



## YEARLY STATUS REPORT - 2020-2021

<b>Part A</b>	
<b>Data of the Institution</b>	
<b>1.Name of the Institution</b>	<b>DR. B. C. ROY ENGINEERING COLLEGE , DURGAPUR</b>
• Name of the Head of the institution	<b>Dr. Sanjay S Pawar</b>
• Designation	<b>Principal</b>
• Does the institution function from its own campus?	<b>Yes</b>
• Phone no./Alternate phone no.	<b>03432501353</b>
• Mobile no	<b>8967674754</b>
• Registered e-mail	<b>info@bcrec.ac.in</b>
• Alternate e-mail	<b>rajesh@bcrec.ac.in</b>
• Address	<b>Jemua Road, Fuljhore</b>
• City/Town	<b>DURGAPUR</b>
• State/UT	<b>West Bengal</b>
• Pin Code	<b>713206</b>
<b>2.Institutional status</b>	
• Affiliated /Constituent	<b>Private and Self Financing</b>
• Type of Institution	<b>Co-education</b>
• Location	<b>Rural</b>

• Financial Status	<b>Self-financing</b>				
• Name of the Affiliating University	<b>Maulana Abul Kalam Azad University of Technology</b>				
• Name of the IQAC Coordinator	<b>Dr. Sanjay Sengupta</b>				
• Phone No.	<b>03432504106</b>				
• Alternate phone No.	<b>9064179712</b>				
• Mobile	<b>9836303034</b>				
• IQAC e-mail address	<b>sanjay.sengupta@bcrec.ac.in</b>				
• Alternate Email address	<b>info@bcrec.ac.in</b>				
<b>3.Website address (Web link of the AQAR (Previous Academic Year)</b>	<a href="https://bcrec.ac.in/NAAC_SSR.pdf">https://bcrec.ac.in/NAAC_SSR.pdf</a>				
<b>4.Whether Academic Calendar prepared during the year?</b>	<b>Yes</b>				
• if yes, whether it is uploaded in the Institutional website Web link:	<a href="https://bcrec.ac.in/AcademicCalendar20-21.pdf">https://bcrec.ac.in/AcademicCalendar20-21.pdf</a>				
<b>5.Accreditation Details</b>					
Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
<b>Cycle 1</b>	<b>B+</b>	<b>2.72</b>	<b>2021</b>	<b>13/09/2021</b>	<b>13/09/2026</b>
<b>6.Date of Establishment of IQAC</b>			<b>08/06/2018</b>		
<b>7.Provide the list of funds by Central / State Government UGC/CSIR/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.,</b>					
Institutional/Department /Faculty	Scheme	Funding Agency	Year of award with duration	Amount	
<b>Computer Science &amp; Engineering</b>	<b>AICTE Training and Learning (ATAL) Academy, (Online FDP)</b>	<b>AICTE Training And Learning (ATAL) Academy</b>	<b>2020, 5 DAYS</b>	<b>93,000</b>	

<b>8. Whether composition of IQAC as per latest NAAC guidelines</b>	<b>Yes</b>	
<ul style="list-style-type: none"> <li>• Upload latest notification of formation of IQAC</li> </ul>		
<b>9.No. of IQAC meetings held during the year</b>	<b>2</b>	
<ul style="list-style-type: none"> <li>• Were the minutes of IQAC meeting(s) and compliance to the decisions have been uploaded on the institutional website?</li> </ul>	<b>Yes</b>	
<ul style="list-style-type: none"> <li>• If No, please upload the minutes of the meeting(s) and Action Taken Report</li> </ul>	No File Uploaded	
<b>10. Whether IQAC received funding from any of the funding agency to support its activities during the year?</b>	<b>No</b>	
<ul style="list-style-type: none"> <li>• If yes, mention the amount</li> </ul>		
<b>11. Significant contributions made by IQAC during the current year (maximum five bullets)</b>		
<p>IQAC was instrumental for NAAC- SSR submission in October 2020. With a lot of effort, the DVV process could be completed in March 2021. Peer Team visited the campus in September 2021 and the Institute got accredited.</p>		
<p>IQAC took a lot of initiatives for getting NBA re-accreditation of two departments, ECE &amp; CSE in February 2020 and submission of SSR applications by three UG courses, ME, IT &amp; EE, and one PG course, MBA. The Expert Team will be visiting the campus in January 2022.</p>		
<p>IQAC also took initiative for submission of data to the NIRF Authorities in 2020-21 for getting a ranking for quality enhancement.</p>		
<p>Under the initiative of IQAC, the Institute submitted the AICTE-IDEA Lab project proposal which got the sanction and a fund of Rs 39.5 lakhs from AICTE. The IQAC team also helped the CSE department to conduct a FDP with a fund of Rs 0.93 lakhs under ATAL (AICTE Training &amp; Learning) program.</p>		

IQAC also advised to apply for the AICTE-LITE program(Leadership in Teaching Excellence) and the Institute got selected as AICTE Brand Ambassador of change.

**12. Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year**

NAAC

Plan of Action	Achievements/Outcomes
<p style="text-align: center;"><b>Focus on Teaching-Learning Process during pandemic</b></p>	<p style="text-align: center;">On-line Class records held during two semesters - Even and Odd during the academic year 2020- 2021 - 10329 virtual classes were held during the Even Semester and during the Odd Semester 11467 classes were held. Total 159 faculty members took the virtual classes with enthusiasm and the students' participation was quite encouraging. Day-by-day number of classes continuously increased.</p>
<p style="text-align: center;"><b>Enhancement of Soft Skill initiatives e.g. English Usage Tests (EUTs) Quantitative Aptitude Test (QAT) Reasoning Aptitude Test (RAT) &amp; Functional Domain Based Test for improvement of Placement</b></p>	<p style="text-align: center;">Total of 581 students (B.Tech + MBA+MCA) participated in the process. During the academic year 2020-21, 517 students have received job offers from campus recruitment for Engineering, MCA and MBA out of which 374 are single offers. Highest salary package for Engineering and MBA are 7 lakhs and 8.89 lakhs per annum with average package as 3.3 and 3.21 lakhs per annum respectively. The placement percentages based on eligible students and total students are 63.35% and 48% respectively for Engineering and 43.86% and 42.37% for MBA.</p>
<p style="text-align: center;"><b>Alumni Engagement through Webinars</b></p>	<p style="text-align: center;">During the pandemic, virtual webinars were organized by several engineering as well as management department and on several occasion, the distinguished Alumni were invited as Speakers to share their expertise and hands-on-experience to the present students.</p>

<p>Quality Enhancement Initiatives for accreditation of more departments and the National ranking for the Institute</p>	<p>Under the initiative of IQAC, NAAC- SSR was submitted in October 2020 and the DVV process was completed in March, 2021. Peer Team visited the campus in September, 2021 and the Institute got accredited. Under the initiative of IQAC, ECE &amp; CSE departments were re-accredited in February, 2020 and three UG courses, ME, IT &amp; EE and one PG course, MBA submitted SSR applications by 2020-21. IQAC also took initiative for submission of data to the NIRF Authorities for getting a ranking for quality enhancement.</p>
<p>Organizing FDPs, Technical Webinars, etc. by various departments</p>	<p>Series of webinars on technical, social and environmental issues, business aspects, etc. were organized by different departments and experts from the Industry, academics, social sector shared their experiences to the students as well as the faculty members to enrich their knowledge. Prominent FDPs were conducted like "Foundations and Practical aspects of Cyber Security" under ATAL Academy, "Moodle and ICT based learning management system (LMS) in collaboration with IIT, Bombay, "Mentoring Pedagogy and Teaching for Higher Education" in collaboration with IIT, Guwahati.</p>
<p>Discussion on National Education Policy (NEP) 2020 for implementation</p>	<p>Webinar on "Implementation of National Education Policy (NEP) 2020 as proposed by AICTE was conducted. The renowned speaker Dr. Vivek M Nanoti delivered wonderful guidelines on NEP.</p>

<b>13. Whether the AQAR was placed before statutory body?</b>	<b>Yes</b>
<ul style="list-style-type: none"> <li>Name of the statutory body</li> </ul>	
Name	Date of meeting(s)
<b>Board of Governors</b>	<b>18/12/2021</b>
<b>14. Whether institutional data submitted to AISHE</b>	
Year	Date of Submission
<b>2019</b>	<b>02/09/2020</b>

<b>Extended Profile</b>	
<b>1.Programme</b>	
1.1 Number of courses offered by the institution across all programs during the year	<b>986</b>
File Description Data Template	Documents <a href="#">View File</a>
<b>2.Student</b>	
2.1 Number of students during the year	<b>2767</b>
File Description Institutional Data in Prescribed Format Institutional Data in Prescribed Format	Documents <a href="#">View File</a> <a href="#">View File</a>
2.2 Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year	<b>327</b>
File Description Data Template	Documents <a href="#">View File</a>
2.3 Number of outgoing/ final year students during the year	<b>792</b>
File Description Data Template	Documents <a href="#">View File</a>
<b>3.Academic</b>	
3.1 Number of full time teachers during the year	<b>187</b>
File Description Data Template	Documents <a href="#">View File</a>
3.2 Number of sanctioned posts during the year	<b>186</b>
File Description Data Template	Documents <a href="#">View File</a>
<b>4.Institution</b>	
4.1 Total number of Classrooms and Seminar halls	<b>55</b>
4.2 Total expenditure excluding salary during the year (INR in lakhs)	<b>617.97</b>
4.3 Total number of computers on campus for academic purposes	<b>1233</b>

**Part B****CURRICULAR ASPECTS**



## 1.1 - Curricular Planning and Implementation

1.1.1 - The Institution ensures effective curriculum delivery through a well planned and documented process

Institute follows CBCS syllabus prescribed by the affiliating university, and ensures effective curriculum delivery. Department Academic Councils (DACs) of each department discuss the updated syllabus and identify curriculum gaps and propose ways to bridge/ address the gaps. Class representatives as part of the DACs also give their suggestions which are placed before the Academic Council for finalisation.

Effective course delivery is ensured using various instructional methods and pedagogical initiatives such as lectures, tutorials, laboratory experimental work, Project Work, Continuous Assessments both for theory and practical subjects as per University guidelines.

Institute has framed programme objectives, programme learning outcomes, course objectives and course learning outcomes for all UG and PG programmes.

Subjects are allocated to the faculty by the HoDs following which the faculty prepares lecture/ lesson plan and allocates number of lectures on the particular topics, based on the profile of students of the class and their past performance. Course coverage is periodically assessed and any related issues/discrepancies /modifications are discussed in the DAC meeting for effective curriculum delivery.

Institute is a recognized local chapter of NPTEL. Students and faculty are encouraged to get certified in relevant NPTEL courses. Student Chapters and Entrepreneurship Cell activities inculcate self-learning in the students.

File Description	Documents
Upload relevant supporting document	<a href="#">View File</a>
Link for Additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_1/1_1/1_1_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_1/1_1_1_1/ADDITIONAL_INFORMATION</a>

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

- A College academic calendar is prepared semester-wise following the calendar of university, after discussion with all stake holders. Along with Academic Calendar, the Activity Calendar is also prepared for extra-curricular and co-curricular activities of the students as part of Mandatory Additional Requirements (MAR) of the University.
- The academic calendar contains the following categories of activities:
  - Commencement of class
  - Orientation and Mandatory Induction programme
  - Extra-curricular events like NSS activities, NCCactivities, Blood Donation and Organ Donation Camps
  - Co-curricular events like Student Chapter activities
  - Mandatory Additional Activities as per requirement of the University
  - MOOCs activities (NPTEL courses, IIT-Bombay Spoken Tutorial Project, etc.)
  - Mentoring activities like individual interaction between Faculty Mentors and Student
  - Specific dates for conduction of Continuous Evaluations - CA1, CA 2, CA 3 and CA4 for theory subjects and PCA 1 & PCA 2 for Practical papers, as prescribed by the University
  - End-semester examinations (Practical & Theory) for University assessments
  - Commemorative events, Holidays and Semester-break
  - For continuous internal evaluation (CIE) process the institute adheres to the academic calendar prepared by it based on the academic calendar of the affiliating University.

File Description	Documents
Upload relevant supporting document	<a href="#">View File</a>
Link for Additional information	Nil

**1.1.3 - Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year.**

**Academic council/BoS of Affiliating University**

**D. Any 1 of the above**

**Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University**

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

## 1.2 - Academic Flexibility

### 1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

#### 1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented

13

File Description	Documents
Any additional information	<a href="#">View File</a>
Minutes of relevant Academic Council/ BOS meetings	<a href="#">View File</a>
Institutional data in prescribed format (Data Template)	<a href="#">View File</a>

### 1.2.2 - Number of Add on /Certificate programs offered during the year

#### 1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

1

File Description	Documents
Any additional information	<a href="#">View File</a>
Brochure or any other document relating to Add on /Certificate programs	<a href="#">View File</a>
List of Add on /Certificate programs (Data Template )	<a href="#">View File</a>

### 1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

121

File Description	Documents
Any additional information	<a href="#">View File</a>
Details of the students enrolled in Subjects related to certificate/Add-on programs	<a href="#">View File</a>

### 1.3 - Curriculum Enrichment

1.3.1 - Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum

To incorporate and amalgamate the crosscutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum, Institute has introduced courses like Values and Ethics in Profession, Human Resource Management and Environmental Science etc. in its UG programme.

College has gender sensitization committee which is organizing seminars, workshops, group discussions to sensitize the gender issues. Class representatives are equal with both boys and girls. Around 24% of the students are female and the faculty is well balanced. Without gender discrimination female students are represented in NCC, E- Cell etc.

Environment and Sustainability are one of the ardent issues, addressed by the Institute. Regular awareness programs are conducted including the popular ones being 'Tree Plantation' and 'Clean India-Swachh Bharat Campaign'. Environmental Science is taught in different UG programmes as a compulsory subject in the second year.

Values and Ethics in Profession is included in the curriculum of UG and is taught in the second year. Some more subjects like Human Resource Management is also there compulsorily in the curriculum for UG second year students. University has also included a new paper- The Constitution of India in the UG curriculum for third year students.

File Description	Documents
Any additional information	<a href="#">View File</a>
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	<a href="#">View File</a>

### 1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

30

File Description	Documents
Any additional information	<a href="#">View File</a>
Programme / Curriculum/ Syllabus of the courses	<a href="#">View File</a>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	No File Uploaded
MoU's with relevant organizations for these courses, if any	<a href="#">View File</a>
Institutional Data in Prescribed Format	<a href="#">View File</a>

### 1.3.3 - Number of students undertaking project work/field work/ internships

735

File Description	Documents
Any additional information	<a href="#">View File</a>
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	<a href="#">View File</a>

## 1.4 - Feedback System

1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders Students

A. All of the above

**Teachers Employers Alumni**

File Description	Documents
URL for stakeholder feedback report	<a href="https://bcrec.ac.in/feedback.html">https://bcrec.ac.in/feedback.html</a>
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

**1.4.2 - Feedback process of the Institution may be classified as follows**

A. Feedback collected, analyzed and action taken and feedback available on website

File Description	Documents
Upload any additional information	<a href="#">View File</a>
URL for feedback report	<a href="https://srv15-bcrec.in/feedback-report/">https://srv15-bcrec.in/feedback-report/</a>

**TEACHING-LEARNING AND EVALUATION****2.1 - Student Enrollment and Profile****2.1.1 - Enrolment Number Number of students admitted during the year**

694

**2.1.1.1 - Number of students admitted during the year**

694

File Description	Documents
Any additional information	<a href="#">View File</a>
Institutional data in prescribed format	<a href="#">View File</a>

**2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)****2.1.2.1 - Number of actual students admitted from the reserved categories during the year**

183

File Description	Documents
Any additional information	<a href="#">View File</a>
Number of seats filled against seats reserved (Data Template)	<a href="#">View File</a>

## 2.2 - Catering to Student Diversity

2.2.1 - The institution assesses the learning levels of the students and organizes special Programmes for advanced learners and slow learners

- Institute admits diversified students from different social and economic backgrounds and the ability and extent of learning of the students is highly influenced by their personal abilities and other attributes. Institute has developed a structured mechanism for assessing the learning levels of the students.
- The first interaction occurs during the mandatory AICTE Induction Programme, with professors assessing, identifying, and differentiating the students. Mentees' learning ability is identified by the Mentors based on their academic performance, behaviour, social and psychological aspects during the individual interaction session. The first Continuous Evaluation (CA 1) process helps the faculty identify Slow and Advanced Learners.
- With regard to the program for Slow Learners, each mentor is assigned with a group of students per year to provide one-to-one counseling for overall improvement. Extra and Remedial classes are conducted for the slow learners including efforts to improve the basic skills in Mathematics and English.
- Advanced learners are motivated to attend webinars, seminars, expert lectures and are encouraged to be members of various professional bodies like IEEE, CSI, E-Cell, publish papers, involve in innovative project and research work, enroll and get certified in MOOC courses and competitive examinations like GATE, GRE, CAT, etc.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_2/2_2/2_2_1/Additional_Documents.pdf">https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_2/2_2/2_2_1/Additional_Documents.pdf</a>
Upload any additional information	<a href="#">View File</a>

### 2.2.2 - Student- Full time teacher ratio (Data for the latest completed academic year)

Number of Students	Number of Teachers
2767	187

File Description	Documents
Any additional information	<a href="#">View File</a>

## 2.3 - Teaching- Learning Process

2.3.1 - Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

The college has been focusing on innovative and creative ways of disseminating, sharing, and facilitating knowledge development in students, adopting student-centric methods which are central to Outcome-Based Education (OBE).

### Course Delivery Methods

- Group discussions
- Seminars/Mini projects
- Technical Reports/ Case studies,
- Simulations and experimental exercises
- Lab experimental work
- Class Assignments/Quizzes

### Individual learning



- E-learning tools like NPTEL videos, SWAYAM, Coursera, IIT Bombay - Spoken Tutorial Project, etc. to let students learn independently and enhance classroom learning.
- Encouraged to enroll and get certification for add-on online courses for self-paced learning.

#### Experiential learning

- Student-centric learning is provided in the practical sessions to apply concepts learned in the classroom.
- Internships/ Vocational training.
- Final Year group Projects, Technical Fest and Workshops.
- Short Visit to nearby industries/labs

#### Participative /collaborative learning

- Exhibiting at intra-college, state, and national project competitions and technical festivals for R&D projects
- Invited talks by experts and alumni from the industry and academia.
- MOUs are signed with leading industries to bridge the gaps in the curriculum.

Problem-based learning promotes students' critical thinking to find solutions in real-life situations.

Faculty also map the learning outcomes from the above initiatives.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_2/2_3/2_3_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_2/2_3/2_3_1/ADDITIONAL_INFORMATION</a>

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

The institute always aims to provide up-to-date ICT infrastructure for its students, professors, and technical personnel. The students' learning experiences are enhanced by the teachers' use of educational technologies and the effective usage of ICT-enabled tools.

- Institute has dedicated digital classrooms for all programs with the use of multimedia teaching aids like LCD projectors, internet-enabled computer/laptop systems, and the teacher's use the modern teaching aids.
- Institute has nine smart classrooms and ICT enabled with projectors & wifi.
- Internally created an online examination system accessible by students via LAN or the internet.
- Grooming/communication skills/Mock tests are conducted using ICT-enabled tools.
- The library subscribes to a large number of e-journals in Engineering, Science, Management and provides access to online and offline databases.
- Hard disk containing web and video courses (offline) from NPTEL are accessible to faculty and students from the server installed in the library / NPTEL local chapter office on the campus.
- The entire academic process is managed by the university's integrated academic management system. The institute has also implemented an ICT-based student admission and payment system for semester and hostel fees.
- Two seminar halls and two auditoriums are equipped with multimedia facilities.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	<a href="#">View File</a>

### 2.3.3 - Ratio of mentor to students for academic and other related issues (Data for the latest completed academic year )

#### 2.3.3.1 - Number of mentors

149

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	<a href="#">View File</a>
Circulars pertaining to assigning mentors to mentees	<a href="#">View File</a>
Mentor/mentee ratio	<a href="#">View File</a>

### 2.4 - Teacher Profile and Quality

#### 2.4.1 - Number of full time teachers against sanctioned posts during the year

187

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
List of the faculty members authenticated by the Head of HEI	<a href="#">View File</a>

#### 2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

##### 2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

66

File Description	Documents
Any additional information	<a href="#">View File</a>
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template)	<a href="#">View File</a>

### 2.4.3 - Number of years of teaching experience of full time teachers in the same institution (Data for the latest completed academic year)

#### 2.4.3.1 - Total experience of full-time teachers

1929

File Description	Documents
Any additional information	<a href="#">View File</a>
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	<a href="#">View File</a>

## 2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

- Institute prepares its own academic calendar well before the semester commences based on the University's Academic Calendar. These include completion of syllabus coverage and CAs for theory, PCAs for sessional and laboratory papers. Changes in schedules, patterns, and methods are communicated to students forthwith via online class briefings and Notifications. Syllabus for the test is communicated to students by class teachers well in advance.
- Internal assessment for theory and lab papers is done through Continuous Assessments (CA1, CA 2, CA 3, CA 4 & PCA 1, PCA 2). The institute has prepared standard formats for question papers depending upon the type of the subject based on Course Outcomes (COs) for Continuous Assessment (CA). Departmental question paper moderation committees evaluate the quality of

question papers and coverage of the entire COs in the CAs.

- Institute has implemented digital evaluation of semester-end examination papers, which has helped in speeding up the evaluation process and increasing transparency. Students can raise about any discrepancy found in the assessment. Adoption of the above method as per MAKAUT guidelines ensures complete transparency in the system of internal assessment, strengthens the bond between faculty and students. The Institute's examination system is thus completely transparent.

File Description	Documents
Any additional information	<a href="#">View File</a>
Link for additional information	<a href="https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_2/2_5/2_5_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_2/2_5/2_5_1/ADDITIONAL_INFORMATION</a>

2.5.2 - Mechanism to deal with internal examination related grievances is transparent, time- bound and efficient

- The Central Examination Cell is supervised by a faculty member chosen by the authorities. Institute carefully adheres to the affiliating University's norms at the time of conducting Internal Tests and Semester Exams,
- All CA and PCA marks for Theory, Practical and Sessional are uploaded into the University portal and students can access them by logging in their own login ids. After publication of the results, a student can apply for Post-Publication Scrutiny (PPS) and Post-Publication Review (PPR).
- Viva-voce and lab copy evaluations are explained in front of students to keep the process transparent and minimize grievances. Project Seminars are held in Google Meet/Seminar Halls in front of the entire class ensure complete transparency in internal assessment.

- The Examination Cell, in close collaboration with the University, deals with any student grievances regarding Admit Cards, Registration Cards, etc.
- Any exam malpractice is reported to the Examination Cell and dealt with as per University guidelines. The Invigilator can cancel a paper online, and the Examination Cell can mark it as "Reported Against (RA)". If the student cannot substantiate his case to the satisfaction of the Committee, he has to repeat the examination the next semester.

File Description	Documents
Any additional information	<a href="#">View File</a>
Link for additional information	<a href="https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_2/2_5/2_5_2/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_2/2_5/2_5_2/ADDITIONAL_INFORMATION</a>

## 2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

- Institute follows the outcome-based education following Bloom's Taxonomy guidelines of NBA.
- PSOs are identified after detailed deliberation with the stakeholders and are placed at prominent places including the labs and offices. The College is following the COs as specified by MAKAUT, in case the COs is not specified by the university, NBA guidelines are followed.
- The POs, PSOs, and COs are disseminated through Institute Website, Prospectus, Course file, Departments, Laboratories, etc. As a part of the Induction Programme, Institute apprise about POs, PSOs, and COs, and other academic details to the fresh batch of students of respective academic programs. Each Course Outcome is mapped to Program Outcomes in terms of relevance. Three levels of relevance are based on the degree

of correlation i.e. 1 for low, 2 for medium, and 3 for high correlation. The contribution of course to each PO is expressed in terms of the average relevance of COs mapped to that particular PO. Similarly, the value computed for all the courses including first-year courses is entered for the corresponding PO and PSOs. The agreed-upon COs form the basis for achieving POs and PSOs and thus contributing towards achieving the Mission and Vision of the Institute.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for Additional information	<a href="https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_2/2_6/2_6_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_2/2_6/2_6_1/ADDITIONAL_INFORMATION</a>
Upload COs for all Programmes (exemplars from Glossary)	<a href="#">View File</a>

2.6.2 - Attainment of Programme outcomes and course outcomes are evaluated by the institution.

- The efficiency and effectiveness of the process of attainment of POs and COs is monitored, assessed, and improved by taking inputs from the discussion/suggestion/decision taken in the meetings of the Department Academic Council, Academic Council, and IQAC Cell.
- The following method is used to assess course outcomes. Course attainment levels are defined based on prior performance and are expressed as a proportion of students achieving a target score.

Theory subjects:

1. Internal Evaluation (weightage 30%)

- Continuous internal assessment

1. External Evaluation (weightage 70%)

- University theory examination

Practical Subjects:

1. Internal Evaluation (weightage 40%)

- Lab performance
- Practical continuous assessment

1. External Evaluation (weightage 60%)

- University practical examination
- Each CO has a target level and is achieved if the attainment is equal to or exceeds the target. Once the total attainment of CO is calculated, it is used for measuring the level of attainment of POs and PSOs.
- Direct Attainment (80% weightage) and Indirect attainment (20% weightage).
- Direct attainment is calculated from CO attainment based on four Continuous Assessments and Semester Examination and Indirect attainment is calculated based on 25% Program Exit Survey + 50% Alumni survey + 25% Employer Survey.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for Additional information	Nil



### 2.6.3 - Pass percentage of Students during the year

#### 2.6.3.1 - Total number of final year students who passed the university examination during the year

792

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Paste link for the annual report	<a href="https://srv15-bcrec.in/vc/IOAC/BCREC_IOAC_REPORT.pdf">https://srv15-bcrec.in/vc/IOAC/BCREC_IOAC_RE PORT.pdf</a>

### 2.7 - Student Satisfaction Survey

#### 2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a weblink)

<https://srv15-bcrec.in/sss-feedback-as-per-naac/>

### RESEARCH, INNOVATIONS AND EXTENSION

#### 3.1 - Resource Mobilization for Research

##### 3.1.1 - Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

##### 3.1.1.1 - Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

0.93

File Description	Documents
Any additional information	<a href="#">View File</a>
e-copies of the grant award letters for sponsored research projects /endowments	<a href="#">View File</a>
List of endowments / projects with details of grants(Data Template)	<a href="#">View File</a>

**3.1.2 - Number of teachers recognized as research guides (latest completed academic year)****3.1.2.1 - Number of teachers recognized as research guides**

13

File Description	Documents
Any additional information	<a href="#">View File</a>
Institutional data in prescribed format	<a href="#">View File</a>

**3.1.3 - Number of departments having Research projects funded by government and non government agencies during the year****3.1.3.1 - Number of departments having Research projects funded by government and non-government agencies during the year**

01

File Description	Documents
List of research projects and funding details (Data Template)	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Supporting document from Funding Agency	<a href="#">View File</a>
Paste link to funding agency website	<a href="https://www.aicte-india.org/atal">https://www.aicte-india.org/atal</a>

**3.2 - Innovation Ecosystem**

3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

R&D cell motivates the faculty members to submission of research proposals to various funding agencies like DRDO, DST, AICTE, DBT, etc. 5 proposals have been submitted to AICTE under MODROB, one FDP and three RPS proposals are in a different stage of consideration in AICTE. One project has been sanctioned by PRISM-DSIR.

AICTE selected the institute for setting up the prestigious AICTE-IDEA Lab and sanctioned the fund of Rs 39 lakhs.

5-day Faculty Development Program under the banner of AICTE-ATAL was organized with a grant of Rs 93000/-.

Institute has also been selected for the AICTE-LITE program.

Institute has published its Vol:2 Issue:1 online journal, "BCREC Engineering Science Transaction (BEST)".

Collaboration with Wadhvani Foundation under National Entrepreneur Network (NEN) has created opportunities and 28 students have started their own setup.

"Texas Instruments Innovation Lab" with the collaboration of Texas Instruments and "Advance VLSI Design and Reconfigurable Computing Lab" with the collaboration of CoreEL were established for carrying out research activities.

MOU with Cambridge Marketing College (CMC) helped the students to apply the learning in a practical scenario.

For the creation and transfer of knowledge among the students and faculty members, financial support is provided for organizing STTPs, National/International Conference/Symposiums, etc.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_3/3_2/3_2_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_3/3_2/3_2_1/ADDITIONAL_INFORMATION</a>

### 3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

#### 3.2.2.1 - Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during the year

58

File Description	Documents
Report of the event	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
List of workshops/seminars during last 5 years (Data Template)	<a href="#">View File</a>

### 3.3 - Research Publications and Awards

**3.3.1 - Number of Ph.Ds registered per eligible teacher during the year****3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year**

3

File Description	Documents
URL to the research page on HEI website	<a href="https://bcrec.ac.in/BCREC_R&amp;D.html">https://bcrec.ac.in/BCREC_R&amp;D.html</a>
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc (Data Template)	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

**3.3.2 - Number of research papers per teachers in the Journals notified on UGC website during the year****3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year**

43

File Description	Documents
Any additional information	<a href="#">View File</a>
List of research papers by title, author, department, name and year of publication (Data Template)	<a href="#">View File</a>

**3.3.3 - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year****3.3.3.1 - Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during year**

33

File Description	Documents
Any additional information	<a href="#">View File</a>
List books and chapters edited volumes/ books published (Data Template)	<a href="#">View File</a>

**3.4 - Extension Activities**

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

Multifarious activities in the Institute involving the students with the objective of sensitizing various social issues and strengthening community participation for holistic development are carried out inside the campus under the banner of NSS.

Women's Day is celebrated as part of Gender Sensitization programs. A webinar "Women: A nation's pillars of strength" was conducted to aware the students. "International Yoga Day" was celebrated too for making the students mentally and physically fit.

Following activities are undertaken to engage faculty, students, and staff in the neighborhood community, viz. Swacchha Bharat initiatives, NO to Plastic campaign, Tree plantation, Health campus, Thalassemia awareness campus, Blood donation, Organ donation campus.

In keeping with the Swasth Bharat initiatives all across the country, students reached out to villagers in Dashirbad, Durgapur as part of the Outreach Programme.

Due to the pandemic, online programs were conducted during this year to aware the students such as "National webinar on Vaccination Drive on Covid19 pros and cons", "Poster Competition on Eradication of Malnutrition".

The needs of the marginalized people especially women and children from the underprivileged sections of society get priority. Charity Drives were conducted where cash, clothes, food, and student materials were distributed through Missionaries of Charity.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_3/3_4/3_4_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_3/3_4/3_4_1/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

**3.4.2 - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year**

**3.4.2.1 - Total number of awards and recognition received for extension activities from Government/ Government recognized bodies year wise during the year**

03

File Description	Documents
Any additional information	<a href="#">View File</a>
Number of awards for extension activities in last 5 year (Data Template)	<a href="#">View File</a>
e-copy of the award letters	<a href="#">View File</a>

**3.4.3 - Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., ( including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs ) during the year**

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

06

File Description	Documents
Reports of the event organized	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	<a href="#">View File</a>

**3.4.4 - Number of students participating in extension activities at 3.4.3. above during year**

**3.4.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year**

1537

File Description	Documents
Report of the event	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	<a href="#">View File</a>

### 3.5 - Collaboration

#### 3.5.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship during the year

##### 3.5.1.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year wise during the year

85

File Description	Documents
e-copies of related Document	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Details of Collaborative activities with institutions/industries for research, Faculty	<a href="#">View File</a>

#### 3.5.2 - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year

##### 3.5.2.1 - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year

06

File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	<a href="#">View File</a>

## INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 - Physical Facilities

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

The Institute has following adequate physical infrastructure to accommodate all departments for conducting its effective teaching-learning process.

- Located on 10.11 acres of land
- 35686 sq. m. built-up area
- Well equipped spacious 55 classrooms (12 smart classrooms) and ICT enabled with projector facility
- Tutorial rooms as per AICTE requirement
- Dedicated Seminar halls
- Laboratories with experimental set-ups, computers & peripherals and Instructors to provide constant support and maintenance.
- Separate R&D labs to carry out research activities.
- Industry tie-up laboratories like Texas Instruments Innovation Lab in collaboration with Texas Instrument, USA, and VLSI lab in tie-up with Xilinx, USA to provide the students hands-on experience and wide exposure
- AICTE IDEA Lab imparting 21st century skills
- Language Lab with modern accessories
- Adequate Staff rooms, Toilets, etc.
- Wi-Fi enabled campus
- Two dedicated Central Computer Centres with 257 desktops
- Six computers in Digital Library, 144 computers in various departments and offices.
- 27 Computer labs with a total of 1082 computers having uninterrupted power supply backed by sufficient number of UPS
- Five generators with 246 KVA for back-up power supply.
- Two Auditoriums with state-of-the-art facilities to carry out extra-curricular activities.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_1/4_1_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_1/4_1_1/ADDITIONAL_INFORMATION</a>

4.1.2 - The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor), gymnasium, yoga centre etc.

Institute has created both infrastructural and instructional facilities to bring about all round development for the students including games & sports and extra-curricular activities.

- Large playing fields support a wide variety of games.



- A 200-metre athletic track and courts for Basketball, Volleyball, Handball, and Throw Ball with Day-Night facilities to conduct matches.
- The institute also has a large indoor gymnasium facility for both boys and girls.
- Karate sessions are held regularly within the college premises and students have represented the Institute at the national level in Karate.
- Yoga sessions are carried out regularly by a permanent Yoga teacher
- The Institute has appointed full-time qualified Sports Personnel (04) to train and guide students in various sports.
- Institute teams have been proving their excellence in various Inter and Intra-Institutional, University, National level competitions.
- Dedicated spaces for Indoor sport.
- Many entertaining events are arranged in two auditoriums as part of cultural activities to exhibit the talent of the students in music, dance, band, etc. with uniqueness and magnanimity.
- Photography club, Debate Club, Quiz Club, etc.
- Tech Fest is conducted by the Student Council to exhibit the technical acumen of the students.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_1/4_1_2/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_1/4_1_2/ADDITIONAL_INFORMATION</a>

#### 4.1.3 - Number of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc.

16

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_1/4_1_3/4_1_3_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_1/4_1_3/4_1_3_1/ADDITIONAL_INFORMATION</a>
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<a href="#">View File</a>

#### 4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year (INR in Lakhs)

##### 4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

57.51

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Upload audited utilization statements	<a href="#">View File</a>
Upload Details of budget allocation, excluding salary during the year (Data Template)	<a href="#">View File</a>

## 4.2 - Library as a Learning Resource

### 4.2.1 - Library is automated using Integrated Library Management System (ILMS)

- Central Library of the Institute occupies a very important place in the campus.
- Central Library supports study, teaching-learning process and research activities and provides a learning space for the students (UG & PG), staff and faculty members.
- Central Library is housed in a sprawling three storied building with a carpet area 1091.16 sq.m. and has a total collection of 7349 titles and 34,190 volumes of books including Departmental Libraries.

- Central Library has a total collection of over 88958 volumes of books.
- The Central Library is automated with Integrated Library Management Software, LIBSYS 4, and Version LSEASE (Rel. 6.1).
- Additionally, there are 54,768 volumes in the Book Bank.
- Library subscribes to about 60 Printed Journals and magazines.

The Central Library is also a member of DELNET and has access to publications of all major publishers like Elsevier, Springer, ASCE, IEEE etc., with access to around 1566 E-books, 179 journals of IEEE, 275 from Elsevier, 13 from SAGE and 617 from DELNET.

- Each department has a reasonably well stocked departmental library for reference to the students.
- The digital library has six computer terminals.
- The library also has books for competitive examinations.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for Additional Information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_2/4_2_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_2/4_2_1/ADDITIONAL_INFORMATION</a>

**4.2.2 - The institution has subscription for the following e-resources e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access toe-resources**      B. Any 3 of the above

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Details of subscriptions like e-journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	<a href="#">View File</a>

**4.2.3 - Expenditure for purchase of books/e-books and subscription to journals/e- journals during the year (INR in Lakhs)**

#### 4.2.3.1 - Annual expenditure of purchase of books/e-books and subscription to journals/e-journals during the year (INR in Lakhs)

8.32

File Description	Documents
Any additional information	<a href="#">View File</a>
Audited statements of accounts	<a href="#">View File</a>
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<a href="#">View File</a>

#### 4.2.4 - Number per day usage of library by teachers and students ( foot falls and login data for online access) (Data for the latest completed academic year)

##### 4.2.4.1 - Number of teachers and students using library per day over last one year

0

File Description	Documents
Any additional information	<a href="#">View File</a>
Details of library usage by teachers and students	<a href="#">View File</a>

### 4.3 - IT Infrastructure

#### 4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

- The institution has a policy for periodical upgradation of the IT facilities. New IT infrastructure are created taking intoconsideration the requirements of the entire college.
- The Institute has a 190 (100+50+40) MBPS high-speed internet connectivity through OFC/LAN/Wi-Fi, with access points/switches (including L2) strategically located across the campus. Wi-Fi is authentication driven with restrictions at different levels to ensure maximum security. Wi-fi facility in all hostels are for 24 hrs.
- The campus is governed by Microsoft Campus Licensing Agreement.

- A dedicated Computer Centre with more than 300 desktops is provided.
- Our ERP server on the cloud (www.bcrecdgp.ac.in) offers ERP services to the college from any end of the globe.
- In order to ensure safety and security of data, a licensed Sophos firewall with web and application filters are used.
- The IT infrastructure in the last year is tabulated below:

YEAR	2020-21
Number of Computers (in working Condition)	1233
Laptops	18
Servers	4
Wi-Fi / Access Points/ Switches	176
Open source software	20
Types of Licensed Software	68
Printers (in working condition)	67
No. of Scanners	17
No. of Online UPS	25
No. of CCTV Cameras	49

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_3/4_3_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_3/4_3_1/ADDITIONAL_INFORMATION</a>

#### 4.3.2 - Number of Computers

1233

File Description	Documents
Upload any additional information	<a href="#">View File</a>
List of Computers	<a href="#">View File</a>

#### 4.3.3 - Bandwidth of internet connection in the Institution A. ? 50MBPS

File Description	Documents
Upload any additional Information	<a href="#">View File</a>
Details of available bandwidth of internet connection in the Institution	<a href="#">View File</a>

#### 4.4 - Maintenance of Campus Infrastructure

##### 4.4.1 - Expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the year (INR in Lakhs)

##### 4.4.1.1 - Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component during the year (INR in lakhs)

#### 50.2

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Audited statements of accounts	<a href="#">View File</a>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<a href="#">View File</a>

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

- Institute continuously strives to meet the growing needs of the academics making available adequate physical infrastructure and constantly upgrading facilities in order to provide a good teaching learning environment.
- Academic Council/IQAC convenes regular meetings to assess the infrastructural facilities and requirements. In order to ensure maintenance and optimum utilization, various systems and procedures are established so as to benefit all the stakeholders.
- Administrative officer of the Institute oversees the campus maintenance which includes buildings, classrooms, laboratories, hostels, playground, lawns etc. Cleaning, Dusting, Sweeping and Mopping, Maintenance of Garden, Pest control, entire campus snag work etc. is undertaken daily by

the housekeeping staff. Institute has a workforce of Carpenters, Masons, Electricians and Plumbers for minor repair work.

- CCTV cameras have been placed at strategic places to help in maintaining discipline and a sense of security, in addition to Security Guards hired through an external private agency. The Institute has deployed Fire Alarm Systems too.
- Files relevant to Library and Library services are well maintained and labelled for easy access.
- Periodic servicing and calibration of equipment/instruments are carried out in all the laboratories.
- System Administrator is responsible for the maintenance of computers and IT facilities.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_4/4_2/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_4_4_2/ADDITIONAL_INFORMATION</a>

## STUDENT SUPPORT AND PROGRESSION

### 5.1 - Student Support

#### 5.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

##### 5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

70

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	<a href="#">View File</a>

### 5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

#### 5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

352

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	<a href="#">View File</a>

**5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills  
Language and communication skills Life skills  
(Yoga, physical fitness, health and hygiene)  
ICT/computing skills**

**B. 3 of the above**

File Description	Documents
Link to Institutional website	<a href="https://bcrec.ac.in/BCREC_TRAINING.html">https://bcrec.ac.in/BCREC_TRAINING.html</a>
Any additional information	<a href="#">View File</a>
Details of capability building and skills enhancement initiatives (Data Template)	<a href="#">View File</a>



#### 5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

File Description	Documents
Any additional information	<a href="#">View File</a>
Number of students benefitted by guidance for competitive examinations and career counseling during the year (Data Template)	<a href="#">View File</a>

#### 5.1.5 - The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

A. All of the above

File Description	Documents
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Details of student grievances including sexual harassment and ragging cases	No File Uploaded

### 5.2 - Student Progression

#### 5.2.1 - Number of placement of outgoing students during the year

##### 5.2.1.1 - Number of outgoing students placed during the year

380

File Description	Documents
Self-attested list of students placed	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Details of student placement during the year (Data Template)	<a href="#">View File</a>

## 5.2.2 - Number of students progressing to higher education during the year

### 5.2.2.1 - Number of outgoing student progression to higher education

14

File Description	Documents
Upload supporting data for student/alumni	<a href="#">View File</a>
Any additional information	No File Uploaded
Details of student progression to higher education	<a href="#">View File</a>

## 5.2.3 - Number of students qualifying in state/national/ international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)

### 5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

13

File Description	Documents
Upload supporting data for the same	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	<a href="#">View File</a>

## 5.3 - Student Participation and Activities

### 5.3.1 - Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one)

during the year

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

0

File Description	Documents
e-copies of award letters and certificates	No File Uploaded
Any additional information	<a href="#">View File</a>
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national/international level (During the year) (Data Template)	No File Uploaded

5.3.2 - Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms )

- Students' Council of the institute comprises students from all years and it is a conglomeration of three different bodies - (1) Student Academic Council, (2) Student Social & Cultural Council and (3) Student Administrative Council.
- The Chairperson is Dean (Students' Welfare & Alumni) and three faculty advisors act as co-ordinators. The primary focus of the Council is to formulate strategies for the overall curricular, co-curricular and extra-curricular development of the students.
- The Student Academic Council gets feedback on the teaching-learning processes from the departments to improve quality.
- Administrative Council looks after the feedback on Hostels and Amenities, Anti-Ragging initiatives, Alumni Association, Grievance Redressal, NSS etc.
- Social and Cultural Council promotes and encourages the involvement of students in organizing various sports, social initiatives and community outreach programmes and recreational

activities ( like Annual Sports, Cultural Fest, Freshers' Welcome, Farewell, etc) of the college in coordination with faculty mentors.

- Alumni Association is in place to strengthen the relationship amongst alumni.
- In addition, as suggested by the NAAC peer team, steps are being initiated to make the Alumni Association more proactive for the benefit of the students.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/Website_Department/CE/Student_CE/Student_Council_CE.pdf">https://srv15-bcrec.in/vc/Website_Department/CE/Student_CE/Student_Council_CE.pdf</a>
Upload any additional information	<a href="#">View File</a>

### 5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

#### 5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year

2

File Description	Documents
Report of the event	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	<a href="#">View File</a>

## 5.4 - Alumni Engagement

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

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

- Alumni Association was formed in the Institute and it was registered in 2008.
- Since its inception, the Alumni association has provided enormous support to motivate present students to enhance the employability and shared their expertise regarding various educational opportunities available in country and abroad.
- Though informal contribution of Rs 3.48 lakhs has been received from Alumni till date, they have been contributing as Expert speakers, sharing experience with students.
- The Alumni f and also play a key role to bridge the gap between industrial requirements and academics through seminar/ webinar / workshops / industrial training organized by various departments
- Due to pandemic situation it was not possible to organise Alumni meet physically in 2020-21. However, AGM of alumni association was conducted virtually in 2021.
- Till date a large number of Alumni are serving the Institute as Faculty Members.
- Mr. Avijit Sham, President Alumni association, is helping the IQAC as active members for enhancement quality of our college.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_5/5_4/5_4_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_5/5_4/5_4_1/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

#### 5.4.2 - Alumni contribution during the year E. <1Lakhs (INR in Lakhs)

File Description	Documents
Upload any additional information	<a href="#">View File</a>

## GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the

institution

- BCREC is governed by Dr. B. C. Roy Engineering College Society.
- Members of the Board of the Governors of the College have been constituted as per the guidelines of AICTE, and meets once every three months.
- BoG members always encourage the efforts of the college team in maintaining quality standards as well as provide guidance wherever necessary.
- The College has an Academic Council with Principal as Chairman, Deans, HODs and Registrar, Head (Admn.), Campus Administrator as members taking care of all academic and administrative issues like budget, recruitment, purchases, admissions, promotions, conferences, variation in intake etc., are discussed and approved in the meeting and thereafter implemented. The meetings are held every two months.
- To ensure the quality and imbibe the culture of excellence, IQAC has developed the Strategic Plan aligning with vision and mission of the Institute. Faculty opinions and participation is given due weightage by their participation in various committees like Anti-ragging, IQAC, Research, Examination, Placement, Internal Complaint Committee (ICC) to ensure the value addition
- Student Council meetings are held every month to brief students on important decisions and consider their suggestions and look into their grievances, if any.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_1/6_1_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_1/6_1_1/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

6.1.2 - The effective leadership is visible in various institutional practices such as decentralization and

participative management.

The management has a participative management system with collective decision-making involving Principal, Deans, HODs, IC(Exam) and Registrar.

#### Case Study

The Institute has developed a well-defined decentralized system to follow the university guidelines for conducting the Internal Assessments as well as end-Semester Examinations.

In-charge of the Examination Cell under the advice of the Principal execute the process in close liaison with the Controller of Examinations of MAKAUT as well as disseminate the instructions to the HoDs and Departmental Exam Coordinators.

Semester-wise and Department-wise Students' Enrolments, Marks uploading of Internal Assessments (Theory and Practical) and end-Semester Practical, Examination Form fill-up (Regular and Backlog), Scrutiny and Review process are carried out by the Departmental Exam Coordinators under the advice of HoDs and IC, Exam of the Institute.

Internal Assessment marks and end-semester final lab marks are scrutinized by Departmental Marks Moderation Committee headed by the HoDs and being endorsed the marks are uploaded by individual subject teacher tagged by the university.

The requirement for setting question papers are informed to the Principal and the IC(Exam), by the University which is sent to the HoDs for distribution amongst the faculty members in confidential manner.

End-Semester Paper checking is carried out by individual tagged teachers.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_1/6_1_2/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_1/6_1_2/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

## 6.2 - Strategy Development and Deployment

## 6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

The Strategic plan of the institute is displayed in the website.

The College is working on Three Es - Equity in education and Excellence in academics which will together lead to optimum levels of Employability.

## Case study

Institute have set their priorities as being a prime aide in employment generation for their students. A few comprehensive strategic changes over the last two years have redefined the performance standards.

The Campus team comprising of senior and experienced professors monitor the training and placement activities since July, 2018 alongside the Training & Placement Team of Kolkata. The team had refurbished the complete training process making a few vital changes with three distinct components, Aptitude, Technical and Verbal & Soft Skills; as a result during the academic year 2020-21, 517 students have received job offers from campus recruitment for Engineering, MCA and MBA out of which 374 are single offers. Highest salary package for Engineering and MBA are 7 lakhs and 8.89 lakhs per annum with average package as 3.3 and 3.21 lakhs per annum respectively. The placement percentages based on eligible students and total students are 63.35% and 48% respectively for Engineering and 43.86% and 42.37% for MBA.

File Description	Documents
Strategic Plan and deployment documents on the website	<a href="#">View File</a>
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_2/6_2_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_2/6_2_1/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

6.2.2 - The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

- The Institute has an internal Organizational Structure that has evolved over 20 years which is displayed in the website.



The hierarchy is followed at every level.

- The Institute is managed by the Board of Governors (BOG).
- The Institute has decentralized its operations and has delegated authority at various levels to ensure good governance.
- The Statutory bodies of the College are the Academic Council (AC) and Internal Quality Assurance Cell (IQAC) framed as per norms of AICTE. These bodies play an important role in framing policies and its execution.
- The Principal is the academic and administrative head who monitors the overall functioning and growth of the Institute. Principal acts as the Member-Secretary of the BOG and the Chairman of Academic Council and IQAC.
- The involvement of the effective leadership is achieved through the well-defined system and organizational structure.
- The Institute has Service and Recruitment Rules as per the norms of the Government of West Bengal.
- Promotion Rules are as per the norms of AICTE/ Government of West Bengal.
- Service Rules & Regulations are displayed in the website for dissemination amongst the faculty and staff.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_2/6_2_2/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_2/6_2_2/ADDITIONAL_INFORMATION</a>
Link to Organogram of the institution webpage	<a href="https://bcrec.ac.in/BCREC_BOG_STRUCTURE_PRESENT.html">https://bcrec.ac.in/BCREC_BOG_STRUCTURE_PRESENT.html</a>
Upload any additional information	<a href="#">View File</a>

### 6.2.3 - Implementation of e-governance in areas of operation Administration Finance and

B. Any 3 of the above

## Accounts Student Admission and Support Examination

File Description	Documents
ERP (Enterprise Resource Planning)Document	<a href="#">View File</a>
Screen shots of user inter faces	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Details of implementation of e-governance in areas of operation, Administration etc(Data Template)	<a href="#">View File</a>

### 6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has effective welfare measures for teaching and non- teaching staff

Progress of an organization depends on its employees. The Institute has effective welfare schemes for the benefit of its teaching and non-teaching staff.

Pay structure being followed is the sixth pay commission with 75% DA and 15% HRA. Faculty and staff are entitled to EPF and gratuity.

All faculty and staff are insured for medical coverage.

Maternity leave of ninety days is provided for maximum of two times.

Institute encourages its teachers in acquiring the latest skills by deputing them for various programs/conferences. Institute supports the teachers by providing Special Leave/Study Leaves to pursue Project/Doctoral/Post-Doctoral research.

The Institute has rules for Leaves, DA and HRA, EPF, Gratuity, ESIC scheme, Medical insurance of Rs 1.50 lakhs, Transport facility, Residential Accommodation, Canteen Facility etc. All the above facilities are mentioned in the Service Rules which is displayed in the website.

Campus medical assistance through a MBBS doctor as well as a Professional Counsellor to address stress and depression of the Staff.

Sports, Gym (male & female), Yoga Instructors are available to maintain a healthy and balanced life.

The Institute has Grievance Redressal committee, Internal complain committee, SC/ST Committee responsible to sort out the issues/complaints, if raised by any staff.

Progress of an organization depends on its employees. The Institute has effective welfare schemes for the benefit of its teaching and non-teaching staff.

Pay structure being followed is the sixth pay commission with 75% DA and 15% HRA. Faculty and staff are entitled to EPF and gratuity.

All faculty and staff are insured for medical coverage.

Maternity leave of ninety days is provided for maximum of two times.

Institute encourages its teachers in acquiring the latest skills by deputing them for various programs/conferences. Institute supports the teachers by providing Special Leave/Study Leaves to pursue Project/Doctoral/Post-Doctoral research.

The Institute has rules for Leaves, DA and HRA, EPF, Gratuity, ESIC scheme, Medical insurance of Rs 1.50 lakhs, Transport facility, Residential Accommodation, Canteen Facility etc. All the above facilities are mentioned in the Service Rules which is displayed in the website.

Campus medical assistance through a MBBS doctor as well as a Professional Counsellor to address stress and depression of the Staff.

Sports, Gym (male & female), Yoga Instructors are available to maintain a healthy and balanced life.

The Institute has Grievance Redressal committee, Internal complain committee, SC/ST Committee responsible to sort out the issues/complaints, if raised by any staff.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_6/6_3/6_3_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_6/6_3/6_3_1/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

### 6.3.2 - Number of teachers provided with financial support to attend conferences/ workshops

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

0

File Description	Documents
Upload any additional information	No File Uploaded
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	No File Uploaded

**6.3.3 - Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year****6.3.3.1 - Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff during the year**

2

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	No File Uploaded
Reports of Academic Staff College or similar centers	No File Uploaded
Upload any additional information	<a href="#">View File</a>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	<a href="#">View File</a>

**6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)****6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year**

87

File Description	Documents
IQAC report summary	<a href="#">View File</a>
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	No File Uploaded
Upload any additional information	<a href="#">View File</a>
Details of teachers attending professional development programmes during the year (Data Template)	<a href="#">View File</a>

### 6.3.5 - Institutions Performance Appraisal System for teaching and non- teaching staff

- A systematic and effective Performance Appraisal System of the Institute provides teaching and non-teaching staff with eloquent appraisals that encourages professional learning and growth.
- Appraisal System for performance review of the faculty members is conducted by the Appraisal Committee of the Institute comprising of senior academicians/technocrats duly appointed by the Principal on the basis of following criteria.
- A structured "Self-Appraisal Form" is given to each faculty member for evaluation purpose. The concerned HOD gives their remarks on the performance of the faculty member.
- Performance Appraisal form for Non-Teaching staff is based on the qualitative and quantitative responses towards performance parameters.
- Performance Review is conducted at the end of an academic year. Wherever, there is scope for improvement, it is communicated to the concerned faculty/staff through the HoDs/ Reporting officials.

	Criteria	Marks	Allotted Marks
1.	Power Point Presentation on a topic of the concerned	15	

	subject & Question-Answers on PPT	
2.	Subject Knowledge & Skill	30
3.	Ability to deliver lectures &	20
	Communication Skills	
4.	Research Contribution/Paper Publication/Newsletter	20
5.	Engagement in other departmental/institutional activities (MAR, MOOCs, Exam, Placement, NBA, NAAC, NIRF)	15
	Total:	100

Performance Review is conducted at the end of an academic year. Wherever, there is scope for improvement, it is communicated to the concerned faculty/staff through the HoDs/ Reporting officials.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_3/6_3_5/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_3/6_3_5/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

## 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

College conducts internal and external financial audits regularly.

#### A. Internal Audit

The Internal audit is entrusted to qualified Auditors who carry out internal audit checks every quarter and they do a thorough check and verification of all financial transactions with the supporting documents and approval of proper authority for each transaction. The financial transactions are accounted in Tally.ERP-9 by the college.

Internal Auditor will examine all vouchers on cent percent basis. The expenses incurred under different heads are thoroughly checked by verifying the bills and vouchers.

On such verification any errors or omissions and commissions when pointed out by the audit team are immediately corrected/rectified and precautionary steps are taken to avoid recurrence of such errors in future.

#### B. External Audit

All the financial transactions of the college are audited by an external agency. The external audit is carried out by the auditors as per the provisions of the Government rules and regulations. The College has maintained the highest level of transparency in all financial transactions. It may be seen from the audited reports that all the financial transactions are carried out as per the standard norms.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_6/6_4/6_4_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_6/6_4/6_4_1/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

### 6.4.2 - Funds / Grants received from non-government bodies, individuals, philanthropers during the year (not covered in Criterion III)

#### 6.4.2.1 - Total Grants received from non-government bodies, individuals, Philanthropers during the year (INR in Lakhs)

0

File Description	Documents
Annual statements of accounts	No File Uploaded
Any additional information	No File Uploaded
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the year (Data Template)	No File Uploaded

#### 6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

Being a self-financed institute, fee collection is the only major source of revenue/income generation for the institute.

The annual budget is prepared according to the need and requirements of the departments taking into consideration the annual intake of students, laboratory and infrastructure development, students, faculty & staff requirements and promotions and latest technologies etc.

The college obtains proposals from the concerned departments regarding expenditure in an academic year, which is matched with the projected income for an academic year and is consolidated by the Principal of the College for approval by the Society that manages the affairs of the College. Once it is approved by the Society, the Principal apprises the Departments of the allocation so that re-appropriation of budget outlays are avoided or kept to the minimum. After the allocation, the departments can avail the financial resources within the given limit.

Purchases are made with the recommendations of duly constituted purchase committee. If any expenditure is made beyond budget sanctioned, it gets ratified in a special meeting.

Our object for resource mobilisation and optimal utilisation of resources puts in the forefront quality of education and growth of students, as the primary and fundamental objective.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_4/6_4_3/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_4/6_4_3/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>



## 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

As an IQAC quality initiative, all the departments were suggested to initiate Research Proposal and consequently submit to the funding agencies for procuring Govt. fund as well as begin Industry-Institute partnership through MoU signing.

### Practice - 1

CSE Department submitted a proposal to conduct an On-line FDP on "Foundations and Practical Aspects of Cyber Security" for which Rs 0.93 lakhs were granted by AICTE under AICTE ATAL Academy Programme. The FDP was organized during 15th to 19th December, 2020 wherein total 98 participants across the country attended.

R&D Cell applied for establishment of AICTE IDEA Lab with a proposal of Rs 78.99 lakhs. Out of 204 applicants, 49 proposals were selected and the Institute received the approval on 17/06/2021.

### Practice - 2

Civil Engineering Department took initiative for signing a MoU with NHAI to provide suggestions for improving the efficiency of existing highway assets of the country. A MoU was signed on 15th October, 2020 under the ambit of Institute Social Responsibilities (ISR). Two stretches of NH, an 18 km stretch from Panagarh to Palsit and 14 km stretch from Purulia to Chandil were adopted by the Institute and quality assurance report was submitted by the Institute to the Govt. Authorities.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_5/6_5_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_5/6_5_1/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic

intervals through IQAC set up as per norms and recorded the incremental improvement in various activities (For second and subsequent cycles - Incremental improvements made for the preceding year with regard to quality and post accreditation quality initiatives) Describe any two examples of institutional reviews and implementation of teaching learning reforms facilitated by the IQAC within a maximum of 200 words each

(1) To have an effective teaching-learning process during the pandemic through virtual mode, IQAC has taken initiative such that all the students are provided with class notes as per the Class Schedule, after the on-line mode of teaching is over through Google Meet. IQAC further advised to take virtual lab classes following the MHRD virtual lab portal. Institute also took initiative for recording of videos of real-time lab execution and sharing with the students.

IQAC further suggested that the students should be counseled through the Mentors to reduce the stress in students during the pandemic. Faculty Mentors remained always in touch with the Mentees and took care of the students as their Guardians which improved personal bonding, teaching-learning process and improvement of attendance.

(2) IQAC suggested for Academic-Administrative Audits for all the departments to be made mandatory for overall improvement of teaching-learning process at large with the hope that after the Institute opens in physical mode, the same may be conducted.

IQAC visited the Electrical Engineering and MBA departments and conducted an audit of all academic and administrative documents as well as processes being followed. IQAC suggested measures of improvement which were accepted by the departments for incorporation.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_5/6_5_2/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_5/6_5_2/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

**6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for**

**A. All of the above**

**improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)**

File Description	Documents
Paste web link of Annual reports of Institution	<a href="https://srv15-bcrec.in/vc/IOAC/BCREC_IOAC_REPORT.pdf">https://srv15-bcrec.in/vc/IOAC/BCREC_IOAC_REPORT.pdf</a>
Upload e-copies of the accreditations and certifications	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Upload details of Quality assurance initiatives of the institution (Data Template)	<a href="#">View File</a>

## INSTITUTIONAL VALUES AND BEST PRACTICES

### 7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

- Gender Sensitization is a critical issue. The Institute organizes programs and events at regular intervals in order to spread awareness about the issue.
- The Institute aims to help provide gender equity by conducting seminars, debates, group discussions for both boys and girls on a single platform, awareness programme on women's empowerment and gender sensitivity, cybercrime and self-defense.
- The institute has constituted various committees with senior female faculty/staff members viz. Anti-harassment Committee, Women Redressal Cell and Internal Complaint Committee (ICC), as per rules and regulations of Statutory Authorities.
- Separate Common rooms for boys and girls with basic facilities exist in the College.
- Counseling of girl as well as boy students is conducted in a regular manner by the lady faculty members of the above mentioned Committees.

- In collaboration with police officials of local area, Durgapur and the Burdwan district, Awareness programs on women's empowerment and gender sensitivity, cyber-crime and self-defense was conducted in the college premises in 2020 and female collectives of the Institute whole-heartedly participated in the programme.

File Description	Documents
Annual gender sensitization action plan	<a href="https://bcrec.ac.in/GenderSensitizationActionPlan.pdf">https://bcrec.ac.in/GenderSensitizationActionPlan.pdf</a>
Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	<a href="https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_7/7_1/7_1_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_7/7_1/7_1_1/ADDITIONAL_INFORMATION</a>

**7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation measures Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power efficient equipment**

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

File Description	Documents
Geo tagged Photographs	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

**7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management**

- The environment of the Institute is eco-friendly. The institute has taken conscious efforts to enhance and nurture the eco-friendly environment and always strives for sustainable environment in the campus.
- A dedicated team of gardeners and sweepers take care of lawns, gardens, plantation, maintenance, etc. to maintain the green environment in the campus in a regular manner.
- The Institute has taken all initiatives in line with the

Swachha Bharat Abhiyan to sensitize its students and staff through different activities e.g. seminar, webinar, NSS cell etc.

- The Institute has proper waste disposal mechanism. The solid waste is segregated into organic and is used to prepare compost for in-house consumption and non-degradable waste is collected by the Durgapur Municipality. The solid waste at the canteen and hostel is segregated at source using green and blue dustbins.
- Liquid waste is collected and then discharged into the municipal sewage system.
- E-waste is assembled in the innovation labs where students cannibalised the required parts, while the rest of the scrap is then sold to E-waste collection company.

File Description	Documents
Relevant documents like agreements / MoUs with Government and other approved agencies	<a href="#">View File</a>
Geo tagged photographs of the facilities	<a href="#">View File</a>

**7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus** D. Any 1 of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

**7.1.5 - Green campus initiatives include**

**7.1.5.1 - The institutional initiatives for greening the campus are as follows:** A. Any 4 or All of the above

1. Restricted entry of automobiles
2. Use of bicycles/ Battery-powered

vehicles

**3. Pedestrian-friendly pathways**

**4. Ban on use of plastic**

**5. Landscaping**

File Description	Documents
Geo tagged photos / videos of the facilities	<a href="#">View File</a>
Various policy documents / decisions circulated for implementation	<a href="#">View File</a>
Any other relevant documents	<a href="#">View File</a>

**7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution**

**7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities**

**A. Any 4 or all of the above**

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<a href="#">View File</a>
Certification by the auditing agency	<a href="#">View File</a>
Certificates of the awards received	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

**7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment 5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of**

**B. Any 3 of the above**

**reading material, screen****reading**

File Description	Documents
Geo tagged photographs / videos of the facilities	<a href="#">View File</a>
Policy documents and information brochures on the support to be provided	<a href="#">View File</a>
Details of the Software procured for providing the assistance	No File Uploaded
Any other relevant information	<a href="#">View File</a>

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 200 words).

- Institute is well known for its endeavour towards academic excellence but also because of its HR policies of empathy, societal consciousness, and harmonious relationship with its ambient culture and sensitivities.
- Faculty / Staff Members and the students of the Institute have an all India mix and they celebrate each others' festivals, music and art. Orientation Programs for the students have some artistic offering from every section of students' home states. Students' band and cultural events reflect diversities in musical/ cultural performances.
- Linguistic differences are assimilated by ensuring a common professional language like English during working hours.
- Communal divides are rare. The Institute has a robust and long-standing commitment to its social responsibilities. The NSS Cell has undertaken many a socially responsible drive in the areas of charity initiatives towards the underprivileged in society.
- Differently-abled students, staff, or teachers are supported with ramps, lift facilities, even special assisting staff members designated.
- Group Discussions on LGBTQ Awareness, Rights, and Empowerment are topics of discourse in the Soft Skills Sessions. This is done to remove, at the very outset of hostel life, misgivings

and apprehensions among students, and encouraging sensitization and inclusivity of approach towards campus life.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

7.1.9 - Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

- The Institute is fully aware of its noble role as architect of India's generation next. The Institute is committed to the philosophy espoused by the Indian Constitution, in word and spirit.
- A copy of the Constitution Preamble is preserved in the reception of Main office building to ensure the expression of the value the Institute puts on it.
- On Constitution Day, Institute renews its pledge to the Constitution by repeating aloud, word for word, the Preamble.
- Institute focuses on installing a sense of responsibility in its students towards the Constitution through various efforts some notable being New India Pledge taking ceremony on Republic Day and Independence Day.
- As part of the curriculum a non-credit offering, Constitution of India/Essence of Indian Knowledge & Traditions is offered.
- In keeping with the values and ethics of Community Service, Institute routinely conducts Swacch Bharat and Swasth Bharat Abhiyaans.
- In association with NGOs, Organ Donation Pledge Workshops are organized in every year under National Service Scheme (NSS) to acquaint the students with the pressing need for more individuals to become Organ Donors.
- World Environment Day is celebrated every year with great enthusiasm by planting trees in campus.



File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	<a href="https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_7/7_1/7_1_9/Additional_Documents.pdf">https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_7/7_1/7_1_9/Additional_Documents.pdf</a>
Any other relevant information	<a href="https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_7/7_1/7_1_9/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_7/7_1/7_1_9/ADDITIONAL_INFORMATION</a>

**7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff** A. All of the above

**4. Annual awareness programmes on Code of Conduct are organized**

File Description	Documents
Code of ethics policy document	<a href="#">View File</a>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

There is a great heritage of the Institute regarding the celebration of national/international commemorative days, events and festivals.

Institute buildings are named after great persons and visionaries, like Vidyasagar Bhawan, Ashutosh Bhawan, Mahalanabish Bhawan, Sister Nivedita Girls Hostel, Chittaranjan Boys Hostel, Satyen Bose Boys Hostel etc.

The gardens are named as Vivek Udyan, Rabindra Udyan, Bidhan Udyan,

etc.

The institute has a tradition of celebrating the Republic Day and Independence Day with full vigour and enthusiasm. The celebration includes parade of NCC members of the student group, unfurling of the tri-colour national flag, singing of national anthem and address by the Principal for the special days.

The Constitution Day celebration is another national event which infuses spirit and devotion to the Constitution of our Nation, in commemoration of the adoption of the constitution of India in 1950.

The institute takes all efforts to commemorate the Birth anniversary of Swami Vivekananda at the Vivek Udyan, which is named after Swami Vivekananda.

In commemoration of the contribution of Bharat Ratna Maulana Abul Kalam Azad, National Education Day is celebrated by the institute.

The Institute celebrates Teachers Day at 5th September on the birth anniversary of Dr. S. P. Radhakrisnan.

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	<a href="#">View File</a>
Geo tagged photographs of some of the events	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

## 7.2 - Best Practices

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

### Best Practice 1

#### Career Guidance Training

##### Objectives of the Practice

In today's ever-changing dynamism, Career Guidance to the students is the most vital aspect of college education so that the students can serve the needs of the ever-changing and dynamic market needs.

To choose the right career path based on the interest of the students, BCREC offers education beyond the curriculum and provides career guidance to the students in the following aspects.

1. Exploring various career options
2. Developing self-confidence and self-reliance
3. Creating interest for higher studies
4. Promoting entrepreneurship
5. Promoting a culture among students for lifelong learning
6. Helping students to learn beyond the curriculum

## The Context

In today's competitive markets, the right path of career choice matching with the potential and the interest is not an easy task for the students. To keep the students career-focused and make them aware of the industry and social needs, career guidance through different training processes beyond the curriculum is most essential. The need of the hour is also to induce a habit among the students for lifelong learning to progress in the career. The challenge is changing the mindset of students to become skilled at how to learn new things and adapt themselves to the latest knowledge and techniques. Career growth culture among students has to be developed and will be of particular importance for ensuring their employability and facilitating their transition from college-level education and internship to face the challenges of the future. Finding the correct resource person for effective guidance (external or in-house) having competencies become more and more important in designing and implementation of this practice.

## The Practice

These goals are achieved through the following activities of the Training and Placement Department as well as the individual departments of specialization in the Institute:

1. Students are trained on Communication & Presentation Skills (using language lab) imparted by the faculty members of English Department - will have a great advantage in the job market and more choice in the profession.

2. Specific training on technical skills like Aptitude test, Programming skills, etc. is provided to the students by hiring Professional Agency, Co-cubes, Bangalore - The students' aptitudes and abilities measured by verbal and numeric reasoning tests can easily be related to real world tasks and jobs, as many jobs require some degree of skill with words and numbers.
3. Soft Skills Training Program (through institutional membership of British Council) which fall into four categories - (i) Problem Solving Skills (ii) Communication Skills (iii) Personal Qualities and Work Ethics (iv) Interpersonal and Teamwork Skills.
4. At the individual department level, Career Guidance is provided to the students to help them explore various career options.
5. Mock Tests, Mock Interviews and Personality Development training program by the Campus T&P team members are held on continuous basis to achieve higher rate of placement.
6. To create awareness about the opportunities / challenges in various engineering / application / management sectors, resource persons from industries are invited to deliver technical talks and to impart knowledge on the current trends and latest technologies. This helps students to provide industry insights making the success rate higher.
7. To make student more enthusiastic and boost their self confidence, alumni are also invited to address them and guide them through the career options.
8. Guidance on competitive examinations e.g. GATE and different public service commission examinations is also given at the department level.
9. Students are encouraged to participate in technical contests, carry out project work, undergo internships and also organize various technical fests and social activities to enhance their knowledge through experience.
10. Seminars/Workshops are organized by individual department/students' chapters in collaboration with renowned industries highlighting the importance of education in the industry are conducted.

### **Constraints faced during students' career guidance:**

There is a serious lack of awareness amongst students, their parents, and even teachers which creates difficulty while giving career guidance. There is a serious mis-match between skill building and available jobs. Awareness of career counseling is really low

among the students, this leads to hesitation among the students to venture for career counseling in the first place.

## Evidence of Success

The career guidance training has augmented the awareness among the students about the importance of effective communication and has helped them to understand about the need for development of other skills other than the technical knowledge they acquire through their regular classes/ labs and continuous assessments.

The performance of the practice is reflected in the campus placement of the students. The total placement scenario has been changed and the placement percentage has taken an upward trend year-by-year. Moreover, students started understanding that they are to be industry-ready as per the market need and it will create their demand. In the process, a larger section of the students get inclined to jobs of different flavor other than the jobs related to their specific technical skill sets.

To add to this, career guidance is helping the students to understand their inclination towards higher studies and they appear for GATE, CAT, GRE, etc. examinations. Although the success rate is not commendable, however, this kind of preparation makes the students ready for facing tough technical interviews as well their confidence increases many-fold on attempting public service examinations. This is evident from the fact that several students are qualifying for the public service commission examinations just after passing out.

## Problems Encountered and Resources Required

The problems encountered in implementing the practice are as follows:

1. Difficulty in motivating students about different flavours of jobs available as per industry demands.
2. Finding out right type of professional agencies who can provide training and skill sets to the students as per market demand.
3. Difficulty in convincing students for regularly attending the training programs by the professional agencies for facing tests/interviews.
4. Difficulty in motivating students for higher studies and public service examinations for which attending classes beyond

the regular class hours is a requirement.

5. Making the faculty members convinced to deliver beyond the curriculum to prepare the students for competitive examinations.
6. Difficulty in making student understand about the fact the instead of short term goals, long term goals are more effective.

Although there are various problems, the institute has been able to implement the practice effectively through decentralizing the training and placement activities and mobilising its technical and non-technical resources in an efficient manner.

## Best Practice 2

### Content beyond Curriculum

#### Objectives of the Practice

The main objective of the practice of Content beyond Curriculum is to help students in following aspects.

1. To groom the students in a progressive environment to become competent professionals.
2. To create excellent opportunity for students to acquire necessary skill sets and develops self-confidence / self-reliance to face various competitive and professional examinations for employability.
3. To enable the students to learn self-learning, team-building, leadership and management skills, innovation and creativity.
4. To diversify the programme contents and to establish greater relevance to socio-economic problems of the Society.
5. To inculcate democratic, moral, social and spiritual values in the minds of the learners.

#### The Context

Since the industry is continuously evolving and technology is ever emerging, mere learning the curriculum is insufficient. There is often a mismatch between what is learnt in the institution and the industrial expectations from the graduate engineers. In order to bridge this gap and make students industry-ready, much emphasis is given for teaching content beyond the regular curriculum which includes branch specific value added courses with industrial tie up

and hands-on placement training. It has become nowadays obvious for the institute that it should create opportunities for the students to inculcate attributes, which are not restricted only to engineering / management knowledge and acumen. Moreover, to cater to the need of the industry, the students require being thorough professionals who can work successfully in teams, who have leadership qualities, who are alive to social and community needs and who can bring innovation and creativity to their work and who are also digitally proficient.

## The Practice

While applying for accreditation for NBA in the year 2015, the institute adopted its own methodology for introducing the practice of content beyond curriculum. Initially academic contents beyond the curriculum were introduced for four programs which were applying for accreditation during the above time, as non-credit points having some contact hours. Socio-economic contents were imparted through co-curricular and extra-curricular events organized under NSS, NCC, etc. events for all the students.

Starting academic year 2018-2019, institute decided to introduce the choice based credit system (CBCS) following AICTE model curriculum for all B.Tech programs as specified by the university. Under this scheme from the academic year 2018-2019 onwards students became eligible for Honours degree by collecting minimum 20 extra credit points, as per mandate of the University. These additional 20 credits students acquire with online courses (MOOCs) where the rare expertise of world famous experts from academic and industry are available which provide the students with the excellent opportunity for skill set development required for employability. The basket for MOOCs is a dynamic one, as courses keep on updating with time. The credits to be earned over are four years (8+4+4+4).

The institute has also preferred SWAYM-NPTEL for implementing the CBCS as the institute is a NPTEL local chapter. If a student fails to complete the requirement of credit during the specified year he/she is given opportunity to complete the requirement in the next year by choosing from the new basket of courses.

As per Mandatory Additional Requirement (MAR) of the university, a concept of mandatorily accumulating some points through a basket of activities for professional development as well as to inculcate the values in the students has also been introduced from 2019. Faculty mentors constantly monitor participation of the students for

different activities (details list of activities with points are included in a separate document). Institute notifies such activities through Activity Calendar and every student is required to earn minimum activity points in addition to the required academic grades.

## Constraints of the Practice

1. Committed faculty members are required to clarify doubts of the students participating in MOOCs courses. This requires continuous up gradation of knowledge of faculty through FDP programs.
2. It has been observed that students enmasse generally prefer some particular course; other courses are chosen by a few. Breaking this chain as well motivating the students for different set of courses is quite challenging.
3. Individual counselling and guiding takes time and there was resistance from the faculty. Therefore awareness programmes and training had to be organized for the stakeholders.

## Evidence of Success

The practice is successfully implemented through constant monitoring by the MOOCs and MAR coordinators and motivating students by the mentors. Following are some of the achievements:

1. Several students of 2018-2022 batch participated in the soft skill development, ethics and programming skills. The programs wise list of the students is attached in the link.
2. For MAR activities all students are actively participating. Almost all pass-out students of 2019 and 2020 have completed the minimum requirements as specified for by the university.
3. In July-October 2019 NPTEL session (for MAR and CBCS), out of total 952 registered candidates 600 passed successfully (63%) with 11 toppers in different subjects.
4. Felicitation at the institute level is done every year for the successful NPTEL participants having Gold, Elite and Silver tags along with the course toppers. In September 2019, 20 Gold, 147 Elite and 67 Silver tagged candidates are felicitated along with 14 toppers.
5. As a nodal center of NPTEL, the institute has been recognized as an ACTIVE and one of the top 100 local chapters. Rating of the college is "A" which is based on performance in NPTEL Online certification courses in July-October 2019. The rank of this college is also in TOP 10 among all over the India.



## Problems Encountered and Resources Required

The challenges encountered in implementing the practice are as follows:

1. Being affiliated to a university, students are required to follow the traditional instructional method of learning where exams are given much importance. This makes students lose interest in pursuing online and other value added courses.
2. Motivating students for CBCS is quite difficult. In many cases during the 1st year, students start participation in CBCS, however with further progress of semesters they lose interest in many cases.
3. Individual counselling takes time and the faculty members with their busy schedule for routine theory, laboratory classes as well as other academic activities do not find sufficient time for individual guidance.
4. Although there is a basket of MAR activities, however it is difficult to diversify students for all such activities. It becomes a challenge for the mentors to convince the students that more than the minimum points will enhance their professional and socio-economic capabilities as it is not linked to credit requirements.

File Description	Documents
Best practices in the Institutional website	<a href="https://bcrec.ac.in/BCREC_BEST_PRACTICES.htm">https://bcrec.ac.in/BCREC_BEST_PRACTICES.htm</a> <u>1</u>
Any other relevant information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_7/7_2/7_2_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_7/7_2/7_2_1/ADDITIONAL_INFORMATION</a>

### 7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

The Institute is celebrating more than two decades of its meaningful contribution in the promotion of higher technical education with a focus on sustainable growth projectile through positive industrial tie-ups, faculty expertise and media relationships. Earning media reputation over the years is one distinctive area to its priority and thrust.

The institute has been in the news for a highly successful global

tie-up with Cambridge Marketing College, UK to explore the possibilities of knowledge exchange programmes and to encourage value added education. In 2020-21 academic year another MoU was signed with National Highways Authority of India, Ministry of Road Transport & Highways, Govt. of India for improving the efficiency of existing highways assets of the country through student internship and faculty collaborations.

The teaching excellence at the Institute is inspirational for the young minds. In the environment of pandemic due to COVID 2019, the faculty members utilized e-learning modules when chalk-and-board teaching is not possible. Numerous Webinars on various beyond syllabus topics and digital events on extra-curricular activities were conducted for the next generation learning with belief that "Sky is Not the Limit".

NAAC

## Part B

### CURRICULAR ASPECTS

#### 1.1 - Curricular Planning and Implementation

1.1.1 - The Institution ensures effective curriculum delivery through a well planned and documented process

Institute follows CBCS syllabus prescribed by the affiliating university, and ensures effective curriculum delivery. Department Academic Councils (DACs) of each department discuss the updated syllabus and identify curriculum gaps and propose ways to bridge/address the gaps. Class representatives as part of the DACs also give their suggestions which are placed before the Academic Council for finalisation.

Effective course delivery is ensured using various instructional methods and pedagogical initiatives such as lectures, tutorials, laboratory experimental work, Project Work, Continuous Assessments both for theory and practical subjects as per University guidelines.

Institute has framed programme objectives, programme learning outcomes, course objectives and course learning outcomes for all UG and PG programmes.

Subjects are allocated to the faculty by the HoDs following which the faculty prepares lecture/ lesson plan and allocates number of lectures on the particular topics, based on the profile of students of the class and their past performance. Course coverage is periodically assessed and any related issues/discrepancies /modifications are discussed in the DAC meeting for effective curriculum delivery.

Institute is a recognized local chapter of NPTEL. Students and faculty are encouraged to get certified in relevant NPTEL courses. Student Chapters and Entrepreneurship Cell activities inculcate self-learning in the students.

File Description	Documents
Upload relevant supporting document	<a href="#">View File</a>
Link for Additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_1/1_1/1_1_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_1/1_1_1_1_1/ADDITIONAL_INFORMATION</a>

### 1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

- A College academic calendar is prepared semester-wise following the calendar of university, after discussion with all stake holders. Along with Academic Calendar, the Activity Calendar is also prepared for extra-curricular and co-curricular activities of the students as part of Mandatory Additional Requirements (MAR) of the University.
- The academic calendar contains the following categories of activities:
  - Commencement of class
  - Orientation and Mandatory Induction programme
  - Extra-curricular events like NSS activities, NCCactivities, Blood Donation and Organ Donation Camps
  - Co-curricular events like Student Chapter activities
  - Mandatory Additional Activities as per requirement of the University
  - MOOCs activities (NPTEL courses, IIT-Bombay Spoken Tutorial Project, etc.)
  - Mentoring activities like individual interaction between Faculty Mentors and Student
  - Specific dates for conduction of Continuous Evaluations - CA1, CA 2, CA 3 and CA4 for theory subjects and PCA 1 & PCA 2 for Practical papers, as prescribed by the University
  - End-semester examinations (Practical & Theory) for University assessments
  - Commemorative events, Holidays and Semester-break
  - For continuous internal evaluation (CIE) process the institute adheres to the academic calendar prepared by it based on the academic calendar of the affiliating University.

File Description	Documents
Upload relevant supporting document	<a href="#">View File</a>
Link for Additional information	Nil

### 1.1.3 - Teachers of the Institution participate in following activities related to curriculum

D. Any 1 of the above

**development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University**

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

## **1.2 - Academic Flexibility**

**1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented**

**1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented**

**13**

File Description	Documents
Any additional information	<a href="#">View File</a>
Minutes of relevant Academic Council/ BOS meetings	<a href="#">View File</a>
Institutional data in prescribed format (Data Template)	<a href="#">View File</a>

**1.2.2 - Number of Add on /Certificate programs offered during the year**

**1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)**

**1**

File Description	Documents
Any additional information	<a href="#">View File</a>
Brochure or any other document relating to Add on /Certificate programs	<a href="#">View File</a>
List of Add on /Certificate programs (Data Template )	<a href="#">View File</a>

### 1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

121

File Description	Documents
Any additional information	<a href="#">View File</a>
Details of the students enrolled in Subjects related to certificate/Add-on programs	<a href="#">View File</a>

### 1.3 - Curriculum Enrichment

1.3.1 - Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum

To incorporate and amalgamate the crosscutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum, Institute has introduced courses like Values and Ethics in Profession, Human Resource Management and Environmental Science etc. in its UG programme.

College has gender sensitization committee which is organizing seminars, workshops, group discussions to sensitize the gender issues. Class representatives are equal with both boys and girls. Around 24% of the students are female and the faculty is well balanced. Without gender discrimination female students are represented in NCC, E- Cell etc.

Environment and Sustainability are one of the ardent issues, addressed by the Institute. Regular awareness programs are conducted including the popular ones being 'Tree Plantation' and 'Clean India- Swachh Bharat Campaign'. Environmental Science is taught in different UG programmes as a compulsory subject in the second year.

Values and Ethics in Profession is included in the curriculum of

UG and is taught in the second year. Some more subjects like Human Resource Management is also there compulsorily in the curriculum for UG second year students. University has also included a new paper- The Constitution of India in the UG curriculum for third year students.

File Description	Documents
Any additional information	<a href="#">View File</a>
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	<a href="#">View File</a>

### 1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

30

File Description	Documents
Any additional information	<a href="#">View File</a>
Programme / Curriculum/ Syllabus of the courses	<a href="#">View File</a>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	No File Uploaded
MoU's with relevant organizations for these courses, if any	<a href="#">View File</a>
Institutional Data in Prescribed Format	<a href="#">View File</a>

### 1.3.3 - Number of students undertaking project work/field work/ internships

735

File Description	Documents
Any additional information	<a href="#">View File</a>
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	<a href="#">View File</a>

#### 1.4 - Feedback System

**1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders Students Teachers Employers Alumni**

A. All of the above

File Description	Documents
URL for stakeholder feedback report	<a href="https://bcrec.ac.in/feedback.html">https://bcrec.ac.in/feedback.html</a>
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

**1.4.2 - Feedback process of the Institution may be classified as follows**

A. Feedback collected, analyzed and action taken and feedback available on website

File Description	Documents
Upload any additional information	<a href="#">View File</a>
URL for feedback report	<a href="https://srv15-bcrec.in/feedback-report/">https://srv15-bcrec.in/feedback-report/</a>

#### TEACHING-LEARNING AND EVALUATION

##### 2.1 - Student Enrollment and Profile

**2.1.1 - Enrolment Number Number of students admitted during the year**

694

**2.1.1.1 - Number of students admitted during the year**

694



File Description	Documents
Any additional information	<a href="#">View File</a>
Institutional data in prescribed format	<a href="#">View File</a>

## 2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)

### 2.1.2.1 - Number of actual students admitted from the reserved categories during the year

183

File Description	Documents
Any additional information	<a href="#">View File</a>
Number of seats filled against seats reserved (Data Template)	<a href="#">View File</a>

## 2.2 - Catering to Student Diversity

### 2.2.1 - The institution assesses the learning levels of the students and organizes special Programmes for advanced learners and slow learners

- Institute admits diversified students from different social and economic backgrounds and the ability and extent of learning of the students is highly influenced by their personal abilities and other attributes. Institute has developed a structured mechanism for assessing the learning levels of the students.
- The first interaction occurs during the mandatory AICTE Induction Programme, with professors assessing, identifying, and differentiating the students. Mentees' learning ability is identified by the Mentors based on their academic performance, behaviour, social and psychological aspects during the individual interaction session. The first Continuous Evaluation (CA 1) process helps the faculty identify Slow and Advanced Learners.
- With regard to the program for Slow Learners, each mentor is assigned with a group of students per year to provide

one-to-one counseling for overall improvement. Extra and Remedial classes are conducted for the slow learners including efforts to improve the basic skills in Mathematics and English.

- Advanced learners are motivated to attend webinars, seminars, expert lectures and are encouraged to be members of various professional bodies like IEEE, CSI, E-Cell, publish papers, involve in innovative project and research work, enroll and get certified in MOOC courses and competitive examinations like GATE, GRE, CAT, etc.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_2/2_2/2_2_1/Additional_Documents.pdf">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_2/2_2/2_2_1/Additional_Documents.pdf</a>
Upload any additional information	<a href="#">View File</a>

### 2.2.2 - Student- Full time teacher ratio (Data for the latest completed academic year)

Number of Students	Number of Teachers
2767	187

File Description	Documents
Any additional information	<a href="#">View File</a>

### 2.3 - Teaching- Learning Process

2.3.1 - Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

The college has been focusing on innovative and creative ways of disseminating, sharing, and facilitating knowledge development in students, adopting student-centric methods which are central to Outcome-Based Education (OBE).

#### Course Delivery Methods

- Group discussions

- Seminars/Mini projects
- Technical Reports/ Case studies,
- Simulations and experimental exercises
- Lab experimental work
- Class Assignments/Quizzes

#### Individual learning

- E-learning tools like NPTEL videos, SWAYAM, Coursera, IIT Bombay - Spoken Tutorial Project, etc. to let students learn independently and enhance classroom learning.
- Encouraged to enroll and get certification for add-on online courses for self-paced learning.

#### Experiential learning

- Student-centric learning is provided in the practical sessions to apply concepts learned in the classroom.
- Internships/ Vocational training.
- Final Year group Projects, Technical Fest and Workshops.
- Short Visit to nearby industries/labs

#### Participative /collaborative learning

- Exhibiting at intra-college, state, and national project competitions and technical festivals for R&D projects
- Invited talks by experts and alumni from the industry and academia.
- MOUs are signed with leading industries to bridge the gaps in the curriculum.

Problem-based learning promotes students' critical thinking to find solutions in real-life situations.

Faculty also map the learning outcomes from the above initiatives.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRI_TERIA_2/2_3/2_3_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRI_TERIA_2/2_3/2_3_1/ADDITIONAL_INFORMATION</a>

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

The institute always aims to provide up-to-date ICT infrastructure for its students, professors, and technical personnel. The students' learning experiences are enhanced by the teachers' use of educational technologies and the effective usage of ICT-enabled tools.

- Institute has dedicated digital classrooms for all programs with the use of multimedia teaching aids like LCD projectors, internet-enabled computer/laptop systems, and the teacher's use the modern teaching aids.
- Institute has nine smart classrooms and ICT enabled with projectors & wifi.
- Internally created an online examination system accessible by students via LAN or the internet.
- Grooming/communication skills/Mock tests are conducted using ICT-enabled tools.
- The library subscribes to a large number of e-journals in Engineering, Science, Management and provides access to online and offline databases.
- Hard disk containing web and video courses (offline) from NPTEL are accessible to faculty and students from the server installed in the library / NPTEL local chapter office on the campus.

- The entire academic process is managed by the university's integrated academic management system. The institute has also implemented an ICT-based student admission and payment system for semester and hostel fees.
- Two seminar halls and two auditoriums are equipped with multimedia facilities.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	<a href="#">View File</a>

### 2.3.3 - Ratio of mentor to students for academic and other related issues (Data for the latest completed academic year )

#### 2.3.3.1 - Number of mentors

149

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	<a href="#">View File</a>
Circulars pertaining to assigning mentors to mentees	<a href="#">View File</a>
Mentor/mentee ratio	<a href="#">View File</a>

### 2.4 - Teacher Profile and Quality

#### 2.4.1 - Number of full time teachers against sanctioned posts during the year

187

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
List of the faculty members authenticated by the Head of HEI	<a href="#">View File</a>

#### 2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

##### 2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

66

File Description	Documents
Any additional information	<a href="#">View File</a>
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template)	<a href="#">View File</a>

#### 2.4.3 - Number of years of teaching experience of full time teachers in the same institution (Data for the latest completed academic year)

##### 2.4.3.1 - Total experience of full-time teachers

1929

File Description	Documents
Any additional information	<a href="#">View File</a>
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	<a href="#">View File</a>

#### 2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

- Institute prepares its own academic calendar well before the semester commences based on the University's Academic Calendar. These include completion of syllabus coverage and CAs for theory, PCAs for sessional and laboratory papers. Changes in schedules, patterns, and methods are communicated to students forthwith via online class briefings and Notifications. Syllabus for the test is communicated to students by class teachers well in advance.
- Internal assessment for theory and lab papers is done through Continuous Assessments (CA1, CA 2, CA 3, CA 4 & PCA 1, PCA 2). The institute has prepared standard formats for question papers depending upon the type of the subject based on Course Outcomes (COs) for Continuous Assessment (CA). Departmental question paper moderation committees evaluate the quality of question papers and coverage of the entire COs in the CAs.
- Institute has implemented digital evaluation of semester-end examination papers, which has helped in speeding up the evaluation process and increasing transparency. Students can raise about any discrepancy found in the assessment. Adoption of the above method as per MAKAUT guidelines ensures complete transparency in the system of internal assessment, strengthens the bond between faculty and students. The Institute's examination system is thus completely transparent.

File Description	Documents
Any additional information	<a href="#">View File</a>
Link for additional information	<a href="https://srv15-bcrec.in/vc/AOAR_2020-21/CRI_TERIA_2/2_5/2_5_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AOAR_2020-21/CRI_TERIA_2/2_5/2_5_1/ADDITIONAL_INFORMATION</a>

2.5.2 - Mechanism to deal with internal examination related grievances is transparent, time- bound and efficient

- The Central Examination Cell is supervised by a faculty member chosen by the authorities. Institute carefully adheres to the affiliating University's norms at the time of conducting Internal Tests and Semester Exams,
- All CA and PCA marks for Theory, Practical and Sessional are uploaded into the University portal and students can access them by logging in their own login ids. After publication of the results, a student can apply for Post-Publication Scrutiny (PPS) and Post-Publication Review (PPR).
- Viva-voce and lab copy evaluations are explained in front of students to keep the process transparent and minimize grievances. Project Seminars are held in Google Meet/Seminar Halls in front of the entire class ensure complete transparency in internal assessment.
- The Examination Cell, in close collaboration with the University, deals with any student grievances regarding Admit Cards, Registration Cards, etc.
- Any exam malpractice is reported to the Examination Cell and dealt with as per University guidelines. The Invigilator can cancel a paper online, and the Examination Cell can mark it as "Reported Against (RA)". If the student cannot substantiate his case to the satisfaction of the Committee, he has to repeat the examination the next semester.

File Description	Documents
Any additional information	<a href="#">View File</a>
Link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_2/2_5/2_5_2/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_2/2_5/2_5_2/ADDITIONAL_INFORMATION</a>

## 2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme and course outcomes for all Programmes offered by the institution are stated



and displayed on website and communicated to teachers and students.

- Institute follows the outcome-based education following Bloom's Taxonomy guidelines of NBA.
- PSOs are identified after detailed deliberation with the stakeholders and are placed at prominent places including the labs and offices. The College is following the COs as specified by MAKAUT, in case the COs is not specified by the university, NBA guidelines are followed.
- The POs, PSOs, and COs are disseminated through Institute Website, Prospectus, Course file, Departments, Laboratories, etc. As a part of the Induction Programme, Institute apprise about POs, PSOs, and COs, and other academic details to the fresh batch of students of respective academic programs. Each Course Outcome is mapped to Program Outcomes in terms of relevance. Three levels of relevance are based on the degree of correlation i.e. 1 for low, 2 for medium, and 3 for high correlation. The contribution of course to each PO is expressed in terms of the average relevance of COs mapped to that particular PO. Similarly, the value computed for all the courses including first-year courses is entered for the corresponding PO and PSOs. The agreed-upon COs form the basis for achieving POs and PSOs and thus contributing towards achieving the Mission and Vision of the Institute.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for Additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_2/2_6/2_6_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_2/2_6/2_6_1/ADDITIONAL_INFORMATION</a>
Upload COs for all Programmes (exemplars from Glossary)	<a href="#">View File</a>

2.6.2 - Attainment of Programme outcomes and course outcomes are evaluated by the institution.

- The efficiency and effectiveness of the process of attainment of POs and COs is monitored, assessed, and improved by taking inputs from the discussion/suggestion/decision taken in the meetings of the Department Academic Council, Academic Council, and IQAC Cell.
- The following method is used to assess course outcomes. Course attainment levels are defined based on prior performance and are expressed as a proportion of students achieving a target score.

Theory subjects:

1. Internal Evaluation (weightage 30%)

- Continuous internal assessment

1. External Evaluation (weightage 70%)

- University theory examination

Practical Subjects:

1. Internal Evaluation (weightage 40%)

- Lab performance
- Practical continuous assessment

1. External Evaluation (weightage 60%)

- University practical examination

- Each CO has a target level and is achieved if the attainment is equal to or exceeds the target. Once the total attainment of CO is calculated, it is used for measuring the level of attainment of POs and PSOs.
- Direct Attainment (80% weightage) and Indirect attainment (20% weightage).
- Direct attainment is calculated from CO attainment based on four Continuous Assessments and Semester Examination and Indirect attainment is calculated based on 25% Program Exit Survey + 50% Alumni survey + 25% Employer Survey.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for Additional information	Nil

### 2.6.3 - Pass percentage of Students during the year

#### 2.6.3.1 - Total number of final year students who passed the university examination during the year

792

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Paste link for the annual report	<a href="https://srv15-bcrec.in/vc/IQAC/BCREC_IQAC_REPORT.pdf">https://srv15-bcrec.in/vc/IQAC/BCREC_IQAC_REPORT.pdf</a>

### 2.7 - Student Satisfaction Survey

#### 2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a weblink)

<https://srv15-bcrec.in/sss-feedback-as-per-naac/>

## RESEARCH, INNOVATIONS AND EXTENSION

### 3.1 - Resource Mobilization for Research

#### 3.1.1 - Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

##### 3.1.1.1 - Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

0.93

File Description	Documents
Any additional information	<a href="#">View File</a>
e-copies of the grant award letters for sponsored research projects /endowments	<a href="#">View File</a>
List of endowments / projects with details of grants(Data Template)	<a href="#">View File</a>

#### 3.1.2 - Number of teachers recognized as research guides (latest completed academic year)

##### 3.1.2.1 - Number of teachers recognized as research guides

13

File Description	Documents
Any additional information	<a href="#">View File</a>
Institutional data in prescribed format	<a href="#">View File</a>

#### 3.1.3 - Number of departments having Research projects funded by government and non government agencies during the year

##### 3.1.3.1 - Number of departments having Research projects funded by government and non-government agencies during the year

01

File Description	Documents
List of research projects and funding details (Data Template)	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Supporting document from Funding Agency	<a href="#">View File</a>
Paste link to funding agency website	<a href="https://www.aicte-india.org/atal">https://www.aicte-india.org/atal</a>

### 3.2 - Innovation Ecosystem

3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

R&D cell motivates the faculty members to submission of research proposals to various funding agencies like DRDO, DST, AICTE, DBT, etc. 5 proposals have been submitted to AICTE under MODROB, one FDP and three RPS proposals are in a different stage of consideration in AICTE. One project has been sanctioned by PRISM-DSIR.

AICTE selected the institute for setting up the prestigious AICTE-IDEA Lab and sanctioned the fund of Rs 39 lakhs.

5-day Faculty Development Program under the banner of AICTE-ATAL was organized with a grant of Rs 93000/-.

Institute has also been selected for the AICTE-LITE program.

Institute has published its Vol:2 Issue:1 online journal, "BCREC Engineering Science Transaction (BEST)".

Collaboration with Wadhvani Foundation under National Entrepreneur Network (NEN) has created opportunities and 28 students have started their own setup.

"Texas Instruments Innovation Lab" with the collaboration of Texas Instruments and "Advance VLSI Design and Reconfigurable Computing Lab" with the collaboration of CoreEL were established for carrying out research activities.

MOU with Cambridge Marketing College (CMC) helped the students to apply the learning in a practical scenario.

For the creation and transfer of knowledge among the students and faculty members, financial support is provided for organizing STTPs, National/International Conference/Symposiums, etc.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_3/3_2/3_2_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_3/3_2/3_2_1/ADDITIONAL_INFORMATION</a>

### 3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

#### 3.2.2.1 - Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during the year

58

File Description	Documents
Report of the event	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
List of workshops/seminars during last 5 years (Data Template)	<a href="#">View File</a>

### 3.3 - Research Publications and Awards

#### 3.3.1 - Number of Ph.Ds registered per eligible teacher during the year

##### 3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year

3

File Description	Documents
URL to the research page on HEI website	<a href="https://bcrec.ac.in/BCREC_R&amp;D.html">https://bcrec.ac.in/BCREC_R&amp;D.html</a>
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc (Data Template)	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

#### 3.3.2 - Number of research papers per teachers in the Journals notified on UGC website

during the year

### 3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year

43

File Description	Documents
Any additional information	<a href="#">View File</a>
List of research papers by title, author, department, name and year of publication (Data Template)	<a href="#">View File</a>

### 3.3.3 - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year

#### 3.3.3.1 - Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during year

33

File Description	Documents
Any additional information	<a href="#">View File</a>
List books and chapters edited volumes/ books published (Data Template)	<a href="#">View File</a>

### 3.4 - Extension Activities

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

Multifarious activities in the Institute involving the students with the objective of sensitizing various social issues and strengthening community participation for holistic development are carried out inside the campus under the banner of NSS.

Women's Day is celebrated as part of Gender Sensitization programs. A webinar "Women: A nation's pillars of strength" was conducted to aware the students. "International Yoga Day" was celebrated too for making the students mentally and physically fit.

Following activities are undertaken to engage faculty, students, and staff in the neighborhood community, viz. Swacchha Bharat initiatives, NO to Plastic campaign, Tree plantation, Health

campus, Thalassemia awareness campus, Blood donation, Organ donation campus.

In keeping with the Swasth Bharat initiatives all across the country, students reached out to villagers in Dashirbad, Durgapur as part of the Outreach Programme.

Due to the pandemic, online programs were conducted during this year to aware the students such as "National webinar on Vaccination Drive on Covid19 pros and cons", "Poster Competition on Eradication of Malnutrition".

The needs of the marginalized people especially women and children from the underprivileged sections of society get priority. Charity Drives were conducted where cash, clothes, food, and student materials were distributed through Missionaries of Charity.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_3/3_4/3_4_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_3/3_4/3_4_1/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

### 3.4.2 - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year

#### 3.4.2.1 - Total number of awards and recognition received for extension activities from Government/ Government recognized bodies year wise during the year

03

File Description	Documents
Any additional information	<a href="#">View File</a>
Number of awards for extension activities in last 5 year (Data Template)	<a href="#">View File</a>
e-copy of the award letters	<a href="#">View File</a>

### 3.4.3 - Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., ( including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs ) during the year



### 3.4.3.1 - Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

06

File Description	Documents
Reports of the event organized	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	<a href="#">View File</a>

### 3.4.4 - Number of students participating in extension activities at 3.4.3. above during year

#### 3.4.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

1537

File Description	Documents
Report of the event	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	<a href="#">View File</a>

### 3.5 - Collaboration

#### 3.5.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship during the year

##### 3.5.1.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year wise during the year

85

File Description	Documents
e-copies of related Document	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Details of Collaborative activities with institutions/industries for research, Faculty	<a href="#">View File</a>

### 3.5.2 - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year

#### 3.5.2.1 - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year

06

File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	<a href="#">View File</a>

## INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 - Physical Facilities

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

The Institute has following adequate physical infrastructure to accommodate all departments for conducting its effective teaching-learning process.

- Located on 10.11 acres of land
- 35686 sq. m. built-up area
- Well equipped spacious 55 classrooms (12 smart classrooms) and ICT enabled with projector facility
- Tutorial rooms as per AICTE requirement
- Dedicated Seminar halls
- Laboratories with experimental set-ups, computers & peripherals and Instructors to provide constant support and

maintenance.

- Separate R&D labs to carry out research activities.
- Industry tie-up laboratories like Texas Instruments Innovation Lab in collaboration with Texas Instrument, USA, and VLSI lab in tie-up with Xilinx, USA to provide the students hands-on experience and wide exposure
- AICTE IDEA Lab imparting 21st century skills
- Language Lab with modern accessories
- Adequate Staff rooms, Toilets, etc.
- Wi-Fi enabled campus
- Two dedicated Central Computer Centres with 257 desktops
- Six computers in Digital Library, 144 computers in various departments and offices.
- 27 Computer labs with a total of 1082 computers having uninterrupted power supply backed by sufficient number of UPS
- Five generators with 246 KVA for back-up power supply.
- Two Auditoriums with state-of-the-art facilities to carry out extra-curricular activities.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRI_TERIA_4/4_1/4_1_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRI_TERIA_4/4_1/4_1_1/ADDITIONAL_INFORMATION</a>

4.1.2 - The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor), gymnasium, yoga centre etc.

Institute has created both infrastructural and instructional facilities to bring about all round development for the students including games & sports and extra-curricular activities.

- Large playing fields support a wide variety of games.
- A 200-metre athletic track and courts for Basketball, Volleyball, Handball, and Throw Ball with Day-Night facilities to conduct matches.
- The institute also has a large indoor gymnasium facility for both boys and girls.
- Karate sessions are held regularly within the college premises and students have represented the Institute at the

national level in Karate.

- Yoga sessions are carried out regularly by a permanent Yoga teacher
- The Institute has appointed full-time qualified Sports Personnel (04) to train and guide students in various sports.
- Institute teams have been proving their excellence in various Inter and Intra-Institutional, University, National level competitions.
- Dedicated spaces for Indoor sport.
- Many entertaining events are arranged in two auditoriums as part of cultural activities to exhibit the talent of the students in music, dance, band, etc. with uniqueness and magnanimity.
- Photography club, Debate Club, Quiz Club, etc.
- Tech Fest is conducted by the Student Council to exhibit the technical acumen of the students.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_1/4_1_2/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_1/4_1_2/ADDITIONAL_INFORMATION</a>

#### 4.1.3 - Number of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc.

16

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_1/4_1_3/4_1_3_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_1/4_1_3/4_1_3_1/ADDITIONAL_INFORMATION</a>
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<a href="#">View File</a>

**4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year (INR in Lakhs)****4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)**

57.51

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Upload audited utilization statements	<a href="#">View File</a>
Upload Details of budget allocation, excluding salary during the year (Data Template	<a href="#">View File</a>

**4.2 - Library as a Learning Resource****4.2.1 - Library is automated using Integrated Library Management System (ILMS)**

- Central Library of the Institute occupies a very important place in the campus.
- Central Library supports study, teaching-learning process and research activities and provides a learning space for the students (UG & PG), staff and faculty members.
- Central Library is housed in a sprawling three storied building with a carpet area 1091.16 sq.m. and has a total collection of 7349 titles and 34,190 volumes of books including Departmental Libraries.
- Central Library has a total collection of over 88958 volumes of books.
- The Central Library is automated with Integrated Library Management Software, LIBSYS 4, and Version LSEASE (Rel. 6.1).
- Additionally, there are 54,768 volumes in the Book Bank.
- Library subscribes to about 60 Printed Journals and magazines.

The Central Library is also a member of DELNET and has access to

publications of all major publishers like Elsevier, Springer, ASCE, IEEE etc., with access to around 1566 E-books, 179 journals of IEEE, 275 from Elsevier, 13 from SAGE and 617 from DELNET.

- Each department has a reasonably well stocked departmental library for reference to the students.
- The digital library has six computer terminals.
- The library also has books for competitive examinations.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for Additional Information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_2/4_2_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_2/4_2_1/ADDITIONAL_INFORMATION</a>

**4.2.2 - The institution has subscription for the following e-resources e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access toe-resources**

**B. Any 3 of the above**

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Details of subscriptions like e-journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	<a href="#">View File</a>

**4.2.3 - Expenditure for purchase of books/e-books and subscription to journals/e- journals during the year (INR in Lakhs)**

**4.2.3.1 - Annual expenditure of purchase of books/e-books and subscription to journals/e-journals during the year (INR in Lakhs)**

**8.32**

File Description	Documents
Any additional information	<a href="#">View File</a>
Audited statements of accounts	<a href="#">View File</a>
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<a href="#">View File</a>

#### 4.2.4 - Number per day usage of library by teachers and students ( foot falls and login data for online access) (Data for the latest completed academic year)

##### 4.2.4.1 - Number of teachers and students using library per day over last one year

0

File Description	Documents
Any additional information	<a href="#">View File</a>
Details of library usage by teachers and students	<a href="#">View File</a>

#### 4.3 - IT Infrastructure

##### 4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

- The institution has a policy for periodical upgradation of the IT facilities. New IT infrastructure are created taking intoconsideration the requirements of the entire college.
- The Institute has a 190 (100+50+40) MBPS high-speed internet connectivity through OFC/LAN/Wi-Fi, with access points/switches (including L2) strategically located across the campus. Wi-Fi is authentication driven with restrictions at different levels to ensure maximum security. Wi-fi facility in all hostels are for 24 hrs.
- The campus is governed by Microsoft Campus Licensing Agreement.
- A dedicated Computer Centre with more than 300 desktops is provided.
- Our ERP server on the cloud ([www.bcrecdgp.ac.in](http://www.bcrecdgp.ac.in)) offers ERP services to the college from any end of the globe.

- In order to ensure safety and security of data, a licensed Sophos firewall with web and application filters are used.
- The IT infrastructure in the last year is tabulated below:

YEAR	2020-21
Number of Computers (in working Condition)	1233
Laptops	18
Servers	4
Wi-Fi / Access Points/ Switches	176
Open source software	20
Types of Licensed Software	68
Printers (in working condition)	67
No. of Scanners	17
No. of Online UPS	25
No. of CCTV Cameras	49

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_3/4_3_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_3/4_3_1/ADDITIONAL_INFORMATION</a>

#### 4.3.2 - Number of Computers

1233

File Description	Documents
Upload any additional information	<a href="#">View File</a>
List of Computers	<a href="#">View File</a>

#### 4.3.3 - Bandwidth of internet connection in the Institution

A. ? 50MBPS

File Description	Documents
Upload any additional Information	<a href="#">View File</a>
Details of available bandwidth of internet connection in the Institution	<a href="#">View File</a>



#### 4.4 - Maintenance of Campus Infrastructure

##### 4.4.1 - Expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the year (INR in Lakhs)

##### 4.4.1.1 - Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component during the year (INR in lakhs)

50.2

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Audited statements of accounts	<a href="#">View File</a>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<a href="#">View File</a>

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

- Institute continuously strives to meet the growing needs of the academics making available adequate physical infrastructure and constantly upgrading facilities in order to provide a good teaching learning environment.
- Academic Council/IQAC convenes regular meetings to assess the infrastructural facilities and requirements. In order to ensure maintenance and optimum utilization, various systems and procedures are established so as to benefit all the stakeholders.
- Administrative officer of the Institute oversees the campus maintenance which includes buildings, classrooms, laboratories, hostels, playground, lawns etc. Cleaning, Dusting, Sweeping and Mopping, Maintenance of Garden, Pest control, entire campus snag work etc. is undertaken daily by the housekeeping staff. Institute has a workforce of Carpenters, Masons, Electricians and Plumbers for minor repair work.
- CCTV cameras have been placed at strategic places to help in maintaining discipline and a sense of security, in addition to Security Guards hired through an external private agency. The Institute has deployed Fire Alarm

Systems too.

- Files relevant to Library and Library services are well maintained and labelled for easy access.
- Periodic servicing and calibration of equipment/instruments are carried out in all the laboratories.
- System Administrator is responsible for the maintenance of computers and IT facilities.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_4/4_2/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_4/4_4/4_2/ADDITIONAL_INFORMATION</a>

## STUDENT SUPPORT AND PROGRESSION

### 5.1 - Student Support

#### 5.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

##### 5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

70

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	<a href="#">View File</a>

#### 5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

##### 5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

352

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	<a href="#">View File</a>

**5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills**

**B. 3 of the above**

File Description	Documents
Link to Institutional website	<a href="https://bcrec.ac.in/BCREC_TRAINING.html">https://bcrec.ac.in/BCREC_TRAINING.html</a>
Any additional information	<a href="#">View File</a>
Details of capability building and skills enhancement initiatives (Data Template)	<a href="#">View File</a>

**5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year**

File Description	Documents
Any additional information	<a href="#">View File</a>
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	<a href="#">View File</a>

**5.1.5 - The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies**

**A. All of the above**

**with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees**

File Description	Documents
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Details of student grievances including sexual harassment and ragging cases	No File Uploaded

## 5.2 - Student Progression

### 5.2.1 - Number of placement of outgoing students during the year

#### 5.2.1.1 - Number of outgoing students placed during the year

380

File Description	Documents
Self-attested list of students placed	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Details of student placement during the year (Data Template)	<a href="#">View File</a>

### 5.2.2 - Number of students progressing to higher education during the year

#### 5.2.2.1 - Number of outgoing student progression to higher education

14

File Description	Documents
Upload supporting data for student/alumni	<a href="#">View File</a>
Any additional information	No File Uploaded
Details of student progression to higher education	<a href="#">View File</a>

**5.2.3 - Number of students qualifying in state/national/ international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)**

**5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year**

13

File Description	Documents
Upload supporting data for the same	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	<a href="#">View File</a>

**5.3 - Student Participation and Activities**

**5.3.1 - Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) during the year**

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

0

File Description	Documents
e-copies of award letters and certificates	No File Uploaded
Any additional information	<a href="#">View File</a>
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national/international level (During the year) (Data Template)	No File Uploaded

5.3.2 - Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms )

- Students' Council of the institute comprises students from all years and it is a conglomeration of three different bodies - (1) Student Academic Council, (2) Student Social & Cultural Council and (3) Student Administrative Council.
- The Chairperson is Dean (Students' Welfare & Alumni) and three faculty advisors act as co-ordinators. The primary focus of the Council is to formulate strategies for the overall curricular, co-curricular and extra-curricular development of the students.
- The Student Academic Council gets feedback on the teaching-learning processes from the departments to improve quality.
- Administrative Council looks after the feedback on Hostels and Amenities, Anti-Ragging initiatives, Alumni Association, Grievance Redressal, NSS etc.
- Social and Cultural Council promotes and encourages the involvement of students in organizing various sports, social initiatives and community outreach programmes and recreational activities ( like Annual Sports, Cultural Fest, Freshers' Welcome, Farewell, etc) of the college in coordination with faculty mentors.
- Alumni Association is in place to strengthen the relationship amongst alumni.

- In addition, as suggested by the NAAC peer team, steps are being initiated to make the Alumni Association more proactive for the benefit of the students.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/Website_Departme nt/CE/Student CE/Student Council CE.pdf">https://srv15-bcrec.in/vc/Website Department/CE/Student CE/Student Council CE.pdf</a>
Upload any additional information	<a href="#">View File</a>

### 5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

#### 5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year

2

File Description	Documents
Report of the event	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions) (Data Template)	<a href="#">View File</a>

### 5.4 - Alumni Engagement

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

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

- Alumni Association was formed in the Institute and it was registered in 2008.
- Since its inception, the Alumni association has provided enormous support to motivate present students to enhance

the employability and shared their expertise regarding various educational opportunities available in country and abroad.

- Though informal contribution of Rs 3.48 lakhs has been received from Alumni till date, they have been contributing as Expert speakers, sharing experience with students.
- The Alumni f and also play a key role to bridge the gap between industrial requirements and academics through seminar/ webinar / workshops / industrial training organized by various departments
- Due to pandemic situation it was not possible to organise Alumni meet physically in 2020-21. However, AGM of alumni association was conducted virtually in 2021.
- Till date a large number of Alumni are serving the Institute as Faculty Members.
- Mr. Avijit Sham, President Alumni association, is helping the IQAC as active members for enhancement quality of our college.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_5/5_4/5_4_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_5/5_4/5_4_1/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

**5.4.2 - Alumni contribution during the year (INR in Lakhs)**

**E. <1Lakhs**

File Description	Documents
Upload any additional information	<a href="#">View File</a>

## GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

- BCREC is governed by Dr. B. C. Roy Engineering College Society.



- Members of the Board of the Governors of the College have been constituted as per the guidelines of AICTE, and meets once every three months.
- BoG members always encourage the efforts of the college team in maintaining quality standards as well as provide guidance wherever necessary.
- The College has an Academic Council with Principal as Chairman, Deans, HODs and Registrar, Head (Admn.), Campus Administrator as members taking care of all academic and administrative issues like budget, recruitment, purchases, admissions, promotions, conferences, variation in intake etc., are discussed and approved in the meeting and thereafter implemented. The meetings are held every two months.
- To ensure the quality and imbibe the culture of excellence, IQAC has developed the Strategic Plan aligning with vision and mission of the Institute. Faculty opinions and participation is given due weightage by their participation in various committees like Anti-ragging, IQAC, Research, Examination, Placement, Internal Complaint Committee (ICC) to ensure the value addition
- Student Council meetings are held every month to brief students on important decisions and consider their suggestions and look into their grievances, if any.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_1/6_1_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_1/6_1_1/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

6.1.2 - The effective leadership is visible in various institutional practices such as decentralization and participative management.

The management has a participative management system with collective decision-making involving Principal, Deans, HODs, IC(Exam) and Registrar.

## Case Study

The Institute has developed a well-defined decentralized system to follow the university guidelines for conducting the Internal Assessments as well as end-Semester Examinations.

In-charge of the Examination Cell under the advice of the Principal execute the process in close liaison with the Controller of Examinations of MAKAUT as well as disseminate the instructions to the HoDs and Departmental Exam Coordinators.

Semester-wise and Department-wise Students' Enrolments, Marks uploading of Internal Assessments (Theory and Practical) and end-Semester Practical, Examination Form fill-up (Regular and Backlog), Scrutiny and Review process are carried out by the Departmental Exam Coordinators under the advice of HoDs and IC, Exam of the Institute.

Internal Assessment marks and end-semester final lab marks are scrutinized by Departmental Marks Moderation Committee headed by the HoDs and being endorsed the marks are uploaded by individual subject teacher tagged by the university.

The requirement for setting question papers are informed to the Principal and the IC(Exam), by the University which is sent to the HoDs for distribution amongst the faculty members in confidential manner.

End-Semester Paper checking is carried out by individual tagged teachers.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_1/6_1_2/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_1/6_1_2/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

## 6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

The Strategic plan of the institute is displayed in the website.

The College is working on Three Es - Equity in education and Excellence in academics which will together lead to optimum

levels of Employability.

#### Case study

Institute have set their priorities as being a prime aide in employment generation for their students. A few comprehensive strategic changes over the last two years have redefined the performance standards.

The Campus team comprising of senior and experienced professors monitor the training and placement activities since July, 2018 alongside the Training & Placement Team of Kolkata. The team had refurbished the complete training process making a few vital changes with three distinct components, Aptitude, Technical and Verbal & Soft Skills; as a result during the academic year 2020-21, 517 students have received job offers from campus recruitment for Engineering, MCA and MBA out of which 374 are single offers. Highest salary package for Engineering and MBA are 7 lakhs and 8.89 lakhs per annum with average package as 3.3 and 3.21 lakhs per annum respectively. The placement percentages based on eligible students and total students are 63.35% and 48% respectively for Engineering and 43.86% and 42.37% for MBA.

File Description	Documents
Strategic Plan and deployment documents on the website	<a href="#">View File</a>
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_2/6_2_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_2/6_2_1/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

6.2.2 - The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

- The Institute has an internal Organizational Structure that has evolved over 20 years which is displayed in the website. The hierarchy is followed at every level.
- The Institute is managed by the Board of Governors (BOG).
- The Institute has decentralized its operations and has delegated authority at various levels to ensure good

governance.

- The Statutory bodies of the College are the Academic Council (AC) and Internal Quality Assurance Cell (IQAC) framed as per norms of AICTE. These bodies play an important role in framing policies and its execution.
- The Principal is the academic and administrative head who monitors the overall functioning and growth of the Institute. Principal acts as the Member-Secretary of the BOG and the Chairman of Academic Council and IQAC.
- The involvement of the effective leadership is achieved through the well-defined system and organizational structure.
- The Institute has Service and Recruitment Rules as per the norms of the Government of West Bengal.
- Promotion Rules are as per the norms of AICTE/ Government of West Bengal.
- Service Rules & Regulations are displayed in the website for dissemination amongst the faculty and staff.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_2/6_2_2/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_2/6_2_2/ADDITIONAL_INFORMATION</a>
Link to Organogram of the institution webpage	<a href="https://bcrec.ac.in/BCREC_BOG_STRUCTURE_PRESENT.html">https://bcrec.ac.in/BCREC_BOG_STRUCTURE_PRESENT.html</a>
Upload any additional information	<a href="#">View File</a>

**6.2.3 - Implementation of e-governance in areas of operation Administration Finance and Accounts Student Admission and Support Examination**

B. Any 3 of the above

File Description	Documents
ERP (Enterprise Resource Planning) Document	<a href="#">View File</a>
Screen shots of user inter faces	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Details of implementation of e-governance in areas of operation, Administration etc(Data Template)	<a href="#">View File</a>

### 6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has effective welfare measures for teaching and non- teaching staff

Progress of an organization depends on its employees. The Institute has effective welfare schemes for the benefit of its teaching and non-teaching staff.

Pay structure being followed is the sixth pay commission with 75% DA and 15% HRA. Faculty and staff are entitled to EPF and gratuity.

All faculty and staff are insured for medical coverage.

Maternity leave of ninety days is provided for maximum of two times.

Institute encourages its teachers in acquiring the latest skills by deputing them for various programs/conferences. Institute supports the teachers by providing Special Leave/Study Leaves to pursue Project/Doctoral/Post-Doctoral research.

The Institute has rules for Leaves, DA and HRA, EPF, Gratuity, ESIC scheme, Medical insurance of Rs 1.50 lakhs, Transport facility, Residential Accommodation, Canteen Facility etc. All the above facilities are mentioned in the Service Rules which is displayed in the website.

Campus medical assistance through a MBBS doctor as well as a Professional Counsellor to address stress and depression of the Staff.

Sports, Gym (male & female), Yoga Instructors are available to maintain a healthy and balanced life.

The Institute has Grievance Redressal committee, Internal complain committee, SC/ST Committee responsible to sort out the issues/complaints, if raised by any staff.

Progress of an organization depends on its employees. The Institute has effective welfare schemes for the benefit of its teaching and non-teaching staff.

Pay structure being followed is the sixth pay commission with 75% DA and 15% HRA. Faculty and staff are entitled to EPF and gratuity.

All faculty and staff are insured for medical coverage.

Maternity leave of ninety days is provided for maximum of two times.

Institute encourages its teachers in acquiring the latest skills by deputing them for various programs/conferences. Institute supports the teachers by providing Special Leave/Study Leaves to pursue Project/Doctoral/Post-Doctoral research.

The Institute has rules for Leaves, DA and HRA, EPF, Gratuity, ESIC scheme, Medical insurance of Rs 1.50 lakhs, Transport facility, Residential Accommodation, Canteen Facility etc. All the above facilities are mentioned in the Service Rules which is displayed in the website.

Campus medical assistance through a MBBS doctor as well as a Professional Counsellor to address stress and depression of the Staff.

Sports, Gym (male & female), Yoga Instructors are available to maintain a healthy and balanced life.

The Institute has Grievance Redressal committee, Internal complain committee, SC/ST Committee responsible to sort out the issues/complaints, if raised by any staff.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRI_TERIA_6/6_3/6_3_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRI_TERIA_6/6_3/6_3_1/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

**6.3.2 - Number of teachers provided with financial support to attend conferences/ workshops and towards membership fee of professional bodies during the year****6.3.2.1 - Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the year**

0

File Description	Documents
Upload any additional information	No File Uploaded
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	No File Uploaded

**6.3.3 - Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year****6.3.3.1 - Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff during the year**

2

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	No File Uploaded
Reports of Academic Staff College or similar centers	No File Uploaded
Upload any additional information	<a href="#">View File</a>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	<a href="#">View File</a>

**6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)****6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year**

87

File Description	Documents
IQAC report summary	<a href="#">View File</a>
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	No File Uploaded
Upload any additional information	<a href="#">View File</a>
Details of teachers attending professional development programmes during the year (Data Template)	<a href="#">View File</a>

#### 6.3.5 - Institutions Performance Appraisal System for teaching and non- teaching staff

- A systematic and effective Performance Appraisal System of the Institute provides teaching and non-teaching staff with eloquent appraisals that encourages professional learning and growth.
- Appraisal System for performance review of the faculty members is conducted by the Appraisal Committee of the Institute comprising of senior academicians/technocrats duly appointed by the Principal on the basis of following criteria.
- A structured "Self-Appraisal Form" is given to each faculty member for evaluation purpose. The concerned HOD gives their remarks on the performance of the faculty member.
- Performance Appraisal form for Non-Teaching staff is based on the qualitative and quantitative responses towards performance parameters.
- Performance Review is conducted at the end of an academic year. Wherever, there is scope for improvement, it is communicated to the concerned faculty/staff through the HoDs/ Reporting officials.

- |  | Criteria | Marks | Allotted Marks |
|--|----------|-------|----------------|
|--|----------|-------|----------------|



1.	Power Point Presentation on a topic of the concerned subject & Ques tion-Answers on PPT	15
2.	Subject Knowledge & Skill	30
3.	Ability to deliver lectures &  Communication Skills	20
4.	Research Contr ibution/Paper Publication/Ne wsletter	20
5.	Engagement in other departme ntal/instituti onal activities (MAR, MOOCs, Exam, Placement, NBA, NAAC, NIRF)	15
	<b>Total:</b>	<b>100</b>

Performance Review is conducted at the end of an academic year. Wherever, there is scope for improvement, it is communicated to the concerned faculty/staff through the HoDs/ Reporting officials.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRIERIA_6/6_3/6_3_5/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRIERIA_6/6_3/6_3_5/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

## 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

College conducts internal and external financial audits regularly.

### A. Internal Audit

The Internal audit is entrusted to qualify Auditors who carry out internal audit checks every quarter and they do a thorough check and verification of all financial transactions with the supporting documents and approval of proper authority for each transaction. The financial transactions are accounted in Tally.ERP-9 by the college.

Internal Auditor will examine all vouchers on cent percent basis. The expenses incurred under different heads are thoroughly checked by verifying the bills and vouchers.

On such verification any errors or omissions and commissions when pointed out by the audit team are immediately corrected/rectified and precautionary steps are taken to avoid recurrence of such errors in future.

### B. External Audit

All the financial transactions of the college are audited by an external agency. The external audit is carried out by the auditors as per the provisions of the Government rules and regulations. The College has maintained the highest level of transparency in all financial transactions. It may be seen from the audited reports that all the financial transactions are carried out as per the standard norms.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRI_TERIA_6/6_4/6_4_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRI_TERIA_6/6_4/6_4_1/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

## 6.4.2 - Funds / Grants received from non-government bodies, individuals, philanthropers

during the year (not covered in Criterion III)

**6.4.2.1 - Total Grants received from non-government bodies, individuals, Philanthropers during the year (INR in Lakhs)**

0

File Description	Documents
Annual statements of accounts	No File Uploaded
Any additional information	No File Uploaded
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the year (Data Template)	No File Uploaded

**6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources**

Being a self-financed institute, fee collection is the only major source of revenue/income generation for the institute.

The annual budget is prepared according to the need and requirements of the departments taking into consideration the annual intake of students, laboratory and infrastructure development, students, faculty & staff requirements and promotions and latest technologies etc.

The college obtains proposals from the concerned departments regarding expenditure in an academic year, which is matched with the projected income for an academic year and is consolidated by the Principal of the College for approval by the Society that manages the affairs of the College. Once it is approved by the Society, the Principal apprises the Departments of the allocation so that re-appropriation of budget outlays are avoided or kept to the minimum. After the allocation, the departments can avail the financial resources within the given limit.

Purchases are made with the recommendations of duly constituted purchase committee. If any expenditure is made beyond budget sanctioned, it gets ratified in a special meeting.

Our object for resource mobilisation and optimal utilisation of resources puts in the forefront quality of education and growth of students, as the primary and fundamental objective.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_4/6_4_3/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_4/6_4_3/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

## 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

As an IQAC quality initiative, all the departments were suggested to initiate Research Proposal and consequently submit to the funding agencies for procuring Govt. fund as well as begin Industry-Institute partnership through MoU signing.

### Practice - 1

CSE Department submitted a proposal to conduct an On-line FDP on "Foundations and Practical Aspects of Cyber Security" for which Rs 0.93 lakhs were granted by AICTE under AICTE ATAL Academy Programme. The FDP was organized during 15th to 19th December, 2020 wherein total 98 participants across the country attended.

R&D Cell applied for establishment of AICTE IDEA Lab with a proposal of Rs 78.99 lakhs. Out of 204 applicants, 49 proposals were selected and the Institute received the approval on 17/06/2021.

### Practice - 2

Civil Engineering Department took initiative for signing a MoU with NHAI to provide suggestions for improving the efficiency of existing highway assets of the country. A MoU was signed on 15th October, 2020 under the ambit of Institute Social Responsibilities (ISR). Two stretches of NH, an 18 km stretch from Panagarh to Palsit and 14 km stretch from Purulia to Chandil were adopted by the Institute and quality assurance report was submitted by the Institute to the Govt. Authorities.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_5/6_5_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_6/6_5/6_5_1/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities (For second and subsequent cycles - Incremental improvements made for the preceding year with regard to quality and post accreditation quality initiatives) Describe any two examples of institutional reviews and implementation of teaching learning reforms facilitated by the IQAC within a maximum of 200 words each

(1) To have an effective teaching-learning process during the pandemic through virtual mode, IQAC has taken initiative such that all the students are provided with class notes as per the Class Schedule, after the on-line mode of teaching is over through Google Meet. IQAC further advised to take virtual lab classes following the MHRD virtual lab portal. Institute also took initiative for recording of videos of real-time lab execution and sharing with the students.

IQAC further suggested that the students should be counseled through the Mentors to reduce the stress in students during the pandemic. Faculty Mentors remained always in touch with the Mentees and took care of the students as their Guardians which improved personal bonding, teaching-learning process and improvement of attendance.

(2) IQAC suggested for Academic-Administrative Audits for all the departments to be made mandatory for overall improvement of teaching-learning process at large with the hope that after the Institute opens in physical mode, the same may be conducted.

IQAC visited the Electrical Engineering and MBA departments and conducted an audit of all academic and administrative documents as well as processes being followed. IQAC suggested measures of

improvement which were accepted by the departments for incorporation.

File Description	Documents
Paste link for additional information	<a href="https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_6/6_5/6_5_2/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AOAR_2020-21/CRITERIA_6/6_5/6_5_2/ADDITIONAL_INFORMATION</a>
Upload any additional information	<a href="#">View File</a>

**6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)**

**A. All of the above**

File Description	Documents
Paste web link of Annual reports of Institution	<a href="https://srv15-bcrec.in/vc/IQAC/BCREC_IQAC_REPORT.pdf">https://srv15-bcrec.in/vc/IQAC/BCREC_IQAC_REPORT.pdf</a>
Upload e-copies of the accreditations and certifications	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Upload details of Quality assurance initiatives of the institution (Data Template)	<a href="#">View File</a>

## **INSTITUTIONAL VALUES AND BEST PRACTICES**

### **7.1 - Institutional Values and Social Responsibilities**

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

- **Gender Sensitization is a critical issue. The Institute organizes programs and events at regular intervals in order to spread awareness about the issue.**
- **The Institute aims to help provide gender equity by**

conducting seminars, debates, group discussions for both boys and girls on a single platform, awareness programme on women's empowerment and gender sensitivity, cybercrime and self-defense.

- The institute has constituted various committees with senior female faculty/staff members viz. Anti-harassment Committee, Women Redressal Cell and Internal Complaint Committee (ICC), as per rules and regulations of Statutory Authorities.
- Separate Common rooms for boys and girls with basic facilities exist in the College.
- Counseling of girl as well as boy students is conducted in a regular manner by the lady faculty members of the above mentioned Committees.
- In collaboration with police officials of local area, Durgapur and the Burdwan district, Awareness programs on women's empowerment and gender sensitivity, cyber-crime and self-defense was conducted in the college premises in 2020 and female collectives of the Institute whole-heartedly participated in the programme.

File Description	Documents
Annual gender sensitization action plan	<a href="https://bcrec.ac.in/GenderSensitizationActionPlan.pdf">https://bcrec.ac.in/GenderSensitizationActionPlan.pdf</a>
Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_7/7_1/7_1_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_7/7_1/7_1_1/ADDITIONAL_INFORMATION</a>

**7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation measures Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power efficient equipment**

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

File Description	Documents
Geo tagged Photographs	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

- The environment of the Institute is eco-friendly. The institute has taken conscious efforts to enhance and nurture the eco-friendly environment and always strives for sustainable environment in the campus.
- A dedicated team of gardeners and sweepers take care of lawns, gardens, plantation, maintenance, etc. to maintain the green environment in the campus in a regular manner.
- The Institute has taken all initiatives in line with the Swachha Bharat Abhiyan to sensitize its students and staff through different activities e.g. seminar, webinar, NSS cell etc.
- The Institute has proper waste disposal mechanism. The solid waste is segregated into organic and is used to prepare compost for in-house consumption and non-degradable waste is collected by the Durgapur Municipality. The solid waste at the canteen and hostel is segregated at source using green and blue dustbins.
- Liquid waste is collected and then discharged into the municipal sewage system.
- E-waste is assembled in the innovation labs where students cannibalised the required parts, while the rest of the scrap is then sold to E-waste collection company.

File Description	Documents
Relevant documents like agreements / MoUs with Government and other approved agencies	<a href="#">View File</a>
Geo tagged photographs of the facilities	<a href="#">View File</a>



<b>7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus</b>	<b>D. Any 1 of the above</b>
<b>File Description</b>	<b>Documents</b>
Geo tagged photographs / videos of the facilities	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>
<b>7.1.5 - Green campus initiatives include</b>	
<b>7.1.5.1 - The institutional initiatives for greening the campus are as follows:</b> <ol style="list-style-type: none"> <li><b>1. Restricted entry of automobiles</b></li> <li><b>2. Use of bicycles/ Battery-powered vehicles</b></li> <li><b>3. Pedestrian-friendly pathways</b></li> <li><b>4. Ban on use of plastic</b></li> <li><b>5. Landscaping</b></li> </ol>	<b>A. Any 4 or All of the above</b>
<b>File Description</b>	<b>Documents</b>
Geo tagged photos / videos of the facilities	<a href="#">View File</a>
Various policy documents / decisions circulated for implementation	<a href="#">View File</a>
Any other relevant documents	<a href="#">View File</a>
<b>7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution</b>	
<b>7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities</b>	<b>A. Any 4 or all of the above</b>

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<a href="#">View File</a>
Certification by the auditing agency	<a href="#">View File</a>
Certificates of the awards received	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

**7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment**  
**5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading**

**B. Any 3 of the above**

File Description	Documents
Geo tagged photographs / videos of the facilities	<a href="#">View File</a>
Policy documents and information brochures on the support to be provided	<a href="#">View File</a>
Details of the Software procured for providing the assistance	<b>No File Uploaded</b>
Any other relevant information	<a href="#">View File</a>

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 200 words).

- Institute is well known for its endeavour towards academic excellence but also because of its HR policies of empathy, societal consciousness, and harmonious relationship with its ambient culture and sensitivities.**

- Faculty / Staff Members and the students of the Institute have an all India mix and they celebrate each others' festivals, music and art. Orientation Programs for the students have some artistic offering from every section of students' home states. Students' band and cultural events reflect diversities in musical/ cultural performances.
- Linguistic differences are assimilated by ensuring a common professional language like English during working hours.
- Communal divides are rare. The Institute has a robust and long-standing commitment to its social responsibilities. The NSS Cell has undertaken many a socially responsible drive in the areas of charity initiatives towards the underprivileged in society.
- Differently-abled students, staff, or teachers are supported with ramps, lift facilities, even special assisting staff members designated.
- Group Discussions on LGBTQ Awareness, Rights, and Empowerment are topics of discourse in the Soft Skills Sessions. This is done to remove, at the very outset of hostel life, misgivings and apprehensions among students, and encouraging sensitization and inclusivity of approach towards campus life.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

#### 7.1.9 - Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

- The Institute is fully aware of its noble role as architect of India's generation next. The Institute is committed to the philosophy espoused by the Indian Constitution, in word and spirit.
- A copy of the Constitution Preamble is preserved in the reception of Main office building to ensure the expression of the value the Institute puts on it.

- On Constitution Day, Institute renews its pledge to the Constitution by repeating aloud, word for word, the Preamble.
- Institute focuses on installing a sense of responsibility in its students towards the Constitution through various efforts some notable being New India Pledge taking ceremony on Republic Day and Independence Day.
- As part of the curriculum a non-credit offering, Constitution of India/Essence of Indian Knowledge & Traditions is offered.
- In keeping with the values and ethics of Community Service, Institute routinely conducts Swacch Bharat and Swasth Bharat Abhiyaans.
- In association with NGOs, Organ Donation Pledge Workshops are organized in every year under National Service Scheme (NSS) to acquaint the students with the pressing need for more individuals to become Organ Donors.
- World Environment Day is celebrated every year with great enthusiasm by planting trees in campus.

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRI TERIA_7/7_1/7_1_9/Additional_Documents.pdf">https://srv15-bcrec.in/vc/AQAR_2020-21/CRI TERIA_7/7_1/7_1_9/Additional_Documents.pdf</a>
Any other relevant information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRI TERIA_7/7_1/7_1_9/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRI TERIA_7/7_1/7_1_9/ADDITIONAL_INFORMATION</a>

**7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff 4. Annual awareness programmes on Code of Conduct are**

**A. All of the above**

organized	
File Description	Documents
Code of ethics policy document	<a href="#">View File</a>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

There is a great heritage of the Institute regarding the celebration of national/international commemorative days, events and festivals.

Institute buildings are named after great persons and visionaries, like Vidyasagar Bhawan, Ashutosh Bhawan, Mahalanabish Bhawan, Sister Nivedita Girls Hostel, Chittaranjan Boys Hostel, Satyen Bose Boys Hostel etc.

The gardens are named as Vivek Udyan, Rabindra Udyan, Bidhan Udyan, etc.

The institute has a tradition of celebrating the Republic Day and Independence Day with full vigour and enthusiasm. The celebration includes parade of NCC members of the student group, unfurling of the tri-colour national flag, singing of national anthem and address by the Principal for the special days.

The Constitution Day celebration is another national event which infuses spirit and devotion to the Constitution of our Nation, in commemoration of the adoption of the constitution of India in 1950.

The institute takes all efforts to commemorate the Birth anniversary of Swami Vivekananda at the Vivek Udyan, which is named after Swami Vivekananda.

In commemoration of the contribution of Bharat Ratna Maulana Abul Kalam Azad, National Education Day is celebrated by the

institute.

The Institute celebrates Teachers Day at 5th September on the birth anniversary of Dr. S. P. Rradhakrisnan.

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	<a href="#">View File</a>
Geo tagged photographs of some of the events	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

## 7.2 - Best Practices

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

### Best Practice 1

#### Career Guidance Training

##### Objectives of the Practice

In today's ever-changing dynamism, Career Guidance to the students is the most vital aspect of college education so that the students can serve the needs of the ever-changing and dynamic market needs. To choose the right career path based on the interest of the students, BCREC offers education beyond the curriculum and provides career guidance to the students in the following aspects.

1. Exploring various career options
2. Developing self-confidence and self-reliance
3. Creating interest for higher studies
4. Promoting entrepreneurship
5. Promoting a culture among students for lifelong learning
6. Helping students to learn beyond the curriculum

## The Context

In today's competitive markets, the right path of career choice matching with the potential and the interest is not an easy task for the students. To keep the students career-focused and make them aware of the industry and social needs, career guidance through different training processes beyond the curriculum is most essential. The need of the hour is also to induce a habit among the students for lifelong learning to progress in the career. The challenge is changing the mindset of students to become skilled at how to learn new things and adapt themselves to the latest knowledge and techniques. Career growth culture among students has to be developed and will be of particular importance for ensuring their employability and facilitating their transition from college-level education and internship to face the challenges of the future. Finding the correct resource person for effective guidance (external or in-house) having competencies become more and more important in designing and implementation of this practice.

## The Practice

These goals are achieved through the following activities of the Training and Placement Department as well as the individual departments of specialization in the Institute:

1. Students are trained on Communication & Presentation Skills (using language lab) imparted by the faculty members of English Department - will have a great advantage in the job market and more choice in the profession.
2. Specific training on technical skills like Aptitude test, Programming skills, etc. is provided to the students by hiring Professional Agency, Co-cubes, Bangalore - The students' aptitudes and abilities measured by verbal and numeric reasoning tests can easily be related to real world tasks and jobs, as many jobs require some degree of skill with words and numbers.
3. Soft Skills Training Program (through institutional membership of British Council) which fall into four categories - (i) Problem Solving Skills (ii) Communication Skills (iii) Personal Qualities and Work Ethics (iv) Interpersonal and Teamwork Skills.
4. At the individual department level, Career Guidance is provided to the students to help them explore various career options.

5. Mock Tests, Mock Interviews and Personality Development training program by the Campus T&P team members are held on continuous basis to achieve higher rate of placement.
6. To create awareness about the opportunities / challenges in various engineering / application / management sectors, resource persons from industries are invited to deliver technical talks and to impart knowledge on the current trends and latest technologies. This helps students to provide industry insights making the success rate higher.
7. To make student more enthusiastic and boost their self confidence, alumni are also invited to address them and guide them through the career options.
8. Guidance on competitive examinations e.g. GATE and different public service commission examinations is also given at the department level.
9. Students are encouraged to participate in technical contests, carry out project work, undergo internships and also organize various technical fests and social activities to enhance their knowledge through experience.
10. Seminars/Workshops are organized by individual department/students' chapters in collaboration with renowned industries highlighting the importance of education in the industry are conducted.

### **Constraints faced during students' career guidance:**

There is a serious lack of awareness amongst students, their parents, and even teachers which creates difficulty while giving career guidance. There is a serious mis-match between skill building and available jobs. Awareness of career counseling is really low among the students, this leads to hesitation among the students to venture for career counseling in the first place.

### **Evidence of Success**

The career guidance training has augmented the awareness among the students about the importance of effective communication and has helped them to understand about the need for development of other skills other than the technical knowledge they acquire through their regular classes/ labs and continuous assessments.

The performance of the practice is reflected in the campus placement of the students. The total placement scenario has been changed and the placement percentage has taken an upward trend



year-by-year. Moreover, students started understanding that they are to be industry-ready as per the market need and it will create their demand. In the process, a larger section of the students get inclined to jobs of different flavor other than the jobs related to their specific technical skill sets.

To add to this, career guidance is helping the students to understand their inclination towards higher studies and they appear for GATE, CAT, GRE, etc. examinations. Although the success rate is not commendable, however, this kind of preparation makes the students ready for facing tough technical interviews as well their confidence increases many-fold on attempting public service examinations. This is evident from the fact that several students are qualifying for the public service commission examinations just after passing out.

## **Problems Encountered and Resources Required**

The problems encountered in implementing the practice are as follows:

1. Difficulty in motivating students about different flavours of jobs available as per industry demands.
2. Finding out right type of professional agencies who can provide training and skill sets to the students as per market demand.
3. Difficulty in convincing students for regularly attending the training programs by the professional agencies for facing tests/interviews.
4. Difficulty in motivating students for higher studies and public service examinations for which attending classes beyond the regular class hours is a requirement.
5. Making the faculty members convinced to deliver beyond the curriculum to prepare the students for competitive examinations.
6. Difficulty in making student understand about the fact the instead of short term goals, long term goals are more effective.

Although there are various problems, the institute has been able to implement the practice effectively through decentralizing the training and placement activities and mobilising its technical and non-technical resources in an efficient manner.

## **Best Practice 2**

## Content beyond Curriculum

### Objectives of the Practice

The main objective of the practice of Content beyond Curriculum is to help students in following aspects.

1. To groom the students in a progressive environment to become competent professionals.
2. To create excellent opportunity for students to acquire necessary skill sets and develops self-confidence / self-reliance to face various competitive and professional examinations for employability.
3. To enable the students to learn self-learning, team-building, leadership and management skills, innovation and creativity.
4. To diversify the programme contents and to establish greater relevance to socio-economic problems of the Society.
5. To inculcate democratic, moral, social and spiritual values in the minds of the learners.

### The Context

Since the industry is continuously evolving and technology is ever emerging, mere learning the curriculum is insufficient. There is often a mismatch between what is learnt in the institution and the industrial expectations from the graduate engineers. In order to bridge this gap and make students industry-ready, much emphasis is given for teaching content beyond the regular curriculum which includes branch specific value added courses with industrial tie up and hands-on placement training. It has become nowadays obvious for the institute that it should create opportunities for the students to inculcate attributes, which are not restricted only to engineering / management knowledge and acumen. Moreover, to cater to the need of the industry, the students require being thorough professionals who can work successfully in teams, who have leadership qualities, who are alive to social and community needs and who can bring innovation and creativity to their work and who are also digitally proficient.

### The Practice

While applying for accreditation for NBA in the year 2015, the institute adopted its own methodology for introducing the practice of content beyond curriculum. Initially academic contents beyond the curriculum were introduced for four programs which were applying for accreditation during the above time, as non-credit points having some contact hours. Socio-economic contents were imparted through co-curricular and extra-curricular events organized under NSS, NCC, etc. events for all the students.

Starting academic year 2018-2019, institute decided to introduce the choice based credit system (CBCS) following AICTE model curriculum for all B.Tech programs as specified by the university. Under this scheme from the academic year 2018-2019 onwards students became eligible for Honours degree by collecting minimum 20 extra credit points, as per mandate of the University. These additional 20 credits students acquire with online courses (MOOCs) where the rare expertise of world famous experts from academic and industry are available which provide the students with the excellent opportunity for skill set development required for employability. The basket for MOOCs is a dynamic one, as courses keep on updating with time. The credits to be earned over are four years (8+4+4+4).

The institute has also preferred SWAYM-NPTEL for implementing the CBCS as the institute is a NPTEL local chapter. If a student fails to complete the requirement of credit during the specified year he/she is given opportunity to complete the requirement in the next year by choosing from the new basket of courses.

As per Mandatory Additional Requirement (MAR) of the university, a concept of mandatorily accumulating some points through a basket of activities for professional development as well as to inculcate the values in the students has also been introduced from 2019. Faculty mentors constantly monitor participation of the students for different activities (details list of activities with points are included in a separate document). Institute notifies such activities through Activity Calendar and every student is required to earn minimum activity points in addition to the required academic grades.

## Constraints of the Practice

1. Committed faculty members are required to clarify doubts of the students participating in MOOCs courses. This requires

continuous up gradation of knowledge of faculty through FDP programs.

2. It has been observed that students enmasse generally prefer some particular course; other courses are chosen by a few. Breaking this chain as well motivating the students for different set of courses is quite challenging.
3. Individual counselling and guiding takes time and there was resistance from the faculty. Therefore awareness programmes and training had to be organized for the stakeholders.

## Evidence of Success

The practice is successfully implemented through constant monitoring by the MOOCs and MAR coordinators and motivating students by the mentors. Following are some of the achievements:

1. Several students of 2018-2022 batch participated in the soft skill development, ethics and programming skills. The programs wise list of the students is attached in the link.
2. For MAR activities all students are actively participating. Almost all pass-out students of 2019 and 2020 have completed the minimum requirements as specified for by the university.
3. In July-October 2019 NPTEL session (for MAR and CBCS), out of total 952 registered candidates 600 passed successfully (63%) with 11 toppers in different subjects.
4. Felicitation at the institute level is done every year for the successful NPTEL participants having Gold, Elite and Silver tags along with the course toppers. In September 2019, 20 Gold, 147 Elite and 67 Silver tagged candidates are felicitated along with 14 toppers.
5. As a nodal center of NPTEL, the institute has been recognized as an ACTIVE and one of the top 100 local chapters. Rating of the college is "A" which is based on performance in NPTEL Online certification courses in July-October 2019. The rank of this college is also in TOP 10 among all over the India.

## Problems Encountered and Resources Required

The challenges encountered in implementing the practice are as follows:

1. Being affiliated to a university, students are required to follow the traditional instructional method of learning

where exams are given much importance. This makes students lose interest in pursuing online and other value added courses.

2. Motivating students for CBCS is quite difficult. In many cases during the 1st year, students start participation in CBCS, however with further progress of semesters they lose interest in many cases.
3. Individual counselling takes time and the faculty members with their busy schedule for routine theory, laboratory classes as well as other academic activities do not find sufficient time for individual guidance.
4. Although there is a basket of MAR activities, however it is difficult to diversify students for all such activities. It becomes a challenge for the mentors to convince the students that more than the minimum points will enhance their professional and socio-economic capabilities as it is not linked to credit requirements.

File Description	Documents
Best practices in the Institutional website	<a href="https://bcrec.ac.in/BCREC_BEST_PRACTICES.html">https://bcrec.ac.in/BCREC_BEST_PRACTICES.html</a>
Any other relevant information	<a href="https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_7/7_2/7_2_1/ADDITIONAL_INFORMATION">https://srv15-bcrec.in/vc/AQAR_2020-21/CRITERIA_7/7_2/7_2_1/ADDITIONAL_INFORMATION</a>

### 7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

The Institute is celebrating more than two decades of its meaningful contribution in the promotion of higher technical education with a focus on sustainable growth projectile through positive industrial tie-ups, faculty expertise and media relationships. Earning media reputation over the years is one distinctive area to its priority and thrust.

The institute has been in the news for a highly successful global tie-up with Cambridge Marketing College, UK to explore the possibilities of knowledge exchange programmes and to encourage value added education. In 2020-21 academic year another MoU was signed with National Highways Authority of India, Ministry of Road Transport & Highways, Govt. of India for improving the efficiency of existing highways assets of the country through

student internship and faculty collaborations.

The teaching excellence at the Institute is inspirational for the young minds. In the environment of pandemic due to COVID 2019, the faculty members utilized e-learning modules when chalk-and-board teaching is not possible. Numerous Webinars on various beyond syllabus topics and digital events on extra-curricular activities were conducted for the next generation learning with belief that "Sky is Not the Limit".

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

### 7.3.2 - Plan of action for the next academic year

- Focus on National Education Policy (NEP) 2020 - In line with NEP, Webinars/Seminars/Workshops will be organized promoting quality education.
- Thrust on Research Excellence - Financial grants will be enhanced to encourage faculty members for participation in Conferences (National/International) and for publishing quality papers in reputed journals.
- Reaching to the neighbourhood through outreach activities - Approach is to be made to the Govt. to register the Institute as a NSS Unit on self-finance basis to undertake socially relevant voluntary activities
- Submission of Project Proposals to various funding Agencies - Engineering students as well as Faculty members will be encouraged for collaborative research leading to submission of project proposals to various funding agencies.
- Enhancing Higher Studies, Employability and Entrepreneurial skills - Planning for Career Guidance through in-house GATE coaching to promote higher studies. Mandatory Soft Skill Training from the 1st year of the study to increase employability quotient. Establishment of Entrepreneurship Development Cell to initiate ideas for start-ups.
- Implementation of AICTE-IDEA lab - Establishment of AICTE-IDEA lab in the Institute to fulfil the dream of Government of India for "Atma Nirbhar Bharat".