

**Dr. B. C. Roy Engineering College, Durgapur**  
**Department of Electronics and Communication Engineering**

**Notice**

No. BCR/ECE/23/07/11

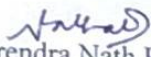
Date: 11.07.23

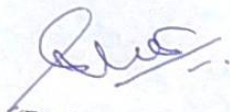
A departmental meeting with all faculty and staff members will be held on 11.07.23, Tuesday at 4:00 PM at Xilinx Lab. to discuss the following agenda.

**Agenda**

- 1) Confirmation of the Minutes of the last Meeting
- 2) Action Taken Report (ATR) on feedback
- 3) Add-on Courses approval and modalities

All the faculty and staff members of ECE department are hereby requested to attend the meeting positively before scheduled time.

  
(Dr. Narendra Nath Pathak)  
Head of the Department  
Distribution:

  
(Dr. Sourav Moitra)  
Convenor, DAC

All Faculty / staff of ECE Department

Copy to:

1. General Secretary, BCREC
2. Principal, BCREC
3. Vice Principal, BCREC
4. DAC FILE.

**Dr. B. C. Roy Engineering College, Durgapur**  
**Department of Electronics and Communication Engineering**

Ref. No. BCR/ECE/23/07/11

Date: 11.07.2023

A DAC meeting was held on 11/07/2023 at 04:00 P.M at Xilinx Lab, ECE department to discuss:

- Action Taken Report based on Feedback on Academics, Feedback on facilities and Course End Feedback taken for the Academic Year 2022-2023. The feedback was submitted to college feedback portal by 176 students of Electronics and Communications Engineering department.
- Approval of following Add-on courses for the students of ECE department
  1. CRYPTOGRAPHY AND NETWORK SECURITY by Dr. Sarit Pal for 7th sem ECE department's students.
  2. Fault Detection and Calibration of Electronics Equipments. by Prof. Debipriya Dutta & Prof. Soumendra Pain for 5th sem ECE department's students

**1. Action Taken Report based on feedback**  
**Academics Feedback**

**Final Year Students**

- The majority of students agreed (73.33%) that they have acquired new technical or scientific knowledge, with 21.67% strongly agreeing.
- The subjects studied were found to be relevant to current industry needs by most students (86.67% agree or strongly agree).
- The highest level of satisfaction was noted in the area of mentorship and counselling process with 43.33% strongly agreeing and 55% agreeing.
- Communication skills improvement was another highly rated area, with 51.67% strongly agreeing and 41.67% agreeing.
- The pedagogical methods used by the teachers were deemed effective and interesting by 95% of the students (agree or strongly agree).
- There seems to be adequate opportunities for co-curricular and extracurricular activities, with 96.67% of students agreeing or strongly agreeing.

**First Year Students**

- While the feedback is generally positive, there are areas where improvement can be made. For example, 14.29% of students disagreed that they were able to apply the knowledge and skills they gained in real life problem solving.
- 22.86% of students were not sure if the subjects they studied were relevant to the current industry need.
- The feedback on the mentorship and counselling process was relatively positive, with 85.71% of students agreeing or strongly agreeing that it was good.
- Students' feedback on improving communication skills was highly positive, with 91.43% of students agreeing or strongly agreeing.

**Second Year Students**

- Only one student participated in the survey, providing only positive feedback. This feedback might not be representative of the overall student experience.

**Third Year Students**

- The feedback from third year students is generally positive, with majority of students agreeing that they have acquired new technical or scientific knowledge and that the subjects they studied were relevant to the current industry need.
- The highest level of satisfaction was noted in the area of mentorship and counselling process with 24.44% strongly agreeing and 64.44% agreeing.
- Areas where improvement can be made include the pedagogical methods used by the teachers and the opportunities for co-curricular and extracurricular activities.

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## Facilities Feedback

### Final Year Students

- The highest rated facility was the laboratory, with 67.67% of students rating it as excellent or very good.
- The internet facility had the lowest rating, with 18.33% of students rating it as poor.

### First Year Students

- The library was rated the highest by the first-year students, with 62.86% rating it as excellent or very good.
- The lowest rated facility was the internet, with 35.71% of students rating it as poor.

### Second Year Students

- The second year student rated all facilities as excellent.

### Third Year Students

- The facilities with the highest ratings were the laboratory, library and water facility, with over 60% rating them as excellent or very good.
- The internet facility had the lowest rating, with 26.67% of students rating it as poor.

In summary, while the feedback is generally positive across all years, areas of improvement include the relevance of the subjects to the current industry need, the pedagogical methods used by the teachers, the opportunities for co-curricular and extracurricular activities, and the internet facility.

The year wise breakup of responders:

Year	Participant Count
1 <sup>st</sup>	70
2 <sup>nd</sup>	1
3 <sup>rd</sup>	45
4 <sup>th</sup>	60

The participant count accounts for nearly 86% of the total strength combined.

### Action Taken Report based on Feedback on Academics for the AY 2022-23

A majority of students across all years have agreed or strongly agreed that they have acquired new technical or scientific knowledge, indicating that our teaching methods have continued to be effective in conveying complex scientific and technical concepts. This is a positive sign that the teaching methods are being well-received by the students. However, there is still room for improvement to help the small proportion of students who disagreed or were not sure about the acquisition of new knowledge.

Our mentorship and counselling process continues to receive high praise from students, with high agreement across all years, indicating that the unified mentoring framework remains effective. It has undoubtedly had a positive long-term impact on students' academic performance and overall development.

The areas of concern identified based on feedback from students are mainly related to the ability to apply the knowledge and skills gained in real-life problem solving, the relevance of the subjects to the current industry need, the adequacy of modern tools in the laboratories, and the opportunities for co-curricular and extracurricular activities.

The feedback received from students across different years provided crucial insights into the teaching and learning environment of our institution. While a majority of the students agreed or strongly agreed that they have acquired new technical or scientific knowledge, there is still a need to further refine our strategies for a more holistic educational experience.

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Our unified mentoring framework has continued to show effectiveness, demonstrating the long-term positive impact on students' academic performance and overall development. However, there are areas where we can enhance our approach to better serve our students.

**Identified areas of concern (with > 3% disagreement):**

- Ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated (3.3% disagreement)
- Draw conclusions using first principles of mathematics, natural sciences, and engineering sciences (3.3% disagreement)
- Ability to apply research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions (5.6% disagreement)
- developed the ability to create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations (4.4% disagreement)

**Actions taken/suggested:**

- **Real-world problem-solving skills:** Our curricula will incorporate more real-world case studies and practical examples. This will allow students to better understand how theoretical concepts can be applied to solve actual problems. Additionally, through our Advanced Prototyping Lab, students will have the opportunity to work on projects that go beyond the regular curriculum, encouraging innovative thinking and practical problem-solving.
- **Relevance to industry needs:** We will maintain our close engagement with industry professionals and continuously update our curriculum based on their feedback. This ensures that our students acquire the most relevant and up-to-date skills needed in the industry. Our Xilinx Lab for FPGA and Texas Instruments Innovation Lab are prime examples of our commitment to providing industry-relevant exposure to our students.
- **Modern tools in laboratories:** A comprehensive review of the tools and equipment in our laboratories will be conducted. Necessary upgrades will be implemented to ensure that our students have access to the most modern and advanced tools, enhancing their learning experience. Labs like the Xilinx Lab for FPGA and Texas Instruments Innovation Lab provide students with access to state-of-the-art equipment and software, keeping them at the forefront of technological advancements.
- **Co-curricular and extracurricular activities:** We will increase the diversity of co-curricular and extracurricular activities available to students. This will offer more avenues for students to explore their interests, hone their skills, and develop a well-rounded personality.
- **Emphasis on Research and Research methodology:** To bridge the gap between academic knowledge and practical implementation, we will intensify our focus on research methodologies in each course. This will expose students to the process of scientific inquiry and foster a culture of research and innovation.
- **Coding and Code Repositories:** We will organize additional sessions on coding and maintenance of code repositories. This will enable students to stay updated with the latest technologies and best practices in software development. We believe that strengthening coding skills will enhance students' problem-solving capabilities and prepare them for diverse roles in the tech industry.

Through these strategic actions, we are confident that we will address the areas of concern raised by students and further enhance the quality of our teaching and learning environment. Our commitment is to provide a comprehensive and industry-relevant education that prepares our students for success in their future careers.



### Action Taken Report based on Feedback on Facilities for the AY 2022-23

The feedback received from students across different years provides a clear understanding of the existing facilities and the areas that require improvement. We acknowledge that some of the facilities such as the hostel, canteen, and internet are managed by the Central Authority, yet they significantly impact the overall student experience.

#### **Identified areas of concern (with > 3% disagreement):**

- Hostel facility (11.96% disagreement)
- Sports facility (5.63% disagreement)
- Water facility (3.52% disagreement)
- Cleanliness and Hygiene (5.63% disagreement)
- Canteen facility (11.97% disagreement)
- Internet facility (17.61% disagreement)

#### **Actions taken/suggested:**

- Internet facilities has been upgraded with 1GBPS Switches in department.
- Wi-Fi is upgraded to dual band with 5.2GhZ high speed (1Gbps) routers.
- Password of all routers has been provided to students.
- Wi-Fi routers are placed at optimized locations for better coverage.

#### **Actions taken/suggested based on feedback:**

- **Laboratory Facility:** The existing labs such as the Xilinx Lab for FPGA and Texas Instruments Innovation Lab have received positive feedback. However, we will continue to strive for excellence by integrating more advanced equipment and tools, as well as by considering the introduction of new labs that align with the evolving needs of the industry and curriculum.
- **Library Facility:** We will continue to enhance the library resources, both offline and online, to cater to the diverse academic interests of our students. Accessibility and a wider range of resources will be our primary focus.
- **Hostel Facility:** Although the hostel facility is under the jurisdiction of the Central Authority, the department will actively collaborate with them to improve the living conditions based on the feedback received. We will facilitate communication between the students and the Central Authority to address specific issues.
- **Internet Facility:** The department acknowledges the critical role of reliable internet services in academic and personal life. While the internet facility is managed by the Central Authority, the department will advocate for an upgrade in internet infrastructure to ensure stable and high-speed internet connectivity across the campus.
- **Sports Facility:** We will continue to maintain and enhance the sports infrastructure and encourage students to participate in physical activities for their overall well-being.
- **Water Facility, Cleanliness, and Hygiene:** These facilities, managed directly by the department, have received positive feedback. We will continue to maintain high standards in these areas.
- **Canteen Facility:** Although the canteen facility is managed by the Central Authority, the department recognizes its importance in the day-to-day life of students. We will represent the students' feedback to





the Central Authority and suggest improvements in the quality and variety of food offered.

By addressing these areas, we aim to create a better learning environment for our students. It is crucial to note that while some facilities are not under the direct purview of the department, we are committed to working with the relevant authorities to ensure that all student needs are met. We thank the students for their valuable input and assure them of our continued efforts to enhance their experience at our institution.

Up gradation of Hostel, Canteen and Food facilities are suggested and the same is forwarded to central authorities.

Departmental UG students have access to sports equipment and gym facilities at prescribed timings, as was reported Sports Committee. No Action is required thereof regarding this issue, as is decided in the meeting.

#### Action Taken Report based on Course End Feedback (Exit Survey) on Facilities for the AY 2021-22

The exit survey of the Electronics & Communication Engineering program for the 2023 pass out batch was participated in by 24 students. The responses indicate an overall positive learning experience and program outcome.

The majority of the students (63.19%) agreed that they have developed capabilities in various aspects of engineering such as applying knowledge of mathematics, science, engineering fundamentals, and engineering specialization for the solution of complex engineering problems. A significant number of students (35.76%) strongly agreed with this.

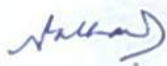
Furthermore, a total of 98.96% of the respondents either agreed or strongly agreed that they are able to identify, formulate, research literature, and analyze complex engineering problems. They believe they have reached substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

The students also showed a high degree of confidence in their abilities to design solutions for complex engineering problems and design system components or processes that meet specified needs. This includes considerations for public health and safety, and cultural, societal, and environmental considerations.

The respondents unanimously agreed (100%) that they have developed the ability to create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

On the ethical front, the students expressed a strong commitment to applying ethical principles and adhering to professional ethics and responsibilities and norms of the engineering practice. They also showed understanding of the impact of professional engineering solutions in societal and environmental contexts, and the need for sustainable development.

In terms of communication skills, the students felt confident about their abilities to communicate effectively on complex engineering activities with the engineering community and with the society at large. This includes comprehension and writing effective reports and design documentation, making effective presentations, and giving and receiving clear instructions.





In terms of lifelong learning, the students strongly agreed that they recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

Overall, the exit survey results reflect positively on the Electronics & Communication Engineering program's ability to prepare students for their future careers and lifelong learning.

**Identified areas of concern (with > 3% disagreement):**

- "Are you able to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences?" had a disagreement rate of 4.17%.

This suggests that some students may have struggled with these aspects of the program. This could be due to a variety of reasons such as difficulty of the material, pace of the class, teaching methods, or personal circumstances. Further investigation may be needed to determine the root cause and find potential solutions. However, since this is just one aspect and the disagreement rate is low, it might not be a major concern. It's also worth noting that the overall feedback for the program is extremely positive.

**Actions taken/suggested:**

- To address concerns about applying the knowledge of mathematics, science, and engineering to complex engineering problems, we have incorporated additional workshops and seminars focusing on practical applications. These sessions, led by industry experts, are designed to bridge the gap between theoretical knowledge and its practical application.
- In response to feedback about the need for more hands-on experience, we have expanded the scope of our laboratories. The Xilinx Lab for FPGA and the Texas Instruments Innovation Lab have been equipped with the latest tools and technologies to provide students with hands-on experience beyond the curriculum. In addition, our Advanced Prototyping Lab has been set up to encourage innovation and exploration outside of the regular coursework.
- To address the need for improved research skills and methods, we have introduced a research methodology module in the curriculum. This includes sessions on how to conduct literature surveys, design experiments, analyze data, and present findings in a coherent and logical manner.
- Recognizing the importance of communication skills in professional settings, we have introduced a comprehensive soft skills training program. This program includes components such as report writing, presentation skills, team collaboration, and leadership training.
- To address the concern related to ethical principles and professional responsibilities, we have integrated a module on engineering ethics into our curriculum. This module emphasizes the importance of professional ethics, legal considerations, and societal responsibilities in engineering practice.
- To ensure our students are prepared for lifelong learning, we have introduced a series of workshops on the latest developments in technology and engineering. These workshops are designed to instill a habit of continuous learning and adaptation in the face of rapid technological advancements.




- We continue to incentivize student participation in external competitions and events, both financially and with equipment. Our past efforts have resulted in students achieving top positions in competitions held across India.
- To ensure our students are industry-ready, we have increased our focus on coding and AI training sessions. We have found that the inclusion of GitHub and coding projects in our curriculum has significantly improved our students' overall skills, as reflected in the positive results of campus placements.
- Finally, to facilitate the transition from academia to the industry, we have introduced Test-Based Training as part of our Placement Guidance. These sessions, organized for final-year students appearing for campus interviews, have proven to be very effective in preparing our students for the job market.

While we are pleased with the overall positive feedback, we are committed to continuous improvement and will continue to take steps to enhance the learning experience of our students.

## 2. Add-on Courses:

Two add-on courses are offered from ECE department for the current ongoing odd semester'2023. One course is for ECE 5<sup>th</sup> semester students while the other is for ECE 7<sup>th</sup> sem students. The syllabuses of both the courses are ready and the DAC members approved the syllabus. Weekly 2 classes for both the courses are included in the routine. The modalities of assessment process, certificate with grade & lesson plan are also discussed and DAC members approved the mentioned items.

All members are unanimously decided to send all related documents to IQAC, BCREC for the acceptance of the above two discussed agendas.

  
(Dr. Narendra Nath Pathak)  
Head of the Department  
ECE Department

  
(Dr. Sourav Moitra)  
Convenor, DAC



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

## Department of ECE

## DAC meeting attendance

Date: 11.07.2023

Time: 3:00 PM

Venue: Xilinx Lab.

Sr. No.	Name of the faculty members	Designation	Signature
1	Dr. Narendra Nath Pathak, HoD	Professor	
2	Dr. Khondekar Mofazzal Hossain	Professor	
3	Dr. Sarit Pal	Professor	
4	Dr. Tapas Mondal	Associate Professor	
5	Dr. Aloke Saha	Associate Professor	
6	Dr. Tribeni Prasad Banerjee	Associate Professor	
7	Ms. Keka Hajra	Assistant Professor	
8	Dr. Rajdeep Ray	Assistant Professor	
9	Dr. Ramkrishna Rakshit	Assistant Professor	
10	Ms. Dipta Chaudhuri	Assistant Professor	
11	Dr. Aritra Bhowmik	Assistant Professor	
12	Dr. Anirban Chattopadhyay	Assistant Professor	
13	Dr. Abhijit Banerjee	Assistant Professor	
14	Dr. Mrinmoy Chakraborty	Assistant Professor	
15	Dr. Rajib Banerjee	Assistant Professor	
16	Ms. Debipriya Dutta	Assistant Professor	
17	Ms. Moutusi Mondal	Assistant Professor	
18	Mr. Nilkamal Bhunia	Assistant Professor	
19	Dr. Ankita Mitra	Assistant Professor	
20	Mr. Pradipta Sarkar	Assistant Professor	
21	Dr. Ardhendu Sekhar Chattopadhyay	Assistant Professor	
22	Mr. Tapas Roy	Assistant Professor	
23	Mr. Koustav Roy	Assistant Professor	
24	Dr. Anup Kumar Das	Assistant Professor	
25	Ms. Subhadra Debroy	Assistant Professor	
26	Mr. Surajit Batabyal	Assistant Professor	
27	Mr. Samujjwal Ray	Assistant Professor	
28	Mr. Moloy Mukherjee	Assistant Professor	
29	Mr. Soumendra Pain	Assistant Professor	
30	Dr. Sibendu Mahato	Assistant Professor	
31	Mr. Atin Mukherjee	Assistant Professor	
32	Mr. Koushik Ghosh	Assistant Professor	
33	Mr. Santanu Roy	Sr. Technical Assistant	
34	Mr. Samar Nath Rajak	Sr. Technical Assistant	
35	Ms. Dolan Das	Sr. Technical Assistant	
36	Mr. Sonatan Dutta	Technical Assistant	
37	Mr. Sukanta Mukherjee	Supervisor	
38	Dr. Sourav Moitra (DAC Convenor)	Assistant Professor	