



## Agenda of the Third IQAC meeting (IQAC\_3) to be held on 12<sup>th</sup> July 2019

### 1. Action Taken Report on decisions of previous meeting :

**ATR 2/3** - Detailed Agenda Item No. 3/3 placed below for Outcome Based Learning and Reaccreditation of NBA and initiatives for NIRF, NAAC Accreditation

**ATR 2/6 – Placement activities** placed in Agenda Item No. 3/6

**ATR 2/7 - Students' Council activities:** IQAC noted that with active participation of Students' Council, the Tech Fest and Cultural Programme of 2019 were conducted successfully.

**ATR 2/9 - Progress of ERP software implementation:** General Secretary informed the house that M/s Hash Technology has started work on various Modules for ERP software implementation after signing the MOU on 6<sup>th</sup> March, 2019.

**ATR 2/10 - ICT Initiatives** placed in Agenda Item No. 3/10

**ATR 2/11 - Procedures to enhance Teaching-Learning process** placed in Agenda Item No. 3/12

**ATR 2/13 - Activities to encourage Research** placed in Agenda Item No. 3/9

**ATR 2/15 - Education Excellence Award** placed in Agenda Item No. 3/11

**ATR 2/19 – Environmental Initiatives** placed in Agenda Item No. 3/15

### 2. Confirmation of Minutes of previous meeting

### 3. Focus on Outcome Based Learning: Discussion on the progress work of NBA, NIRF and NAAC

### 4. Result Analysis and Discussion on Result Improvement Initiatives – Remedial Lectures for the drop outs

### 5. Induction Programme by each department for the first year students

### 6. Pre-placement Training for students through Test-Based-Training (TBT)

### 7. Enhancing Industry Institute Interaction - Industry Ready Orientation Program

### 8. Introduction of latest technological trends to the students – Students' Chapter activities

### 9. Research Initiatives:

- Book, Technical and Paper review by faculty from each department
- IEEE Conference in February 2020 to encourage research among faculties and students
- Encouragement to develop Innovative Project – Smart Railway System

### 10. ICT Initiatives –

- Discussion to conduct more classes in Digital Classrooms
- Discussions to create infrastructure to capture Lectures
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11. Centre of Excellence for Academic Education

- Education Excellence Award 2019 in Engineering
- Achievement: Ranks Top 10 in NPTEL
- Zee Bangla Exposure

12. Procedures to enhance Teaching-Learning process – Individual learning through NPTEL

13. Encouragement of new start-ups in Campus –

- Inauguration of IEEE, Student Branch, BCREC
- Seminar on “Role of IEEE for Young Engineers and Researchers”

14. Planning of Alumni Meet in December 2019

15. Activities to encourage Environment related Initiatives -

- Solar Energy Based Automated Seed Sowing Machine For Cultivation
- Solar Water Pumping System For Women, Children & Old People
- Collection and Preservation of Rain Water

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**Prof. Sanjay Sengupta**  
**Coordinator, IQAC Cell**





**Minutes of the proceedings of the Third Meeting of Internal Quality Assurance Cell (IQAC) of Dr. B. C. Roy Engineering College, Durgapur**

The 3<sup>rd</sup> IQAC Meeting was conducted on 12th July 2019 at 3.00 pm in the Board Room. Prof. (Dr.) Pijush Pal Roy, Chairperson of IQAC chaired the meeting.

Item	Agenda	Minutes of the proceedings
3/1	<b>Action Taken Report</b>	Chairperson started initial discussion with the minutes of the previous meeting and the corresponding actions taken thereof.
3/2	<b>Confirmation of minutes of previous meeting</b>	Minutes of the 2 <sup>nd</sup> meeting of IQAC was unanimously accepted and confirmed.
3/3	<b>Focus on Outcome Based Learning: Discussion on the progress work of NBA, NIRF and NAAC</b>	Prof. (Dr.) Chandan Koner updated all the members regarding the current work status of NBA. IQAC noted and appreciated that ME and IT departments submitted the accreditation applications in June, 2019. It was decided that all the faculty and staff members should put more effort to expedite the process of completion of submission of applications to NBA for other programs like EE, MBA, etc. Chairperson informed the members that a NAAC core committee has been constituted as per decision of the meeting of the Academic Council for submission of application to the NAAC at the end of Academic year 2019-20. Prof. Narendra Nath Pathak informed that the Institute will apply for NIRF in January'2020 for which work is in full swing.
3/4	<b>Result Analysis and Discussion on Result Improvement Initiatives – Remedial Lectures for the drop outs</b>	The semester results of December'2018 and June'2019 were reviewed and it was decided that initiatives should be taken to improve the semester results. The IQAC members proposed that Remedial lectures should be planned at departmental level for failures and dropout students. Each department should ensure that maximum number of students should attend these remedial sessions prior to University semester exams to be held in December'2019. IQAC further suggested that Remedial Classes must be included in the Regular Class Schedule.
3/5	<b>Induction Programme by each department for the first year students</b>	The IQAC Chairperson suggested that <b>Mandatory Induction Programme</b> for the first year students is to be conducted as per directives of the University to make the students aware about engineering education and their roles and responsibilities in Society. The college will holistically follow the directives of MAKAUT and it was proposed that an <b>Induction Programme Coordination Committee</b> is to be constituted with faculty members to coordinate smooth implementation of various events as per the schedule, for the first year students of the academic session 2019-20. Thus, it was concluded that the Induction Programme should be incorporated every year at the onset of the first semester as an integral part of undergraduate engineering

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		education.
3/6	<b>Pre-placement Training for students through Test-Based-Training (TBT)</b>	The IQAC team briefed about the placement statistics of 2018-2019 and the activities carried out. Although the placement statistics of 2019 batch was indeed excellent, but still it was proposed that in addition to the internal Training & Placement team, the pre-placement training will also continue to be given by external agency to improve the placement number as well as the salary package offered. IQAC team noted that to gear up the placement process of 2019-2020, the pre-placement training commenced with special modules of online assessment process and special Soft skills training with internal faculty members. It was also decided that the Test Based Training (TBT) mainly comprised of three distinct components, namely, Aptitude, Technical and Verbal & Soft Skills should be continued with M/s. Cocubes, Placement Season and Reference Globe.
3/7	<b>Enhancing Industry Institute Interaction Industry Ready Orientation Program</b>	In order to enhance Industry-Institute Interaction, it was decided to invite eminent industry experts to deliver a talk in the Institute Campus and update the students regarding the recent trends in industry. In order to commemorate the Industry Institute Relationship, BCREC had arranged a technical seminar titled " <b>Industry Ready Orientation Program</b> " organized on 4 <sup>th</sup> May, 2019 by the Electrical Engineering Department under IEEE banner. The lead speakers were from Philips Carbon Black Pvt. Ltd., Durgapur and were mainly addressed for the 6 <sup>th</sup> semester students to make them industry-ready. The session was a very interactive one where numerous questions related to campus interview was discussed.
3/8	<b>Introduction of latest technological trends to the students</b>	As discussed and suggested by the IQAC team, the Institute conducted a series of Workshops, Seminars and Certification Programme in the College Campus so that the students can be benefitted to the fullest extent to upgrade and enrich their knowledge base regarding the latest technology trends in IT Industry. Events were as follows - IQAC team noted that One day certification program on " <b>Modern International Digital Marketing Tools and Practices</b> " was conducted at Dr. B. C. Roy Engineering College, Durgapur on 19 <sup>th</sup> March, 2019 which was hosted by Maulana Abul Kalam Azad University of Technology (MAKAUT), West Bengal partnered by The <b>Cambridge Marketing Services, UK</b> . The event mainly highlighted the types, processes, tools and strategies of Digital Marketing in today's market with a very lucid presentation which was beneficial for the students and the faculty members of the college. IQAC noted and appreciated that a seminar on " <b>Cloud Computing</b> " was organized on 29 <sup>th</sup> March, 2019. The seminar

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		<p>commenced with the discussion of the basic technologies available in modern India, and the technology behind the various webs and apps viz. Amazon, online shopping and so on. The principles of cloud and application of Cloud Computing in present and future job scenario was also elucidated. It was also highlighted that special skill sets like knowledge in Internet of Things (IoT), programming knowledge in C++, Java &amp; Python, Cloud Computing must be acquired by the students in present scenario.</p> <p>As approved by the IQAC, a 3-day workshop titled “<b>Basics of Python</b>” was conducted by IIT Mumbai, in association with FOSSEE and technically supported by the IEEE student branch of BCREC was organized at Dr. B. C. Roy Engineering College, Durgapur during 1<sup>st</sup> May – 3<sup>rd</sup> May, 2019. Students were trained through online sessions about the basics of Python scripting language, IPython, Plotting, Arrays and Numpy Arrays etc. The special attraction of the Workshop to the students had been the interactive session which included Quiz and Q&amp;A Session through video conferencing using appear.in software provided by FOSSEE.</p>
	<b>Student activities</b>	<b>Chapter</b>
		<p>C.S.I. student chapter organized a one day workshop on “<b>Google Cloud Study – JAM</b>” on 16<sup>th</sup> March, 2019 to provide an insight on the recent applications on Google Cloud.</p> <p>CSI Student Chapter and ICODERS Club organized a workshop on “<b>Blockchain</b>” on 18<sup>th</sup> April, 2019 where eminent speakers from the IT Industry delivered the lectures with exposure to hands-on exercises to the participating students on Blockchain.</p>
		<p>IQAC team appreciated all the efforts taken by various departments for conducting all such technical enhancement programs for the students and suggested that to enrich the knowledge of the students in order to make them industry-ready, such programs should be regularly continued.</p>
3/9	<p><b>Research Initiatives:</b></p> <p>(i) <b>Book, Technical and Paper review by faculty from each department</b></p> <p>(ii) <b>Upcoming IEEE Conference in February 2020 to encourage research among faculty members and students</b></p> <p>(iii) <b>Encouragement to</b></p>	<p>IQAC Coordinator, Prof. (Dr.) Sanjay Sengupta highlighted the need of Book, Technical and Paper review by the faculty members to remain updated with the latest technology. It was proposed by IQAC that faculty members from each department should participate in these activities.</p> <p>Chairperson, IQAC initiated the discussion on the planning and organization of National IEEE Conference entitled <b>The National Conference on Emerging Trends on Sustainable Technology and Engineering Applications (NCETSTE-2020)</b> in the month of February’2020. The tentative dates were fixed during 7<sup>th</sup> – 8<sup>th</sup> February, 2020. IQAC decided that the conference will foster research between the Universities and Industries for the benefit of the common people in the country and generate ideas for sustainable growth in Engineering applications.</p>

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	<p><b>develop Innovative Project – Smart Railway System</b></p>	<p>The IQAC team suggested that the Institute should encourage the students as well as the faculty members to develop Innovative Projects to promote research activities in the College Campus. In compliance to this, Chairperson mentioned that an innovative project, namely, “<b>Smart Railway System</b>” has been developed by a team comprising of students of ECE department of the Institute. The above project also won the second prize in the event of “<b>Innovative Project Exhibition</b>” organized by MAKAUT on the occasion of National Science Day held on 28<sup>th</sup> February, 2019. The main focus of this project is passengers’ safety and reduction of corruption prevailing in the existing system such that no intruders will be able to get inside the train. During the event, the Institute was also conferred the second prize by the affiliating University for its overall research initiatives of the students of CE, EE and ECE departments.</p>
<p>3/10</p>	<p><b>ICT Initiatives – (a) Discussion to conduct more classes in Digital Classrooms (b)Discussions to create infrastructure to capture Lectures</b></p>	<p>It was suggested by the IQAC members to maximize the use of ICT resources in every department of the Institution. More emphasis should be given to utilize the digital classrooms and digital contents by implementing presentation slides or displaying videos to enhance the teaching-learning process. It was also suggested that online tests should gradually replace the written tests. IQAC also suggested that departmental routines should include the above ICT enabled classes.</p> <p>It was proposed by IQAC to create the infrastructure to implement the Lecture Capture facility of the lectures delivered by the faculty members in their respective classes so that they can be referred by the students for doubt clarification. Everybody agreed on this and necessary steps were discussed.</p>
<p>3/11</p>	<p><b>Centre of Excellence for Academics (a) Education Excellence Award 2019 in Engineering (b)Achievement: Ranks Top 10 in NPTEL ©Zee Bangla Exposure</b></p>	<p>The IQAC team highlighted that one of the main objective of this Institute to convert it into a <b>Centre of Excellence</b> in the field of Education and set an example for other Engineering and Management Colleges in the locality. In order to accomplish this target, all the staff members along with the students need to work effectively and efficiently with dedication.</p> <p>IQAC team was happy to note that popular electronic media, the Zee 24 Ghanta news channel shoot a video documentary of 22 minutes duration and telecast the same for its viewers widely on 12<sup>th</sup> June, 2019 to spread the news of excellence and achievement in the field of Academics. The above coverage projected the academic excellence, discipline and ambience of the Institute along with useful bytes taken from students and faculty members, as per suggestion by the IQAC team.</p>

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		IQAC members lauded that with hard work and dedication, the Institute won prestigious <b>“Education Excellence Award 2019 in Engineering”</b> from a renowned Bengali News Channel Zee 24 Ghanta as a mark of recognition of its excellence in the field of Engineering. The award was given on 28 <sup>th</sup> June, 2019.
3/12	<b>Procedures to enhance Teaching-Learning process – Individual learning through NPTEL</b>	IQAC Coordinator, Prof. (Dr.) Sanjay Sengupta initiated the discussion regarding the active participation of the Institute as a Local Chapter (LC) of National Programme on Technology Enhanced Learning (NPTEL). He further shared that it is a matter of pride and achievement that Dr. B. C. Roy Engineering College, Durgapur is in the Top 10 ( <b>Rank “AAA”</b> ) amongst all colleges in PAN India and it has also secured the Top 3 position in NPTEL Local Chapters amongst the 115 Local Chapters in West Bengal. IQAC also noted that as per advice, BCREC felicitated on 27 <sup>th</sup> March, 2019 all the students and faculty members who had secured Top positions in NPTEL various courses.
3/13	<b>Encouragement of new start-ups in Campus – Inauguration of IEEE, Student Branch, BCREC- Seminar on “Role of IEEE for Young Engineers and Researchers”</b>	The IQAC members recommended that it is essential that the Institute should take the initiative to introduce new start-ups in the Campus. To encourage research activities, the IEEE, Student Branch of Dr. B. C. Roy Engineering College, Durgapur was inaugurated on 5 <sup>th</sup> April, 2019. The IEEE Student Branch provides opportunities to meet and learn from fellow IEEE Student and Graduate Student Members and engage with professional IEEE members locally. To grace the occasion, a seminar on <b>“Role of IEEE for Young Engineers and Researchers”</b> was also organized on the same day. The seminar commenced with a speech on “History of IEEE”.
3/14	<b>Planning of Alumni Meet in December 2019</b>	Every year many students pass out from the Institute. It is essential to connect with the Alumni for the advancement of the Institution. Hence, it was proposed by IQAC that Alumni meet should be conducted every year in the Institute Campus to connect the entire Alumni network with the current students. Accordingly, all the members agreed to this proposal and it was decided to conduct the first Alumni meet on 22 <sup>nd</sup> December, 2019 to bridge the gap between the industry and the academia through the Alumni base of the Institute.
3/15	<b>Environmental related initiatives - Activities to encourage Solar Energy Projects (a) Solar Energy Based Automated Seed Sowing Machine For Cultivation (b) Solar</b>	In order to create awareness about the environmental issues, it was proposed by IQAC team to encourage more Solar Energy Projects. In accordance with this proposal, a three-member students team from EE department invented a <b>“Solar Energy based Automated Seed Sowing Machine for Cultivation”</b> in order to make it more environment friendly and clean technology without any running cost. IQAC team appreciated the above initiative of the students.

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	<b>Water Pumping System For Women, Children &amp; Old People (c) Collection and Preservation of Rain Water</b>	<p>Another project based on solar energy was the “<b>Solar Water Pumping System for women, children and old people</b>” where an eco-friendly and cost-effective pumping system which can utilize solar energy to draw out ground water was developed by the final year ME students. Since in rural areas, many homes have to depend on hand-operated pumps which often becomes difficult to operate by the women, children and aged persons when the demand of water is high, it was presumed that the above initiative will help a lot among the people of such localities.</p>
		<p>To preserve the environment and to create awareness about the environmental issues, it was proposed by IQAC that the Institute should take the initiative to organize Recycle Campaign in the Campus. Thus, to promote environmental conservation and protection, a Project to collect and preserve rain water for harvesting to be undertaken by the Institute as a part of Green initiatives. The IQAC Chairman updated all the members regarding the progress of this Project.</p>

It was unanimously decided to conduct the next meeting in the month of February, 2020 and discuss the Action Taken Reports on the Agenda Items of the current meeting as well as new Agenda Items of the next meeting.

The meeting thereafter ended with a vote of thanks to the Chair.

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16/7/2019