, **M. Chakraborty**	Frequency Tuning & Bandwidth Enhancement in Compact Microstrip Antenna using Saw Tooth Shaped DGS	IEEE 9th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON)	Dr. B. C. Roy Engineering College, Durgapur
A. Pathak, K.V.S.J, **Abhijit Banerjee**	Evaluation of Reverse Ellitism Firefly Algorithm on the CEC2013 Real Parameter Single Objective Optimization Benchmark Functions	IEEE UP Section Conference on Electrical Computer and Electronics (UPCON)	Dr. B Roy Engineering College, Durgapur

Name of the faculty member	Name of the Paper	Name of the Conference	Name of the affiliating institute at the time of publication
Anirban Chattopadhyay, Mofazzal H. Khondekar, Anup Kumar Bhattacharjee	Multivariate Singular Spectral Analysis (MSSA) to explore geomagnetic storm and CME bond	1st IEEE Conference on Applied Signal Processing (ASPCON), Jadavpur University	Dr. B.C. Roy Engineering College, Durgapur
Ritu Rani De(Maity), R.Mumdi, C.Day	Real-time Evaluation of an Interval Type-2 Fuzzy PID Controller on Servo Position Control System	2018 Fifth International Conference on Emerging Applications of Information Technology (EAIT)	Dr. B.C. Roy Engineering College, Durgapur
Sukarna Dey Mondal, Dipendra Nath Ghosh	Comparative Evaluation of Students' Performance in Campus Recruitment of a Technical Institution through Fuzzy-MCDM Techniques	1st International Conference on Innovations in Computer Science (ICICS-2018) December 21st -22nd, 2018 Organised by The Department of Computer Science, The University of Burdwan	Dr. B.C. Roy Engineering College, Durgapur
Anirban Chattopadhyay, Mofazzal H. Khondekar, Anup Kumar Bhattacharjee	Fractality and singularity in CME linear speed signal: Cycle 23	Elsevier –Chaos, Solitons and Fractals	Dr. B. C. Roy Engineering College, Durgapur
Anirban Chattopadhyay, Mofazzal H. Khondekar, Anup Kumar Bhattacharjee	Multivariate Singular Spectral Analysis (MSSA) to explore geomagnetic storm and CME bond	1st IEEE Conference on Applied Signal Processing (ASPCON), Jadavpur University	Dr. B.C. Roy Engineering College, Durgapur

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	Name of journal	Year of publication
A Hybrid Domain Color Image Watermarking Based on DWT–SVD	**Soumitra Roy** Arup Kumar Pal	CSE	Iranian Journal of Science and Technology, Transactions of Electrical Engineering, Springer	2019

Title of paper	Name of the author/s	Department	Name of journal	Year of publication
Oppositional Symbiotic Organisms Search Optimization for Multilevel Thresholding of Color Image	**Falguni Chakraborty,** Debashis Nandi , Provas Kumar Roy	MCA	Applied Soft Computing, Elsevier	2019
Effect Of Tangent Modulus On Residual Stresses Of A Spherical Vessel Subjected To Internal Pressure	**Rupali**, S. Sarkar and S. C. Mondal	Mechanical Engineering	JETIR (ISSN-2349-5162)	2019
"Lithium ion conductivity in Li_2O-P_2O_5-ZnO glass-ceramics,	Sanjib Bhattacharya, Amartya Acharya, AnindyaSundar Das, Koyel Bhattacharya and **Chandan Kumar Ghosh,**	ECE	Journal of Alloys and Compounds	2019
Complexity and periodicity of daily mean temperature and dew-point across India	**Rajdeep Ray**, **Mofazzal Hossain Khondekar,** Koushik Ghosh, and Anup Kumar Bhattacharjee	ECE AEIE	Journal of Earth System Science	2019
Oppositional elephant herding optimization with dynamic Cauchy mutation for multilevel image thresholding.	**Falguni Chakraborty,** Provas Kumar Roy , Debashis Nandi	MCA	Evolutionary Intelligence, Springer	2019
Correlation measure of hesitant fuzzy soft sets and their application in decision making	**Sujit Das** Debashish Malakar Samarjit Kar Tandra Pal	CSE	Neural Computing and Applications	2017
Presplit blasting for stabilization of highwall slopes and productivity enhancement in a trench-mining project	**Pijush Pal Ro**y, Chhangte Sawmliana & Rakesh Kumar Singh	Civil Engineering	Journal of Mines, Metals and Fuels	2019
UltraSense: A non-intrusive approach for Human Activity Identification using Heterogeneous Ultrasonic Sensor Grid for Smart Home Environment	**Arindam Ghosh,** Amartya Chakraborty, Dhruv Chakraborty, Mousumi Saha and Sujoy saha	CSE	Journal of Ambient Intelligence and Humanized Computing, Spinger	2019

Title of paper	Name of the author/s	Department	Name of journal	Year of publication
ZnO and TiO$_2$ nanostructured Dye sensitized Solar photovoltaic cell	**Dola Sinha**,D. De, D. Goswami, A Mondal, A Ayaz.	EE	Materials Today proceedings, Elsevier	2019
"Suppression of Higher Order Modes of a Two Element Microstrip Array Using Open-ended Stubs"	Susmita Biswas, **Chandan K. Ghosh,** Santimoy Mandal, Goffar A. Sarkar,Soumen Banerjee and Durbadal Mandal,"	ECE	Progress In Electromagnetics Research Letter	*2019*
Design of Master-Slave Coupling for Chaotic synchronization of Maps	**A.K. Das** and M. K. Mandal	AEIE	International Journal of Recent Technology and Engineering	2019
Chaos-based Controlled System using Discrete Map	**A.K. Das** and M. K. Mandal	AEIE	Recent Advances in Computer Science and Communications (Formerly: Recent Patents on Computer Science)	2019
Optimal fractional order PIλDμ controller for stabilization of cart-inverted pendulum system: Experimental results	Reetam Mondal , **Arindam Chakraborty** , Jayati Dey , Suman Halder	EE	Asian journal of control, Wiley	2019
Comparative Evaluation of Students' Performance in Campus Recruitment of a Technical Institution through Fuzzy-MCDM Techniques	**Sukarna Dey Mondal, Dipendra Nath Ghosh**	Basic science and Humanities (Mathematics)	International Journal of Computer Sciences and Engineering	2019
Effect of wave spreading including multi-directional wave interaction on the resposes of a spar platform	A. K. Banik, **Shovan Roy**, Kaushik Saha and Swarnadip Dey	Civil Engineering	Marine Systems and Ocean Technology **(Springer)**	2019

Title of paper	Name of the author/s	Department	Name of journal	Year of publication
Emergent dynamics in delayed attractive-repulsively coupled networks	Prosenjit Kundu , Lekha Sharma, **Mauparna Nandan** , Dibakar Ghosh , Chittaranjan Hens , and Pinaki Pall	MCA	Chaos: An Interdisciplinary Journal of Nonlinear Science	2019
Oppositional based grey wolf optimization algorithm for economic dispatch problem of power system	**Moumita Pradhan** Provas kumar Roy,Tandra Pal	Information Technology	Ain Shams Engineering Journal	2017
Determination of tungsten inert gas welding input parameters to attain maximum tensile strength of 316l austenitic stainless steel	**Subhas Chandra Mo**i, Pradip Kumar Pal, Asish Bandyopadhyay, Ramesh Rudrapati	Mechanical Engineering	Journal of MECHANICAL ENGINEERING – Strojnícky časopis,	2018
Artificial neural network based model for forecasting of inflation in India.	**Gour Sundar Mitra Thakur**; Rupak Bhattacharyya; Seema Sarkar Mondal	Information Technology	Fuzzy Information and Engineering	2017
Coupled dynamic responses of a semisubmersible under the irregular wave and turbulent wind	Swarnadip Dey, Rupam Mukherjee, **Shovan Roy** and A. K. Banik	Civil Engineering	Journal of Ocean Systems Engineering **(Techno Press)**	2018
Periodic controller for guaranteed simultaneous stabilization of two plants with robust zero error tracking	**Arindam Chakraborty**,Jayati Dey	EE	Proceedings of the Institution of Mechanical Engineers Part I Journal of Systems and Control Engineering	2018
Bare Bones Teaching Learning Based Optimization Technique for Economic Emission Load Dispatch Problem Considering Transmission Losses,	Deblina Maity **Sumit Banerjee** Chandan Kumar Chanda	EE	Iranian Journal of Science and Technology, Transactions of Electrical Engineering	2018

Title of paper	Name of the author/s	Department	Name of journal	Year of publication
Angular bend Half Mode Substrate Integrated Waveguide (HMSIW) based Band-Pass Filter with multiple transmission zeroes	Sourav Moitra · Ranjan Dey · **Chandan Kumar Ghosh**	ECE	*Wireless Personal Communication, Springer*	2019
A robust and blind image watermarking scheme in DCT domain: International Journal of Information and Computer Security: Vol 10, No 4	Arup Kumar Pal , **Soumitra Roy**	CSE	International Journal of Information and Computer Security	2018
Performance of a partial discrete wavelet transform based path merging compression technique for wireless multimedia sensor networks	**Rajib Banerjee**, S. Chatterjee and S. Das Bit	ECE	*Wireless Personal Communication, Springer*	2019
Modified firefly algorithm for area estimation and tracking of fast expanding oil spills	**Abhijit Banerjee,Dipendranath Ghosh**,Suvrojit Das	ECE, Basic science and Humaanities (Mathematics)	Applied Soft Computing	2018
Dynamic responses of an FPSO moored on sloped seabed under the action of environmental loads	**Shovan Roy** and A. K. Banik	Civil Engineering	Journal of Ocean Systems Engineering **(Techno Press)**	2018
An Approach for decision making using intuitionistic Trapezodial fuzzy soft set	**Sujit Das**, M. B. Kar, S. Kar, T. Pal	CSE	Annals of Fuzzy Mathematics and Informatics	2018
Novel CMOS Multi-bit Counter for Speed-Power Optimization in Multiplier Design	**Aloke Saha**, Rahul Pal, Akhilesh G. Naik and Dipankar Pal	ECE	AEU-*International Journal of Electronics & Communication (IJEC)*, Elsevier	2018
DPL-Based Novel Binary-to-Ternary Converter on CMOS Technology	**Aloke Saha** and Dipankar Pal	ECE	AEU-*International Journal of Electronics & Communication (IJEC)*, Elsevier	2018
Fractality and singularity in CME linear speed signal: Cycle 23"	**Anirban Chattopadhyay, M. H. Khondekar**, A. K. Bhattacharjee	ECE AEIE	Elsevier -Chaos, Solitons and Fractals	2018

Title of paper	Name of the author/s	Department	Name of journal	Year of publication
Fractality and singularity in CME linear speed signal: Cycle 23	**Anirban Chattopadhyay**, **Mofazzal H. Khondekar**, A. K. Bhattacharya	ECE AEIE	Chaos, Solitons and Fractals, Elsevier	2018
Capacitor placement in radial distribution system using oppositional cuckoo optimization algorithm	**Sneha Sultana**, Provas Kumar Roy	EE	International Journal of Swarm Intelligence Research (IJSIR)	2018
Optimal Design of Power system stabilizer using novel evolutionary algorithm	**Sourav Paul**, Provas kumar Roy	EE	International Journal of Energy Optimization and Engineering (IJEOE)	2018

5. STUDENTS' PLACEMENT DETAILS

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 new 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 2018 was discussed. To gear up the placement process in 2019, 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 2018-19;

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

SL. NO.	NAME	DEPTT.	COMPANY NAME
1	Shashi Kumar	ECE	CAPGEMINI
2	Deep Shikha	AEIE	CAPGEMINI
3	Shubham Kumar	CSE	CAPGEMINI
4	Naina Nandini	EE	CAPGEMINI
5	Omair Rumman Azmi	EE	CAPGEMINI
6	Nilanjana Mondal	EE	CAPGEMINI
7	Madhura Chatterjee	EE	CAPGEMINI
8	Avinash Gadhwal	EE	CAPGEMINI
9	Dipanjan Das	EE	CAPGEMINI
10	Ravi Kant Ranjan	EE	CAPGEMINI
11	Piyush Singh	EE	CAPGEMINI
12	Sagar Kumar	CSE	CAPGEMINI
13	Shipra Priyadarshni	CSE	CAPGEMINI
14	Shreya Kundu	CSE	CAPGEMINI
15	Soumili Das	EE	CAPGEMINI

16	Sneha Roy	CSE	CAPGEMINI
17	Deepannita Banerjee	CSE	CAPGEMINI
18	Suchismita Karar	CSE	CAPGEMINI
19	Md Saquib	CSE	CAPGEMINI
20	Debraj Nandi	CSE	CAPGEMINI
21	Mesbahul Alam	CSE	CAPGEMINI
22	Shubhendu Dey	CSE	CAPGEMINI
23	Sayan Mal	EE	CAPGEMINI
24	Puja Kumari Burman	CSE	CAPGEMINI
25	Abhishek Kumar	CSE	CAPGEMINI
26	Shuvo Kumar	CSE	CAPGEMINI
27	Shreya	CSE	CAPGEMINI
28	Swati Priya	CSE	CAPGEMINI
29	Ashish Kumar	CSE	CAPGEMINI
30	Deepti	ECE	CAPGEMINI
31	Khushboo Kumari	ECE	CAPGEMINI
32	Rina Regar	ECE	CAPGEMINI
33	Rahul Raj	ECE	CAPGEMINI
34	Vikas Kumar	ECE	CAPGEMINI
35	Chandrani Mishra	AEIE	CAPGEMINI
36	Anjli	ECE	CAPGEMINI
37	Aulina Dhal	ECE	CAPGEMINI
38	Narendra Deo Singh	ECE	CAPGEMINI
39	Snehal Kumar	IT	CAPGEMINI
40	Jyoti Kumari	IT	CAPGEMINI
41	Komal	IT	CAPGEMINI
42	Anu Priya	IT	CAPGEMINI
43	Insha Fatmi	IT	CAPGEMINI
44	Reshav Raj	IT	CAPGEMINI
45	Akash Kumar	IT	CAPGEMINI
46	Kritika	EE	CAPGEMINI
47	Anusha Ishteaque	EE	CAPGEMINI
48	Joydip Bhattacharjee	EE	CAPGEMINI

49	Bandana Gupta	ECE	CAPGEMINI
50	Manisha Kumari	ECE	CAPGEMINI
51	Tithi Mandal	ECE	CAPGEMINI
52	Sanjeet Kumar Ranjan	ECE	CAPGEMINI
53	Monisha Mondal	ECE	CAPGEMINI
54	Md Ashif Khan	ECE	CAPGEMINI
55	Shilpa Nayak	ECE	CAPGEMINI
56	Shrishtee Shorya	ECE	CAPGEMINI
57	Vijaya Laxmi	ECE	CAPGEMINI
58	Ankita Sarkar	ECE	CAPGEMINI
59	Vineeta Sarkar	ECE	CAPGEMINI
60	Anoushka Mazumder	ECE	CAPGEMINI
61	Swati Kumari	ECE	CAPGEMINI
62	Tishya Banerjee	ECE	CAPGEMINI
63	Akash Pathak	ECE	CAPGEMINI
64	Arnab Dutta	ECE	CAPGEMINI
65	Debmalya Panday	ECE	CAPGEMINI
66	Sonal Das	ECE	CAPGEMINI
67	Shuvojit Biswas	ECE	CAPGEMINI
68	Sneha Saha Choudhury	ECE	CAPGEMINI
69	Madhumita Ganguly	ECE	CAPGEMINI
70	Shivam Jyoti	ECE	CAPGEMINI
71	Hemant Kumar Singh	AEIE	CAPGEMINI
72	Aniket Subham	AEIE	CAPGEMINI
73	Gargee Mitra	ECE	CAPGEMINI
74	Poonam Kumari	ECE	CAPGEMINI
75	Kumari Nikita	AEIE	CAPGEMINI
76	Sagarika Mandal	ECE	CAPGEMINI
77	Sudarshana Gupta	ECE	CAPGEMINI
78	Nandita Sharan	ECE	CAPGEMINI
79	Saurav Kumar Sinha	IT	CAPGEMINI
80	Gajanand Kumar	IT	CAPGEMINI
81	Shubhangi Shubham	IT	CAPGEMINI

82	Susmita Dutta	IT	CAPGEMINI
83	Shreyansh	IT	CAPGEMINI
84	Raktim Kumar Nandi	ECE	CAPGEMINI
85	Ritika Das	ECE	CAPGEMINI
86	Parthsarthy	IT	CAPGEMINI
87	Abinash Mishra	IT	CAPGEMINI
88	Richa Kumari	IT	CAPGEMINI
89	Arpita	IT	CAPGEMINI
90	Moumita Karmakar	IT	CAPGEMINI
91	Rajdeep Pal	IT	CAPGEMINI
92	Mridul Mahato	IT	CAPGEMINI
93	Susweta Konar	IT	CAPGEMINI
94	Avni Chaturvedi	IT	CAPGEMINI
95	Richa Raj	IT	CAPGEMINI
96	Sudhanshu Shekhar Singh	IT	CAPGEMINI
97	Satyam Raj	CSE	CAPGEMINI
98	Joydeep Kumbhakar	CSE	CAPGEMINI
99	Devesh Kumar	CSE	CAPGEMINI
100	Kirti Kumari	CSE	CAPGEMINI
101	Abhirupa Dey	CSE	CAPGEMINI
102	Falguni Soni	CSE	CAPGEMINI
103	Annu Mishra	CSE	CAPGEMINI
104	Pranjal	EE	CAPGEMINI
105	Akhil Kumar Panday	CSE	CAPGEMINI
106	Abhishek Kumar Jha	CSE	CAPGEMINI
107	Umama Ahmad	CSE	CAPGEMINI
108	Siddharth Saurav	CSE	CAPGEMINI
109	Shambhavi	CSE	CAPGEMINI
110	Shivam Kumar Singh	EE	CAPGEMINI
111	Alekh Ranjan	CSE	CAPGEMINI
112	Nitesh Kumar Upadhyay	CSE	CAPGEMINI
113	Kumari Nikita	AEIE	TCS
114	Binay Roy	ME	TCS

115	Ritwika Misra	CSE	TCS
116	Saloni Swaroop	CSE	TCS
117	Dinesh Kumar	IT	TCS
118	Joydeep Kumbhakar	CSE	TCS
119	Mridul Mahato	IT	TCS
120	Shubham Sinha	ME	TCS
121	Rupsa Ghose	ME	TCS
122	Jayanto Das	ECE	TCS
123	Akshay Gupta	CSE	TCS
124	Puja Kumari	CSE	TCS
125	Gyanji Vatsa	ME	TCS
126	Shivam	ECE	TCS
127	Ishika Jaiswal	ECE	TCS
128	Bidisha Karmakar	MCA.1	TCS
129	Sukanya Mondal	IT	TCS
130	Sachin Kumar	ME	TCS
131	Soumilee Ghosh	CSE	TCS
132	Lokesh Kumar	ME	TCS
133	Anirban Mukherjee	M.TECH. (EE)	TCS
134	Partha Pratim Mukherjee	EE	Extramarks Education India Pvt.Ltd.
135	Saloni Kumari	EE	Extramarks Education India Pvt.Ltd.
136	Shipra Sinha	AEIE	Extramarks Education India Pvt.Ltd.
137	AVINASH KUMAR	CE	360 Realtors LLP
138	MAVIA ARSHAD	CE	360 Realtors LLP
139	ATISHEK RITURAJ	CE	360 Realtors LLP
140	Rahul Adhikary	CE	360 Realtors LLP
141	Rajdeep Paul	CE	360 Realtors LLP
142	Mayank Kumar Singh	CE	360 Realtors LLP
143	Jishu Banerjee	CE	360 Realtors LLP
144	Pranesh Banerjee	CE	360 Realtors LLP
145	Trishit Chandra	CE	360 Realtors LLP
146	Kaji Tousif	CE	360 Realtors LLP
147	MD SHAHBAZ ANWER	CE	360 Realtors LLP

148	Puja Barman	CE	360 Realtors LLP
149	KRISHNENDU BANERJEE	CE	360 Realtors LLP
150	Tirthankar Roy	CE	360 Realtors LLP
151	Subham Adhurjya	CE	360 Realtors LLP
152	Sakshi Sinha	CE	360 Realtors LLP
153	Md Ahsan Alam	MBA	360 Realtors LLP
154	Khusboo Kumari	MBA	360 Realtors LLP
155	Anmol Sharma	MBA	360 Realtors LLP
156	Amit Kumar Roy	MBA	360 Realtors LLP
157	Abhik Goswami	MBA	360 Realtors LLP
158	Ritika Singh	MBA	360 Realtors LLP
159	Ankita Pandey	MBA	360 Realtors LLP
160	Snigdha Rakshit	MBA	360 Realtors LLP
161	Shweta Pramanik	MBA	360 Realtors LLP
162	Salman	MBA	360 Realtors LLP
163	Raj Shekhar Sarkar	MBA	360 Realtors LLP
164	Prerna Barat	MBA	360 Realtors LLP
165	Mousumi Banerjee	MBA	360 Realtors LLP
166	Monika Singh	MBA	360 Realtors LLP
167	Minakshi Mishra	MBA	360 Realtors LLP
168	Narendranath Dutta	ME	Byju's
169	Rajdeep Paul	CE	Byju's
170	Avinash Gadhwal	EE	FL Smidth
171	Subham Gupta	MBA	Karvy
172	Salman	MBA	Karvy
173	Rishav Jain	MBA	Karvy
174	Chandrani Mishra	AEIE	JARO Education
175	Snigdha Rakshit	MBA	Flipkart
176	Shalvi	MBA	Flipkart
177	Nitu Kumari	MBA	Flipkart
178	Manipushpak Sarkar	MBA	Federal Bank
179	Biswajit Biswas	MBA	Fleetguard Filters
180	Arindam Ghosh	MBA	Fleetguard Filters

181	Vidit kumar	IT	WIPRO
182	Aayushi	IT	WIPRO
183	Shivendra Kumar Verma	IT	WIPRO
184	Samrat Nishant	IT	WIPRO
185	Shagufta Yasmin	CSE	WIPRO
186	Sudipta Moi	CSE	WIPRO
187	Neha Dey	CSE	WIPRO
188	Puja Shree Khandelwal	CSE	WIPRO
189	Kshitij Kumar	CSE	WIPRO
190	Abhimanyu Achyut	CSE	WIPRO
191	Shreya Kundu	CSE	WIPRO
192	Akhil Anand Pritam	CSE	WIPRO
193	Monisha Mondal	ECE	WIPRO
194	Rina Regar	ECE	WIPRO
195	Ritwik Ghosh	ECE	WIPRO
196	Sudipta Roy	ME	WIPRO
197	Robin Kumar	IT	WIPRO
198	Siddharth Saurav	CSE	WIPRO
199	Jayanto Kumar Das	ECE	WIPRO
200	Saptanshu Pandit	MBA	VIVO
202	Ankita Pandey	MBA	VIVO
203	Avik Goswami	MBA	VIVO
204	Subhajit Roy	MBA	Just Dial
205	Soma Santra	MBA	Just Dial
206	Saptanshu Pandit	MBA	Just Dial
207	Mousumi Banerjee	MBA	Just Dial
209	Amit Kr. Roy	MBA	Just Dial
210	Ajay Kumar Yadav	CE	Cortex Construction Solutions Pvt. Ltd.
211	Krishna Kant Gupta	CE	Cortex Construction Solutions Pvt. Ltd.
212	Trishit Chandra	CE	Cortex Construction Solutions Pvt. Ltd.
213	Subham Adhurjya	CE	Cortex Construction Solutions Pvt. Ltd.
214	Utkarsh Chaurasia	ECE	M-Phasis
215	Rahul Kumar	ECE	M-Phasis

216	Neha Mandal	ECE	M-Phasis
217	Neha Dey	CSE	Cognizant
218	Nikhita Srivastava	IT	Cognizant
219	Shristi Manik	IT	Cognizant
220	Puja Shree Khandelwal	CSE	Cognizant
221	Shubham Kumar	CSE	Cognizant
222	Debjeet Sen	CSE	Cognizant
223	Priya Agarwal	CSE	Cognizant
224	Abhishek Kumar	CSE	Cognizant
225	Shreenivas Choudhary	CSE	Cognizant
226	shubham Kumar	CSE	Cognizant
227	Neha Mandal	ECE	Cognizant
228	Manosi Ghosh	ECE	Cognizant
229	Ankit Anurag	ECE	Cognizant
230	Romharshan Saket	ECE	Cognizant
231	Pragya Gupta	ECE	Cognizant
232	Vikash Kumar	ECE	Cognizant
233	Kingshuk Paul	MBA	Mission Hospital
234	Raj Shekhar Sarkar	MBA	Mission Hospital
237	Monika Singh	MBA	Mission Hospital
238	Richaa Roy	MBA	Mission Hospital
239	Priya Agarwal	CSE	KOVAIR
240	Sruti Sukul	ECE	Nerdy Turtlez
241	Niladri Sekhar Das	IT	Nerdy Turtlez
243	Prerna Barat	MBA	Genpact
244	Abhik Goswami	MBA	Genpact
245	Sk. Asgar	MBA	Genpact
246	Abdul Malik Khan	MBA	Genpact
247	Neha Kumari Rawat	MBA	Genpact
248	Khusboo Kumari	MBA	Genpact
249	Pallavi Sirmoni	MBA	Genpact
250	Avniesh Kumar	MBA	Genpact
251	Rafat Riyaz	MBA	Genpact

252	Priya Singh	MBA	Genpact
253	Ritika Singh	MBA	Genpact
254	Sakshi Sinha	CE	Genpact
255	Debjani Sen	CE	Genpact
256	Amit Kumar	EE	Genpact
257	Ashis Rajan	ME	Genpact
258	Pratyush	EE	Genpact
259	Prerna Kumar Saha	EE	Genpact
260	Subham Rakshit	ECE	Genpact
261	Kaji Tousif	CE	Genpact
262	Shrey Shekhar	EE	Genpact
263	Kalyani Bhattacharyya	EE	Genpact
264	Saheli Nath	AEIE	Genpact
265	Saumya	AEIE	Genpact
266	Abdul Malik Khan	MBA	ICICI Bank
267	Abhik Goswami	MBA	ICICI Bank
268	Khusboo Kumari	MBA	ICICI Bank
270	Mousumi Banerjee	MBA	ICICI Bank
271	Neha Kumari Rawat	MBA	ICICI Bank
272	Pallavi Sirmour	MBA	ICICI Bank
273	Prerna Barat	MBA	ICICI Bank
274	Priya Singh	MBA	ICICI Bank
275	Rafat Riyaz	MBA	ICICI Bank
276	Ritika Singh	MBA	ICICI Bank
277	Shweta Pramanik	MBA	ICICI Bank
278	Sk Asgar	MBA	ICICI Bank
279	Subham Ganguly	MBA	ICICI Bank
280	Sudarshan Chakraborty	MBA	ICICI Bank
281	Suvendu Kumar Ghosh	MBA	ICICI Bank
282	Anmol Sharma	MBA	Apollo Munich
283	Suvendu Kumar Ghosh	MBA	Apollo Munich
284	Prashant Chatterjee	MBA	Apollo Munich
285	Md. Mahtab Alam	ME	Merchant Navy

286	Binay Roy	ME	Merchant Navy
287	Subham Rakshit	ECE	Sriram Transport
288	Debajit Sarkar	ME	Sriram Transport
289	Kalpendu Maji	EE	Sriram Transport
290	Anupam Guha	ME	Sriram Transport
291	Akash Kumar	ECE	Sriram Transport
292	Shubham Saurav	IT	Sriram Transport
293	Tushar Das	ME	Sriram Transport
294	Amit Kumar	EE	Sriram Transport
295	Abhijeet Upadhyay	ME	Sriram Transport
296	Aditi Shreyasi	MBA	ShriMaa Group of Companies
297	Deblina Mondal	MBA	ShriMaa Group of Companies
298	Subrata Das	MCA	ShriMaa Group of Companies
302	Debajit Sarkar	ME	COGNIZANT
303	Mr. Raj Shekhar	ME	Maheshwari Mioning
304	Mr. Ashish Ranjan	ME	Maheshwari Mioning
305	Mr. Gulshan Kumar	ME	Maheshwari Mioning
306	Mr. Satyajeet Kumar Jha	ME	Maheshwari Mioning
307	Mr. Narendranath Dutta	ME	Maheshwari Mioning
308	Mr. Sourav Mitra	EE	Maheshwari Mioning
309	Mr. Subhajit Roy	EE	Maheshwari Mioning
310	Mr. Vikas Kumar	EE	Maheshwari Mioning
311	Mr. Sourav Senapati	EE	Maheshwari Mioning
312	Subhrajyoti Paul	CE	Patil Rail Infrastucture Ltd.
313	Rathindra Nath Dutta	CE	Patil Rail Infrastucture Ltd.
314	Souvik Gantait	CE	Patil Rail Infrastucture Ltd.
315	Pranesh Banerjee	CE	Patil Rail Infrastucture Ltd.
316	Tapan Dipta Sen	CE	Patil Rail Infrastucture Ltd.
317	Md. Minhaj Alam	CE	Patil Rail Infrastucture Ltd.
318	Saptarshi Bera	CE	Patil Rail Infrastucture Ltd.
319	Sankarshan Chatterjee	ECE	Garuda Power Pvt. Ltd.
320	Subrata Das	EE	Garuda Power Pvt. Ltd.
321	Bijay Bhagat	EE	Garuda Power Pvt. Ltd.

322	Partha Pratim Mukherjee	EE	Garuda Power Pvt. Ltd.
323	Rishab h Kumar Ram	ME	Garuda Power Pvt. Ltd.
324	Babloo Kumar	ME	Garuda Power Pvt. Ltd.
325	Hayatul Islam	EE	Garuda Power Pvt. Ltd.
326	Anupam Guha	ME	JSW
327	Kalyani Bhattacharyya	EE	JSW
328	Arup Panda	MCA	Keross Research & Development Pvt. Ltd.
329	Pallabi Dutta	MCA	Keross Research & Development Pvt. Ltd.
330	sahir sultanchowdhury	IT	MINDTREE
331	Rajesh Koiri	CSE	MINDTREE
332	Shambhavi	CSE	MINDTREE
334	Ranjan Kumar Tewari	IT	MyChoice Telecom
336	Suman Kumar Bag	CSE	TCS
337	Akhil Anand Pritam	CSE	TCS
338	Debjeet Sen	CSE	WIPRO
339	Nitesh Kumar Upadhyay	CSE	Meditab
340	Priya Agarwal	CSE	Meditab
341	Roshan Jha	ME	Himadri Chemicals
342	Debdulal Raj	ME	Himadri Chemicals
343	Sudip Chatterjee	ME	Himadri Chemicals
344	Souvik Kumar Das	AEIE	Neo Metaliks Ltd.
345	Tushar Das	ME	Neo Metaliks Ltd.
346	Ananta Lal Das	ME	Kalimata Ispat Industries Pvt. Ltd.
347	Samim Ali Shaikh	ME	Kalimata Ispat Industries Pvt. Ltd.
348	Abhishekh Chakraborty	ME	Kalimata Ispat Industries Pvt. Ltd.
349	Souvik Kumar Das	AEIE	Jindal Steel & Power
350	Shubham Saurav	IT	Bariza
354	Arnab Kumar Mukherjee	CE	Paharpur Cooling Towers Limited
355	Jiten Kumar Das	CE	Paharpur Cooling Towers Limited
356	Arindam Chatterjee	CE	British Telecom
357	Shipra Sinha	AEIE	British Telecom
358	Sandipan	AEIE	British Telecom

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

BCREC welcomed the first year engineering students of all departments and conducted a well-organized Orientation Programme for them on 2nd August, 2018 followed by an Effective Induction Programme from 3rd August, 2018 to 25th August, 2018. The Orientation Programme was designed to support the new students as they began their journey in BCREC. The mandatory Induction Programme introduced by MAKAUT, West Bengal mainly aspired to create manpower who will acquire strong technical knowledge and skill, possess leadership qualities and be a team player, capability to recommend innovative ideas and solutions as well as be responsible to society and community concerns.

The first lecture was by Prof. D. C. Panigrahi, Professor and Former Director of IIT-ISM, Dhanbad on "Introduction to Engineering and Management". The second lecture was delivered by Prof. P. Pathak, Professor and Head, Department of Management Studies, IIT-ISM, Dhanbad enlightening the students on the subject of "Innovation and Entrepreneurship". There were also lectures by the Officers of our Training and Placement Office and by Prof. S Maity, Head of Information Technology Department and also the in-charge of TPO, BCREC Durgapur.

There were also Yoga and Sports session for every class of first year students. Apart from this, there were also English proficiency assessment courses conducted by the faculty members of the Basic Science and Humanities Department and computer proficiency assessment courses conducted by the faculty members of the Engineering Departments.

In the third week, there were department wise visits to nearby places around BCREC Campus along with some villages in Haribazar. A visit was also arranged to CMERI, Durgapur for the

first year students where the CMERI scientists painstakingly demonstrated two of their important infrastructures to the first year students.

Fig. 6.1- Some Glimpses of Orientation Program 2018

6.2 Training Programs: Workshops/Seminars/STTPs/FDPs

✓ The Dept. of Basic Science and Humanities of BCREC organized a mini seminar on 21st July, 2018. The topic was **"Strategic Communication Management"** and the speakers invited were Sri. Jayanta – Asst. VP, CTS, Kolkata and Ms. Alopi Banerjee, DGM, DSP-SAIL where both shared their professional experiences to enlighten the massive registered student population in the Seminar Hall.

✓ CSI Students Chapter and Think IoT Research Group organized a workshop on **"Booting IoT V:2.0"** on 18th February, 2018 which aimed to immerse the young innovative minds in the concept of Internet of Things (IoT). Prof. (Dr.) Sujoy Saha, Assistant Professor, National Institute of Technology, Durgapur was the invited speaker. The workshop was an interactive, informative introduction to the concepts of IoT which also included a 'do-it-yourself' task that aim to pacify their knowledge acquisition about various sensors used in IoT realization.

✓ A 6-day Faculty Development Programme (FDP) was organized by **E&ICT Academy of IIT-Guwahati** with support from skilled Gym (OPC) Pvt. Ltd., Guwahati at BCREC Campus to encourage more and more faculty members to participate in such programs. The programme mainly concentrated on Behavioral Remodeling and the use of ICT Tools in teaching process which enriched the faculty members regarding how to conduct classes more effectively and efficiently. A certified-professional from the E&ICT Academy trained the faculty members over the entire duration of the course with theoretical and practical classes. The faculty members were enriched regarding the application of ICT Tools in teaching like Google Forms, Teacher Tubes, TEDed, MS Power point etc. BCREC is committed to introduce all such learning procedures in curriculum as well as in classroom teaching.

✓ A Seminar on **BIG DATA** was organized by IT Department on 23rd February, 2019 at Institute Campus where eminent personalities like Mr. Prabhakar Ojha, Bigdata Developer, Ddriven Data Science Analyst Pvt. Ltd. (Singapore), Bangalore Branch, delivered lecture with hands-on exposure to the participants.

- ✓ A Seminar on **Google Cloud** was also organized by IT/CSE Department of BCREC on 16th March, 2019. Google Cloud Team lead by Mr. Soumitra Bagchi, Google Study JAMS 2019, delivered the lectures with exposure to hands-on exercises to the participants on Google Cloud and Machine Learning. Around 300 students across all the departments participated in the programme.
- ✓ Prof. Soumya Sen Sharma, Chief Scientist, CSIR-CMERI, Durgapur and Coordinator, Outreach cum Cluster Innovation Centre of PRISM (Promoting Innovations in Individuals, Start-Ups and MSMEs) delivered a talk on **"Project formulation and the formats under the scheme"** on 3rd November, 2018. The Chair of the Session – Prof. (Dr.) Pijush Pal Roy, Director, BCREC encouraged and urged all the faculty members to prepare small innovative project proposals (less than 2 Lakhs) to be funded by Research Bodies to accelerate their Research & Development work as well as of the Institute.
- ✓ A 2-days Workshop for imparting knowledge on **Robotics** was organized at BCREC Campus.
- ✓ A 2-days **Python** Workshop mostly required by software industries was conducted at BCREC Campus.

6.3 Important Events

Celebration of 72nd Independence Day

BCREC fraternity proudly celebrated the **72nd Independence Day** of our beloved country on August 15, 2018 along with the countrymen in the country and 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.

Fig. 6.2- Some Glimpses of the Independence day Program 2018

Wall Magazine Competition

The Intra College Wall Magazine Competition was celebrated on 31st August, 2018 in the College premises of BCREC where Prof. (Dr.) Pijush Pal Roy, Director, BCREC and Mr. T. Bhattacharya, General Secretary of BCREC Society inaugurated the exhibition. The Vice

Chancellor of MAKAUT, Prof. (Dr.) Saikat Maitra was the Chief Guest for the event where he closely inspected every wall magazine and motivated the students and advised them to participate in this type of competition. He also suggested that this type of event is required to encourage the students to utilize their head (Cognitive), hand (skills) and heart (values). Students actively participated in the competition to express their thoughts through imagination, slogan and colors. The evaluation of the Wall Magazine was done by the Vice Chancellor of MAKAUT, Prof. (Dr.) Saikat Maitra, Sri. Sutirtha Bhattacharya, Director of PTC India Ltd. and Prof. (Dr.) Pijush Pal Roy, Director, BCREC.

Inauguration of Wall Magazine of CSE & IT Department was named as **"BCRECians Imagination Tree (BIT)"** by Prof. (Dr.) Pijush Pal Roy, Director, BCREC. The objective of this magazine was to develop the literary taste and to provide opportunity to the students for self-expression.
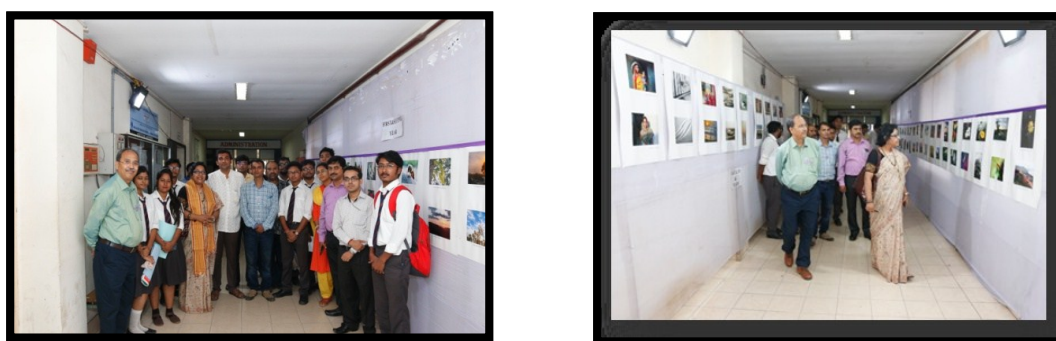

Fig. 6.3- BCREC Wall Magazine Competition 2018

Inauguration of DM Auditorium

The inauguration of DM Auditorium was held on 31st August, 2018 and was named after late **Sri Dulal Mitra, former President and founder member of BCREC Society**. The auditorium is well ventilated and quite spacious with a large number of comfortable seating arrangement. It can easily accommodate 700 students at a time. The light system on the stage includes spot lights as well as various coloured dramatic lights for increased visibility. All in all, it is a treat for all the students and teachers can enjoy cultural as well as academic workshops over here on special events. The auditorium was inaugurated by Padma Bhushan **Sri Soumitra Chatterjee** in the august presence of Prof. (Dr.) Saikat Maitra, Hon'ble Vice Chancellor, MAKAUT as Chief Guest, Sri Suthirtha Bhattacharya, former CMD-COAL India Ltd. as Guest of Honor, and Sri Tapas Banerjee, MLA Asansol-Daksin & Chairman ADDA, presided for the day. The Hon'ble dignitaries were escorted by the guard of honor and then accompanied by the Vice President - Smt. Mita Mitra, General Secretary – Sri Tarun Bhattacharya and Director – Prof. (Dr.) Pijush Pal Roy.

The inaugural ceremony started with unveiling the memorial plaque – Dulal Mitra Auditorium and lighting of lamps at Ashutosh Bhavan. In his welcome address, General Secretary, Sri Tarun Bhattacharya, introduced the Hon'ble dignitaries present in the dias and briefed biography and contribution of late Sri Dulal Mitra. Padma Bhushan Sri Soumitra Chatterjee addressed the gathering with his mesmerized voice and recited two wonderful poems on this occasion. The event ended with a vote of thanks by our Director – Prof. (Dr.) Pijush Pal Roy.

Our distinguished guests, faculty & staff members and students participated in the programme in various forms.

Fig. 6.4- Dulal Mitra Auditorium

Engineers Day

Engineer's Day was celebrated on 15th September, 2018 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 on **"Global on self-sustenance in Renewable Energy Production & Utilization for Mankind – Role of Engineers".**
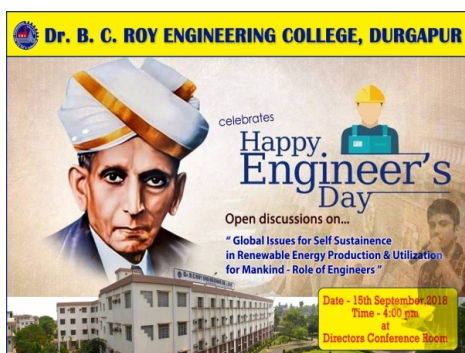

Fig. 6.5- Engineers' Day Celebration in BCREC

Viswakarma Puja & Saraswati Puja

Vishwakarma Day (18th September), also known as Viswakarma Jayanti or 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 was also celebrated during the winter season.

Fig. 6.6- Viswakarma Puja Celebration

Celebration of Parakram Parv

The Institute took the initiative to introduce some awareness program in the campus related to Indian Army in order to inculcate the sense of responsibility and the sacrifices made by the Indian Army Jawans for the nation. To commemorate their sacrifices and to mark the second anniversary of the surgical strikes carried out by the Indian Army (30th September, 2018), Dr. B. C. Roy Engineering College observed the day along with the rest of India as 'Parakram. Director BCREC and Colonel S. K. Ganguli, Proctor, BCREC highlighted the velour and accomplishments of the Indian Army.

Adult Computer Drive

To educate the adult community who lack familiarity with computers in the modern age where technology is involved in every aspect of life - in work place, to keep in touch with family and friends, perform day-to-day task management, remote education and even online shopping, the students of BCREC organized computer education for adults on 12th October, 2018 as a part of community service initiatives. The program mainly focused on two areas: developing familiarity with the hardware of a computer mainly, monitor, mouse, keyboard, USB memory stick etc. and developing a basic knowledge on the use of Word, Excel, PowerPoint, accessing mail, using search engines, familiarity with social media platforms etc.

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 on 13th October, 2018 in the locality.

Release of BCREC Newsletter

On 13th October, 2018, **BCREC Newsletter (Vol. 1, Issue 1)** was formally released by Sri Soumya Sen Sharma, Chief Scientist, CMERI, Durgapur. In his welcome address, Director

BCREC stated that BCREC Newsletter would be very useful for wide circulation and dissemination of BCREC activities to all concerned and stakeholders, and thanked the members of the Publication Committee for their tireless efforts to bring out this well decorated newsletter.

Rashtriya Ekta Divas

BCREC fraternity observed **"The Rashtriya Ekta Divas"** in fond remembrance of **Bharat Ratna Sardar Ballabhbhai Patel** – the birthday of the first Home Minister and Deputy Prime Minister of independent India on 31st October, 2018.

The Director of the College and other speakers reminisced on Sardar Ballabhbhai's contribution in the freedom, struggle, his role in the annexation of approximately 565 self-governing princely states, and in the creation of the Indian Administrative Service and the Indian Police Service to serve the interest of modern and free India. The BCREC fraternity also took the pledge to dedicate themselves to preserve the UNITY, INTEGRITY and SECURITY of the NATION.

Ekotai Sampriti

A State-wide special awareness programme entitled "Ekotai Sampriti" was organized in all districts under the aegis of I & CA Department from 16th – 18th November, 2018. In that prestigious State Sponsored Cultural Programme, a team of 21 BCREC students participated on 17th November, 2018 at Srijani Auditorium, Durgapur mentored by faculty members of BCREC and headed by Mr. Aloke Kahali (Head-Admin).

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 12th January, 2019. The theme for the year is **"Channelizing Youth Power for Nation Building"**. 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

In order to promulgate social awareness, on 19th January, 2019, the Anthyesti Foundation, Kolkata in collaboration with Mohan Foundation conducted an awareness program on Organ Donation Pledge for the faculties and students of BCREC as an integral part of NSS activity. The mission of the event was to save lives by increasing opportunities for the people in Durgapur to join the organ, eye and tissue registry and was highly successful where around 500 students participated in this awareness programme.

Shri Tarun Bhattacharya, General Secretary and Shri Ratan Roy Chowdhury, President, Prof. (Dr.) Pijush Pal Roy, Director, Mrs. Ruma Mitra, Registrar, BCREC, Dr. Deepak Kumar of Mission Hospital were among the dignitaries who graced the occasion. Ms. Shruthi Reddy, CEO of Anthyesti Foundation delivered the talk on importance of organ donation in our society. She clarified the legal and ethical concerns, facts about the organ donation and its

types. Dr. Deepak Kumar of Mission Hospital who was associated with the first organ donation operation in Durgapur said that people should come forward to register and pledge their organs or donation. BCREC fraternity feels incredibly proud to have city's first organ donation pledge drive and committed to move forward to ensure the mission to save lives by increasing opportunities for the people in Durgapur to join the organ, eye and tissue registry.

Fig. 6.7- Organ Donation Pledge Program 2019

Blood Donation Camp 2019

Another noble drive for the community was the Voluntary Blood Donation Camp hosted by BCREC on 25th January, 2019 in the College premises. This philanthropic activity was sponsored by the HDFC Bank Ltd. and two of their Officers namely, Shri Santanu Biswas, Manager (Operation Head) and Shri Sekhar Banerjee, Deputy Manager actively participated in the programme. It was also partnered by the Sub-Divisional Voluntary Blood Donor's Organization, led by Shri Kabi Ghosh. The event was a grand success with a robust turnout of 90 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.
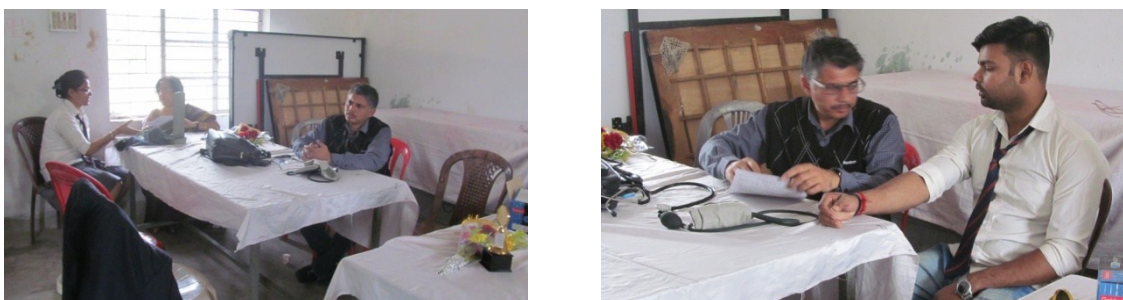

Fig. 6.8- Blood Donation Program 2019

Annual Sports 2019

Annual Sports was organized on 9th February, 2019 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.

Fig. 6.9- Annual Sports 2019

Commemoration Day of Former President of BCREC: Late Dulal Mitra

Dr. B. C. Roy Engineering College along with its sister Institutes observed 12th February, 2019 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, Mrs. Shraboni Sen presented few Rabindra Sangeets in her 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.

Tribute to Nation's Martyrs

To show respect and to pay tributes to the Martyrs and to offer condolences to the bereaved families who had lost their loved ones, a condolence meeting was held at BCREC Campus on 15th February, 2019 where the Director, BCREC along with the faculty, staff members and students condemned the cowardly attack by militants and prayed to All Mighty for the brave-hearts.

Fire Safety Workshop

BCREC Management suggested that the staff members and students of the Institute should be fully prepared to face any kind of disaster. To enhance their knowledge base, Disaster Management Programs were conducted in the Institute campus. Fire safety measures existed in the Institute since long but it was renovated in 2019. Apart from this, Awareness Workshops

was also organized in the Institute campus to demonstrate the fire safety measures to the students and the staff members.

NDRF Workshop

NDRF Workshop was also organized in the Institute campus to arouse the sense of awareness among the common people so that they can safeguard them during any natural disaster or calamity.

Fig. 6.10- Some Glimpses of NDRF Workshop

ROBOTRIX: Students designed and made Robots to participate in ROB-SOCCER and ROBO-WAR competition and show their skills. Prior to this event, they were trained in a Workshop provided by AICTE PVT. LTD. Durgapur at the College Campus.

TECH MELA: Various exhibits were displayed and demonstrated in science exhibition. Students came up with new ideas which are going to help the society for better living.

BOHEMIAN COLORS: A colorful event where students from all streams participated to showcase their talent in thematic T-shirt painting.

IGNITIA: A quiz competition based on non-academic topics where any student can participate after clearing the initial phase of MCQ test.

GAME THRONES: Event to test the imagination, creativity, promptness to take decision and time management ability of students where multiple players strive to win the game.

X-POSED: This is the event to explore the photographic skills.

TREASURE HUNT: A game which is full of surprises and fun. This is the mega event where maximum participation is recorded.

CINEKSHETRA: Short films are made by the students where they show their skills of acting, directing, editing etc.

WANNACODE: A competition to make students ready for industry through coding and decoding of various industrial and socio-economic requirements with C and C++.

B-PLAN: Students compete with their entrepreneurship ideas.

TECH-QUIZ: A quiz competition especially for budding instrumentation engineers.

CIRCUITRIX: Competitors have to solve various puzzles made with electronic circuits.

MECH-QUIZ: A quiz competition especially for budding mechanical engineers.

AUTOCAD: A competition for budding mechanical engineers to explore their skills towards design and manufacture.

BRUG IT: A competition for budding civil engineers to explore their skills towards structure design.

SCHOLAR: Presentation of technical papers.

ANDROMEDA: Students competes for excellence for Android.

WEB-D: Students have to prove their creativity and knowledge through the design of web page as per customer requirement.

Horizon 2K19

In an ardent effort to inculcate an atmosphere of intellect, skill and technical powers among budding engineers, BCREC organized Annual Technical Festival every year within the College Campus. The Horizon of Knowledge is oblivious of time and space encircling all walks of life within and beyond human intellect. A total of 1352 participants registered for 18 events in HORIZON-2K18 even from other technical Colleges including NIT's. The purview of vents spanned from technical like Robotics, Coding Challenges, Manufacturing and Construction Challenges; Technical Paper presentation to non-technical skill building events like Debate, Extempore and Business Model competitions.

The Techno-Management Fest of Dr. B. C. Roy Engineering College, HORIZON-2K19 started with the opening of Book Fair. The Director, Dr. B. C. Roy Engineering College extended welcome address. The Chair of Chief Guest in inauguration program was ornamented by Shri Prem Sagar Mishra, Chairman-cum Managing Director of Eastern Coalfields Ltd. (ECL), Coal India Limited. He delivered a session on the topic "Cohesive Existence of Engineering Education and Management for Sustainable Growth of Indian Industries". The HORIZON-2K19 team expressed homage to International Mother's Language (Matribhasa) Day (21st February, 2019). The fest came to an end with closing speech by Director, Dr. B. C. Roy Engineering College.

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.

Fig. 6.11- Some Glimpses of Annual Cultural Fest 2019

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. BCREC students led by their mentors 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.

Fig. 6.12- Some Photos of Tree-Plantation in 2019

Celebration of Rabindra Jayanti

Rabindra Jayanti is an annually celebrated cultural festival in the remembrance of Kabiguru Rabindranath Tagore's birthday anniversary on the 25th day of the Bengali month of Boishakh. Members of BCREC family celebrated the day – 9th May, 2019 as a tribute to Tagore and his works. The theme of the celebration was "Mukti", emancipation through spiritual attainment. In addition to the soulful rendition of music as per the theme, speeches were delivered by Prof. (Dr.) Pijush Pal Roy, Director, BCREC, Sri Amitava Chakraborty, Chief Corporate Affairs, BCREC and others. The event graced by the presence of many faculty and staff members of the BCREC community, was concluded with the respectful laying of wreaths and flowers at the feet of the bard's statue.

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, 2018 and January to April, 2019. 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. In the July to October cycle, total 30 students have secured the top spot in their respective courses. Prof. Nilkamal Bhunia (Assistant Professor, Department of Electronics & Communication Engineering, Dr. B.C. Roy Engineering College, Durgapur) also topped his respective course during that cycle. In the January to April cycle, 11 students topped in their respective courses. Four faculty members, namely Prof. Subhajit Bhattacherjee (Assistant Professor, Department of Mechanical Engineering, Dr. B.C. Roy Engineering College, Durgapur), Prof. Paramita Manna (Assistant Professor, Department of Information Technology, Dr. B.C. Roy Engineering College, Durgapur), Prof. Dipak Kumar Dhak (Assistant Professor, Department of Electronics & Communication Engineering, Dr. B.C. Roy Engineering College, Durgapur) and Prof. Soham Dey (Assistant Professor, Department of Electrical Engineering, Dr. B.C. Roy Engineering College, Durgapur) have also topped their respective courses. In this academic year, the following number of students have participated in the different subjects and courses offered by SWAYAM-NPTEL;

Present	Gold	Elite	Silver	Successful	Participation	Topper
1334	15	713	0	485	121	31

Jul-Oct 2018
CONGRATS! You are one of the top 100 Local Chapters. Your college is hereby recognized as an ACTIVE Local Chapter.

July to October, 2018

Present	Gold	Elite	Silver	Successful	Participation	Topper
483	20	62	141	200	60	15

Jan-Apr 2019
CONGRATS! You are one of the top 100 Local Chapters. Your college is hereby recognized as an ACTIVE Local Chapter.

January to April, 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 2018-19 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
QCad Training	60 hours	59	20
Python Training	60 hours	370	148
C Training	60 hours	56	30
Linux Training	60 hours	60	31
Scilab Training	60 hours	127	16

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*
>
> It is indeed a moment of pride for the Institution as Dr. B. C. Roy Engineering College had been selected for India's Education Excellence Award 2018 as per the research report 2018 by Berkshire Media, USA which is the most acclaimed accolade in the field of education. It's main objective is to highlight and recognize the quality and diversity of the educational establishments across India who have achieved excellence by their significant contributions towards the education sector.
>
> ➢ Prof. (Dr.) Pijush Pal Roy, Director, BCREC has been nominated as an Honorary Director (Technical and Skill Development) of M/s Arrows Mining Technologies Pvt. Ltd. It is an upcoming Mining and Infrastructure Company with high-end Engineering and Technical skills backed by enormous R&D supports from personnel of Academia and Research Organizations focusing primarily on Safety & Quality Operations of International Standards.
> ➢ Prof. (Dr.) D. N. Ghosh from the Department of Computer Science & Engineering, received the "**Best Faculty Award**" from MAKAUT.
> ➢ Two students of the Electronics and Communication Engineering Department – Shri K.V.S. Jogender (2018 Batch) and Shri Akash Pathak (2019 Batch) were invited by

the Madan Mohan Malaviya University of Technology, Gorakhpur to present their paper on "Evaluation of Reverse – Elitism Firefly Algorithm or CEC-2013 Real Parameter Single Objective Optimization Benchmark Functions" in the Vth IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON – 2018) held between 2nd and 4th November, 2018.

➢ Seven BCREC students participated in DSP Elocution Contest organized by Durgapur Steel Plant, SAIL. They received prizes in different categories at The Synergy Hall, Centre for Human Resource Development (CHRD), Durgapur Steel Plant on 3rd November, 2018.

➢ Students from Department of Civil Engineering and Department of Electronics & Communication Engineering have represented Dr. B.C. Roy Engineering College, Durgapur in a competition organized by Maulana Abul Kalam Azad University of Technology (MAKAUT) on the occasion of "National Science Day" held on Haringhata Campus of MAKAUT, Nadia, West Bengal. With the projects like smart city, porous pavement and sensor based stick for the blind people, the students finished as the second best in the overall competition.

6.6 New start-ups: Entrepreneurship Programme

To encourage the students to start up their own businesses, Entrepreneurship Programmes were conducted in the Institute and this initiative was taken up by the ECell of BCREC. On 18th August, 2018, a one day seminar on **"Entrepreneurship in an Engineer's World"** was organized. Mr. Indranil Aich, Managing Director, Aich Group of Companies and Mr. Subhabrata Bhattacharya, Regional Manager, National Entrepreneurship Network, Wadhwani Foundation spoke about the importance of Entrepreneurship in the current economic scenario of the country and how a budding professional can equip himself in Entrepreneurship through training.

Dr. Pijush Pal Roy, Director BCREC delivered the welcome address and Prof. Krishna Roy, Coordinator, ECell BCREC introduced the speakers. They highlighted on the fact that how the young engineers can aim at becoming job givers and how they can be certified in Entrepreneurship through free online courses. Around 500 students across the departments participated in the program.

6.7 Introduction to New in-house Software

The Online Examination System (OES) software

To prepare the students for high-profile jobs and to make them aware and familiar with the various types of Online Competitive Exams, it was proposed that dedicated software should be developed and implemented at the earliest. Accordingly, an in-house software to conduct online exams namely, the **'Online Examination System (OES)'** was developed under the leadership of Sri Pranab Kumar Sinha (Online Programme Coordinator) and supervision of Dr. Pijush Pal Roy, the hon'ble Director of BCREC. A huge question bank comprising of all the subjects of B.Tech 1st Semester, 3rd Semester, 7th Semester and 8th Semester of B.Tech Course of Maulana Abul Kalam Azad University of Technology (MAKAUT), West Bengal

was composed and uploaded by all the relevant faculty members of the Institution to conduct online exams for the students.

Grievance Redressal Software

To address various types of grievances mainly by the students as well as faculty members and anybody else regarding fooding, hostel accommodation, canteen service, laboratory facility, infighting, ragging, theft, security, sanction of leaves and other issues, a software, namely, **'My Grievance'** was launched by the Grievance Cell of the Institution. The software is designed in such a manner so as to keep the confidentiality of every grievance and in order to use it, a user needs to register with the system by validating with OTP sent to their registered mobile phone and email.

6.8 Tie-Ups and MOU Sign

MOU sign with The Mission Hospital for Medical Treatment

To improve the medical facility and to serve additional number of ailing students, staff and faculty members within the BCREC Campus, the IQAC proposed to collaborate with some nearly Hospital in the locality. Accordingly, the Management of Dr. B. C. Roy Engineering College, Durgapur signed a **MOU agreement** with **The Mission Hospital, Durgapur** to provide Consultation Services to the students, staffs, officers and faculty members at the College Campus. One doctor as per the schedule made by the hospital will come to the medical unit of the college on its working hours and will look after the students, teachers and staffs as per requirements. The arrangement also includes free Ambulance Services on call.

MOU sign with Tata Power Skill Development Institute (TPSDI)

In order to upgrade the knowledge base of the students with the latest trends in industry and to prepare them for industry jobs, Dr. B. C. Roy Engineering College, Durgapur signed a **Memorandum Of Understanding (MOU)** with **Tata Power Skill Development Institute (TPSDI)** on 2nd February, 2019 with the objective of imparting practical skill sets among the engineering students relevant for the industry, especially for the power and allied sectors. To mark this occasion, the TPSDI Principal, Shri Alok Prasad delivered a talk to elaborate the various industrial certification courses offered by Tata Power Skill Development Institute for the students where they can experience practical hands-on exercises to enhance their skill set. About 125 students of CE, ME and EE participated in the Seminar cum interactive session with great enthusiasm and expressed keen interest for undergoing practical training under TPSDI.

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 is about to be made

8. Rain water harvesting: This important measure to be adopted by the institute. In rain water harvesting the main object is to store the rain water and use them. The storage water is used in the garden and other purposes. Also, the excess water flowing in the drainage system is avoided.

Tree Plantation

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

Development Programs

> On 28th Jan, 2019, the program on administrative capacity development program took place
> Seminar on "Role of IEEE for Young Engineers and Researchers" in Collaboration with IEEE
> One Day Seminar on "Strategic Communication Management for Engineering Professionals --- Issues and Challenges" held on 21st July, 2018

Participation in NIRF

A team has been formed by the institute to look after the work related to NIRF ranking. Dr. Alok Kahali, Head (Admin) and Prof. (Dr.) N.N. Pathak along with Prof. Suman Dasgupta, Prof. Sudip Kumar Gorey, Prof. Dipta Choudhury and prof. Soumyadip Das are entitled with the work related to NIRF which will be available on September, 2019 for the ranking of the year 2020.
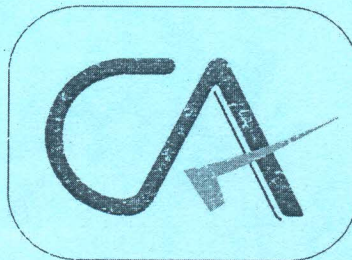
NBA Accreditation

It is a matter of pride for BCREC that two departments namely Computer Science & Engineering and Electronics & Communication Engineering got the NBA accreditation in the previous academic year. It has been further decided that Mechanical Engineering, Information Technology and Electrical Engineering departments should prepare the SAR and other relevant documents for the NBA accreditation for the next academic year.

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, 2019
(ASSESSMENT YEAR 2019-20)**

AUDITORS' REPORT

We have audited the attached Balance Sheet of **Dr. B.C. Roy Engineering College** as at March 31st, 2019 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 31st March, 2019; and

b)   in the case of the Income & Expenditure of the surplus for the year ended on that date.

Place: Durgapur

Dated: 03/09/2019.

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

(SUGATA GANGULY)
Partner
Membership No. 065153

Pijush Pal Roy
Director
Dr. B. C. Roy Engineering College
Durgapur

DR.B.C.ROY ENGINEERING COLLEGE
JEMUA ROAD, FULJHORE, DURGAPUR - 713 206
BALANCE SHEET AS AT 31ST MARCH, 2019

PREVIOUS YEAR	PARTICULARS	Sch. No.	AS AT 31ST MARCH, 2019	
	GENERAL FUNDS :			
363,366,274.08	Balance as per General Fund		393,180,221.32	
646,729.56	Less: Transferred to Gratuity Fund		7,521,982.02	
-	Less: Prior Period Adjustment		-	
-	Less: Transferred to Reserve Fund		-	
30,460,676.80	Add.:- Surplus for the year as per		22,628,295.41	
	attached Income & Expenditure Accounts			
393,180,221.32				408,286,534.71
	RESERVE FUND :			
24,585,210.72	Group Gratuity Scheme			32,107,192.74
24,585,210.72				32,107,192.74
-	**LOAN FUNDS** :	1		-
-				-
	FUND MOVEMENTS (Inter Head)			
22,366,971.67	Fund Received from Dr. B.C. Roy, APC			-
22,366,971.67				-
440,132,403.71	**TOTAL**			**440,393,727.45**
	FIXED ASSETS :	2		
283,149,294.65	Net Block			283,316,462.65
132,659,820.48	**INVESTMENTS**	3		113,657,568.33
	FUND MOVEMENTS (Inter Head)			
57,541,536.00	Fund Transferred To Dr. B.C. Roy Polytechnic		64,819,598.83	
-	Fund Transferred To Dr. B.C.R.C.P.&A.H.S.		-	
57,541,536.00				64,819,598.83
	CURRENT ASSETS :	4		
246,660.00	a) Deposits		2,273,660.00	
72,214.00	b) Loans & Advances		154,054.00	
71,628,421.94	c) Cash & Bank Balances		83,865,815.51	
12,484,795.50	d) Other Receivable		13,716,839.50	
84,432,091.44			100,010,369.01	
	Less:- CURRENT LIABILITIES :	5		
106,422,396.75	a) Advances against educational activities		108,726,785.50	
2,269,588.00	b) Security deposits		1,290,151.00	
1,674,474.00	c) Liabilities for Expenses		1,476,820.00	
979,685.11	d) Liabilities Against Student		723,811.87	
1,307,019.00	e) Unpaid statutory deductions		1,253,715.00	
737,842.00	f) Liabilities for Tax Deducted at Source		836,512.00	
4,259,334.00	g) Sundry Creditors		7,102,476.00	
117,650,338.86			121,410,271.37	
(33,218,247.42)	**NET CURRENT ASSETS(4 - 5)**			(21,399,902.36)
440,132,403.71	**TOTAL**			440,393,727.45

This is the Balance Sheet for the year ended 31st March, 2019
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 : 03/09/2019

Pijush Pal Roy
Director
Dr. B. C. Roy Engineering College
Durgapur

![EnsimulatedSolutionsLLP logo]

EnsimulatedSolutionsLLP

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 2019

Name of the Installation	Dr. B.C. Roy Engineering College Jemua Road, Fuljhore 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 Nivedita Girl's Hostel
Date of Energy and Green Audit	23.07.2019
Name of Certified Energy Auditor	Mr. Saibal Saha
Certification Sl. No.	8890 (EA-12290)
Validity of the Certificate	22.07.2020

Signature of Auditor
(Mr. Saibal Saha)
Executive Director

Dr. B.C. ROY ENGINEERING COLLEGE, DURGAPUR
ACADEMIC CALENDAR - ODD SEMESTER [JULY TO DECEMBER 2018]

MONTH	MON	TUE	WED	THU	FRI	SAT	SUN	WEEK	REMARKS
									ODD SEMESTER ACADEMIC ACTIVITIES WILL START FROM 3RD JULY, 2018 AND FOR THE
									STUDENTS FROM 10TH JULY, 2018 [EXCEPT FIRST SEMESTER]
JULY							1	1	
	2	3	4	5	6	7	8	2	
	9	10	11	12	13	14	15	3	STUDENTS RETURN FROM VACATION 10TH JULY 2018
	16	17	18	19	20	21	22	4	
	23	24	25	26	27	28	29	5	25.07.2018: NSS ACTIVITIES - SWACCHH BHARAT ABHIYAN PROGRAMME
	30	31						6	
AUG			1	2	3	4	5	7	15.08.18 : INDEPENDENCE DAY/
	6	7	8	9	10	11	12	8	08.08.2018 (TENTATIVE) : FRESHERS' JOINING
	13	14	15	16	17	18	19	9	14.08.2018 TO 18.08.2018 : SUBMISSION OF FIRST ASSIGNMENT
	20	21	22	23	24	25	26	10	18.08.2018: E-CELL ACTIVITIES/ 22.08.2018 : ID-UZ-ZOHA
	27	28	29	30	31			11	25.08.2018 (TENTATIVE) : FRESHERS' WELCOME
SEPT						1	2	12	
	3	4	5	6	7	8	9	13	1ST ROUND OF TEST ON SPOKEN TUTORIAL PROJECT-IIT BOMBAY DURING 1ST WEEK
	10	11	12	13	14	15	16	14	04.09.2018 TO 08.09.2018: SUBMISSION OF SECOND ASSIGNMENT
	17	18	19	20	21	22	23	15	14.09.2018 - 20.09.2018: MAKAUT FIRST CLASS TEST SLOT
	24	25	26	27	28	29	30	16	21.09.18: MUHARRAM/ 27.09.2018 TO 28.09.2018:NSS ACTIVITIES INCLUDING 1ST YEAR
OCT	1	2	3	4	5	6	7	17	2.10.18: MAHATMA GANDHI'S BIRTHDAY
	8	9	10	11	12	13	14	18	07.10.2018 : FIRST SLOT OF NPTEL EXAMINATION
	15	16	17	18	19	20	21	19	16.10.2018 TO 25.10.2018: DURGA PUJA, MUHARRAM AND LAKSHMI PUJA
	22	23	24	25	26	27	28	20	28.10.2018: SECOND SLOT OF NPTEL EXAMINATION
	29	30	31					21	30.10.2018 TO 03.11.2018:2ND ROUND OF TEST ON SPOKEN TUTORIAL PROJECT-IIT(B)
NOV			1	2	3	4		22	
	5	6	7	8	9	10	11	23	06.11.2018 TO 09.11.2018: KALI PUJA , DIWALI & BHATRIDWITIYA.
	12	13	14	15	16	17	18	24	13.11.2018 : CHHAT PUJA
	19	20	21	22	23	24	25	25	14.11.2018 TO 20.11.2018 : MAKAUT SECOND CLASS TEST SLOT
	26	27	28	29	30			26	23.11.2018: GURU NANAK'S BIRTHDAY
DEC						1	2	27	
	3	4	5	6	7	8	9	28	04.12.2018 TO 21.12.2018 : MAKAUT THEORY EXAMINATIONS (UG & PG)
	10	11	12	13	14	15	16	29	19.12.2018 : FATEH-DWAZ DUHAM
	17	18	19	20	21	22	23	30	25.12.2018 : CHRISTMAS DAY
	24	25	26	27	28	29	30	31	24.12.2018 TO 12.01.2019: INTER SEMESTER BREAK
	31								
LEGEND :									COLLEGE WILL RE-OPEN ON 15TH JANUARY 2019
			WEEKLY HOLIDAYS						ABSENCE FROM THE CLASSES WILL ASK FOR PUNITIVE ACTION AS PER RULES OF THE COLLEGE

* College hours: 10 a.m. to 5:30 p.m./ LABS WILL BE OPEN FROM 9:50 a.m.

** All sessionals are to be submitted by the students in time and to report to the concerned mentors.

***** REVISION/MAKE-UP CLASSES/PENDING LABS/PENDING THEORIES/DOUBT CLEARING CLASSES MAY BE ADJUSTED AS PER CONVENIENCE

DR. B.C.ROY ENGINEERING COLLEGE, DURGAPUR
ACADEMIC CALENDAR - EVEN SEMESTER [JANUARY 2019 TO JUNE 2019]

MONTH	MON	TUE	WED	THU	FRI	SAT	SUN	REMARKS
JANUARY		1	2	3	4	5	6	**10-01-19 - COMMENCEMENT OF CLASSES**
	7	8	9	10	11	12	13	01.01.2019:NPTEL COURSE ENROLLMENT STARTING(UNDER MOOCs)
	14	15	16	17	18	19	20	12.01.19 - SWAMI VIVEKANANDA'S BIRTHDAY
	21	22	23	24	25	26	27	23.01.19 - NETAJI'S BIRTH DAY/26.01.19 - REPUBLIC DAY
	28	29	30	31				31.01.2019:SPOKEN TUTORIAL ENROLMENT CLOSING(UNDER MOOCs)
FEBRUARY					1	2	3	02.02.19 - ANNUAL SPORTS DAY
	4	5	6	7	8	9	10	04.02.19 - NPTEL SET - I ENROLMENT CLOSING/ 10.02.2019 - SARASWATI.PUJA
	11	12	13	14	15	16	17	12.02.19-16.02.19 - FIRST ASSIGNMENT
	18	19	20	21	22	23	24	04.02.19-05.02.19 - TECH FEST/06.02.19 - CULTURAL FEST
	25	26	27	28				25.02.19-NPTEL SET II COURSE STARTING & ENROLLMENT CLOSING(UNDER MOOCs)
MARCH					1	2	3	04.03.19 - SHIVARATRI
	4	5	6	7	8	9	10	05.03.2019-09.03.2019 - FIRST TEST SLOT (INCLUDING BACKLOG STUDENTS)-TENTATIVE
	11	12	13	14	15	16	17	21.03.19 - DOLJATRA/22.03.19-HOLI
	18	19	20	21	22	23	24	26.03.19-30.03.19 - SECOND ASSIGNMENT/26.03.19-31.03.19-FIRST TEST SLOT FOR SPOKEN TUTORIAL(UNDER MOOCs)
	25	26	27	28	29	30	31	31.03.19 - NPTEL FIRST EXAMINATION (UNDER MOOCs)
APRIL	1	2	3	4	5	6	7	02.04.19 -06.04.19-SECOND TEST SLOT(INCLUDING BACKLOG STUDENTS)-TENTATIVE
	8	9	10	11	12	13	14	14.04.19: Dr. AMBEDKAR'S BIRTH DAY/15.04.19:BENGALI NEW YEAR
	15	16	17	18	19	20	21	17.04.19- MAHAVIR JAYANTI/ 19.04.19 - GOOD FRIDAY/21.04.19-SAB-E-BARAT
	22	23	24	25	26	27	28	27.04.19 & 28.04.19 - NPTEL SECOND & THIRD EXAMINATION (UNDER MOOCs)
	29	30						
MAY			1	2	3	4	5	01.05.19 : MAY DAY/02.05.19-08.05.19-SECOND TEST SLOT FOR SPOKEN TUTORIAL(UNDER MOOCs)
	6	7	8	9	10	11	12	02.05.18-08.05.18-THIRD TEST SLOT(INCLUDING BACKLOG STUDENTS)-TENTATIVE
	13	14	15	16	17	18	19	09.05.19 - RABINDRA JAYANTI/18.05.19 : BUDDHA PURNIMA
	20	21	22	23	24	25	26	10.05.19-17.05.19 UNIVERSITY PRACTICAL EXAMINATION & VIVA-VOCE (TENTATIVE)
	27	28	29	30	31			22.05.19-08.06.19 - UNIVERSITY THEORY EXAMINATION (TENTATIVE)
JUNE						1	2	
	3	4	5	6	7	8	9	
	10	11	12	13	14	15	16	05.06.19 - ID-UL-FITR
	17	18	19	20	21	22	23	
	24	25	26	27	28	29	30	11.06.19-29.06.19 - INTER-SEMESTER BREAK (TENTATIVE)

COLLEGE WILL RE-OPEN ON 10TH JANUARY 2019 AFTER WINTER RECESS

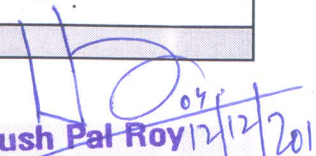| LEGEND		
		GENERAL HOLIDAYS
		WEEKLY HOLIDAYS

* College hours: 10 a.m. to 5:30 p.m./ LABS WILL BE OPENED FROM 9:50 a.m.
** All sessionals are to be submitted by the students in time and to report to the concerned HOD/***Absence from the scheduled classes/tests is punishable
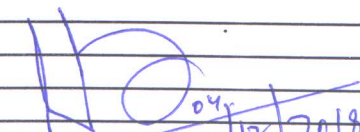****Any other Holiday that will intimated by the appropriate Authourity to be notified later on.
DATES OF CLASS TESTS/UNIVERSITY PRACTICAL & THEORY EXAMINATION WILL CHANGE AS PER MAKAUT ACADEMIC CALENDAR OF 2019

Pijush Pal Roy 12/12/2018
DIRECTOR
Dr. B. C. Roy Engineering College
DURGAPUR

DR. B.C.ROY ENGINEERING COLLEGE, DURGAPUR
ACTIVITY CALENDAR - PART OF MAR REQUIREMENT OF MAKAUT
EVEN SEMESTER [JANUARY 2019 TO JUNE 2019]

MONTH	MON	TUE	WED	THU	FRI	SAT	SUN	REMARKS
JAN		1	2	3	4	5	6	
	7	8	9	10	11	12	13	19-01-19-VOLUNTARY ORGAN DONATION WORKSHOP AND HEALTH CAMP
	14	15	16	17	18	19	20	25-01-19- BLOOD DONATION CAMP
	21	22	23	24	25	26	27	29-01-19 - WORKSHOP ON PHOTOGRAPHY (4:30 PM)
	28	29	30	31				30-01-19 TO 01-02-19- CRICKET AND OTHER TOURNAMENTS
FEB					1	2	3	02-02-19 - ANNUAL SPORTS DAY
	4	5	6	7	8	9	10	04-02-19 TO 05-02-19- TECH FEST; 06-02-19-CULTURAL FUNCTION
	11	12	13	14	15	16	17	09-02-2019 - PHOTOGRAPHY COMPETITION
	18	19	20	21	22	23	24	10-02-19 TO 12-02-19 -CRICKET AND OTHER TOURNAMENTS
	25	26	27	28				
MAR					1	2	3	
	4	5	6	7	8	9	10	
	11	12	13	14	15	16	17	16-03-19-GROUP DISCUSSION /DEBATE(FOR FINAL YEAR STUDENTS) BY DEPARTMENT
	18	19	20	21	22	23	24	30-03-19-ENTREPRENEURSHIP PROGRAMME
	25	26	27	28	29	30	31	23-03-19 - GROUP DISCUSSION /DEBATE(FOR THIRD YEAR STUDENTS) BY DEPARTMENT
APR	1	2	3	4	5	6	7	
	8	9	10	11	12	13	14	
	15	16	17	18	19	20	21	
	22	23	24	25	26	27	28	
	29	30						
MAY			1	2	3	4	5	
	6	7	8	9	10	11	12	
	13	14	15	16	17	18	19	
	20	21	22	23	24	25	26	
	27	28	29	30	31			
JUNE						1	2	
	3	4	5	6	7	8	9	
	10	11	12	13	14	15	16	
	17	18	19	20	21	22	23	
	24	25	26	27	28	29	30	

Pijush Pal Roy 2/12/2018
DIRECTOR
Dr. B. C. Roy Engineering College
DURGAPUR

CONGRATULATIONS

NPTEL

SWAYAM-NPTEL *recognizes*

DR. B. C. ROY ENGINEERING COLLEGE

DURGAPUR, WEST BENGAL

as a valuable Local Chapter with a rating of

AAA

based on perfomance in NPTEL Online Certification courses

Jul - Oct 2018

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

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

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CONGRATULATIONS

SWAYAM-NPTEL *recognizes*

TRIBENI PRASAD BANERJEE

of

DR. B. C. ROY ENGINEERING COLLEGE
DURGAPUR, WEST BENGAL

For **"Best Certified Count improvement"** among the top 100 rated Local Chapter

based on perfomance in NPTEL Online Certification courses

Jul - Dec 2018

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

DR. B.C.ROY ENGINEERING COLLEGE, DURGAPUR

BCR/PR/ /2018
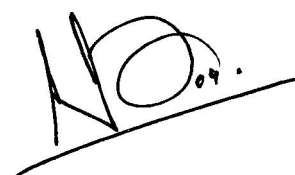
June 08, 2018

N O T I C E

This is for information of all concerned that Dr. B. C. Roy Engineering College, Durgapur, will be applying for NAAC accreditation at the earliest. Formation of **Internal Quality Assurance Cell (IQAC)** is a requirement to enhance the quality of higher education as per the guidelines of NAAC. Since quality enhancement is a continuous process, the IQAC will become a part of the system and procedure of the college henceforth. **The prime task of the IQAC will be development of a system for conscious, consistent and catalytic improvement in the overall performance of the college.**

The following committee is being constituted as per structure of NAAC and the committee will monitor and coordinate the activities of Internal Quality Assurance Cell (IQAC).

1. **Chairperson: Head of the Institution** - Prof.(Dr.) Pijush Pal Roy, Director
2. **A few senior administrative officers** – Ms. Ruma Mitra, Registrar, Mr. Aloke Kahali, Head (Admn), Mr. Rajesh Chatterjee, Manager (Administration), Mr. Ravi Sharma, Manager (Finance)
3. **Three to eight teachers** - Prof. (Dr). D. P. Mukherjee, IT, Prof. (Dr.) Chandan Chattoraj, ME, Prof. (Dr.) N. N. Pathak, ECE, Prof. (Dr.) Chandan Koner, CSE, Prof. (Dr.) Rajib Roy, MBA, Prof. (Dr.) Jayanta Pal, BSH, Prof. Anirban Bose, AEIE, Prof. Pabitra Kumar Dey, MCA, Prof. Arijit Kumar Banerjee, CE
4. **One member from the Management** – Mr. Tarun Bhattacharya
5. **One/two nominees from local society, Students and Alumni** – Prof. Mou Das Mahapatra, Asstt. Professor, EE, BCREC and Mr. Abhijit Shyam, Entrepreneur, President, Alumni Association, BCREC
6. **One/two nominees from Employers /Industrialists/stakeholders** – Mr. Sanjay Jha, HR Manager, Neo Metaliks and Mr. Sujit Kumar Pal, Personnel Manager, GE India Power
7. **One of the senior teachers as the coordinator/Director of the IQAC** - Prof. Sanjay Sengupta, CE

Some of the functions of the IQAC will be:

- 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
- 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 institution
- Preparation of the Annual Quality Assurance Report (AQAR) as per guidelines and parameters of NAAC to be submitted to NAAC post-accreditation.

It is expected that formation of IQAC will facilitate/contribute to the enhancement and coordination among various activities of the institution and institutionalize all good practices. Moreover, it will build an organized methodology of documentation and internal communication to improve institutional functioning.

Prof. (Dr.) Pijush Pal Roy
Director
Dr. B.C. Roy Engineering College, Durgapur

Copy to: General Secretary...for kind information
            All HODs/Incharges
            Registrar
            Head-Administration
            Proctor
            Manager (Finance)
            Manager (Admn.

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)
2018	ME18S23008031	Vikram Kumar		
2018	12000714024			Anurag Singh
2018	21341296			Aritra Ghara
2018	ME18S14046122	Aditya Bhattacharjee		
2018	CS18S34047056	Sourav Karmakar		
2018	CS18S36069067	Arkaprabha Kar		
2018	CE18S86066121	Harsha Himanshu		
2018	CE18S74020376	Ashish Kumar Punj		
2018	CE18S74024024	Shashank Nayan		
2018	CE18S74046077	Ankit Gupta		
2018	CE18S74046146	Ankit Kumar		
2018	CE18S84041051	Suman Banerjee		
2018	CE18S84046010	Subham Dutta		
2018	CE18S84046086	Anurag Saha		
2018	CE18S86066081	Rakesh Kumar Singh		
2018	CS18S34028281	Mehwish Naushin		
2018	CS18S34029568	Manish Kumar		
2018	CS18S34045179	Qamar Alam Ansari		
2019	12000715019			Tridib Gorai
2019	8036495			Arindam Ghosh
2019	EE19S64039260	Sayantan Bhattacharya		
2019	EE19S64033129	Shibam Sarkar		
2019	EE19S64018297	Md. Saidullah		
2019	EE19S64033326	Vikas Kumar		
2019	EE19S64033265	Abhijit Ghosh		
2019	EC19S53041081	Vinit Kumar		
2019	EC19S54032100	Goutam Gope		
2019	EC19S54033282	Rahul Kumar		
2019	EC19S54032053	Rina Regar		
2019	EC19S54032035	Romharshan Saket		
2019	EC19S56056646	Neha Bharti		
2019	CS19S34032067	Nitesh Kumar Upadhyay		
2019	CS19S34032436	Sagar Kumar		
2019	CE19S73011097	Susmit Singh		
2019	CE19S74033062	Debabrata Thakur		
2019	CE19S74033303	Kunal Kumar Nandan		
2019	CE19S76058100	Trishit Chandra		
2019	CE19S86060083	Gautam Kumar		

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

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

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हीरक जयंती २०१८
Diamond Jubilee 2018
एक साथ प्रगति की ओर
Achieving Excellence Together

CERTIFICATE OF SPOKEN TUTORIAL(ST) TRAINING

To,
The Principal
Dr. B. C. Roy Engineering College
Durgapur, West Bengal

Subject - 2018-19 status of Training done in collaboration with IIT Bombay –ST (Spoken Tutorial)

As per agreement between **Dr. B. C. Roy Engineering College** and Spoken Tutorial IT/Software Training Program by IIT Bombay initiated by National Mission on Education through ICT, MHRD, Govt. of India to promote IT literacy through Open Source Software.

The students **Dr. B. C. Roy Engineering College** have enrolled in various FOSS (Free and Open Source Software) developed and certified by IIT-Bombay during academic session 2018-19.

Details of students enrolled in various FOSS under Spoken Tutorial IT/Software Training Program during academic session 2018-19.

Sr. No.	Department / Batch	FOSS	Participants
1	Civil Engineering (B.Tech), 2017 Batch	QCAD	67
2	Electronics and Communication Engineering (B.Tech), 2016 Batch	java	108
3	Electronics and Communication Engineering (B.Tech), 2018 Batch	C and Cpp	121
4	Electronics and Communication Engineering (B.Tech), 2017 Batch	Python	3
5	Electrical Engineering (B.Tech), 2016 Batch	Silab	128
6	Electrical Engineering (B.Tech), 2017 Batch	Silab	116
7	Electronics and Communication Engineering (B.Tech), 2017 Batch	C and Cpp	133
8	Information Technology, 2016 Batch	Linux	60
9	Information Technology, 2017 Batch	C and Cpp	56
10	Information Technology, 2015 Batch	C and Cpp	58
11	Electronics and Communication Engineering (B.Tech), 2015Batch	Python	130

12	Electrical Engineering (B.Tech), 2015 Batch	Python	142
13	Electronics and Communication Engineering (B.Tech), 2015 Batch	Python	132
14	Electronics and Communication Engineering (B.Tech), 2016 Batch	Python	108
15	Electrical Engineering (B.Tech), 2017 Batch	python	111
16	Electrical Engineering (B.Tech), 2016 Batch	python	108
17	Electronics and Communication Engineering (B.Tech), 2016 Batch	python	130
18	Civil Engineering (B.Tech), 2017Batch	Advance C	67

Your Sincerely,
For On behalf of
Spoken Tutorials,
Indian Institute of Technology Bombay

Shyama Iyer

Shyama Iyer
National Coordinator
Spoken Tutorial Project, IIT Bombay