



# NETAJI SUBHASH ENGINEERING COLLEGE

Techno City, Garia, Kolkata – 700 152

## IQAC Annual Report 2022-2023

The Internal Quality Assurance Cell (IQAC) at Netaji Subhash Engineering College plays a pivotal role in enhancing the quality of education, research, and overall institutional development. Through a series of strategic initiatives and collaborations with national and international organizations, the IQAC has continuously worked to maintain the highest standards in academics, faculty development, student support, infrastructure enhancement, and innovative projects. This report highlights key achievements, initiatives, and inputs made during the academic year 2022-2023

### **Key Financial and Collaborative Achievements**

#### **Grant and Funding Support:**

- The Institute was awarded a 1.0 Lakh grant from the Ministry of Education Innovation Cell (MoE IC), Government of India (GOI) to further the development of innovation initiatives across departments.
- The IEEE MTT Student Branch Chapter (SBC) received a grant of USD 1500 from the MTT Society. Additionally, student members benefited from travel grants, registration fees, accommodation, and cash awards for various academic activities and conferences.
- Collaboration with NIELIT Kolkata: Eleven faculty members were trained in Blockchain Technology under the Training of Trainers (ToT) program. Additionally, 187 students were mentored and enrolled in a blockchain technology certification course.

#### **Student Achievements:**

- Best Paper Award: Anirban Chatterjee, a PhD student, along with his supervisor Dr. Koushik Dutta, received the Best Paper Award at the IEEE WAMS 2023 in Gandhinagar, Gujarat. Anirban was awarded a cash prize of Rs 15,000 along with travel grants and accommodation.
- National Achievements: Abhijit Ray, a first-year student of Electrical Engineering, earned a bronze medal at the 39th National Kyorugi and 12th POOMSE National Taekwondo Championship held at Vishakhapatnam.

#### **Innovative Projects and Competitions:**

- Team Buzz and Team Powercon Technology won the IITF Best Start-up Award in the "Future Entrepreneur" and "Innovation of the Year" categories at the BNCCI organized event.
- PowerCon secured the WINNER title at Shark Pool Season 2 at Amiphoria 2k23, hosted by Amity University Kolkata.
- The Institute secured 4th position in the General Championship (GC) at Cognizance 2023, an annual tech fest organized by IIT Roorkee.

### **Infrastructure and Teaching-Learning Enhancement**

#### **Digital Teaching-Learning Initiatives:**

- 55 classrooms and laboratories have been equipped with state-of-the-art ICT facilities to facilitate digital teaching and learning.





- The institute has expanded its online learning resources, including NPTEL course materials, e-journals, ebooks, and a library book renewal system.
- Surveillance and Safety: A total of 212 CCTV cameras have been installed across classrooms, laboratories, and important areas to create a safe and conducive learning environment.

#### **Skill Development and Coding Initiatives:**

- Competitive Coding classes were introduced in the regular timetable for second-year students, facilitated by external experts and internal faculty from the Academy of Skill Development. This program focused on C++, Python, and Java, enhancing problem-solving abilities.
- The GNX Society in collaboration with the Department of Computer Science and Engineering organized a two-day IoT Workshop, integrating competitive coding contests.

#### **Research and Collaboration Initiatives**

##### **Interdisciplinary Research and Sponsored Projects:**

- Faculty members have actively mentored students on problem-centric projects in fields such as healthcare, renewable energy, AI, ML, and cybersecurity. These projects have contributed to the development of innovative solutions, with financial support provided to students for their participation in hackathons and innovation competitions.
- Three research proposals were submitted for funding under schemes like SERB-Core Research Grant, SERB-SUPRA, and CSIR-ASPIRE.

#### **MoUs and Collaborations**

##### **The Institute signed four MoUs with prominent organizations:**

- NIELIT Kolkata for Blockchain Technology training.
- Sun Eco Tech Ventures Pvt. Ltd. for sustainability-focused collaborations.
- TCS for Academic Interface Programs (AIP) focused on digital skill development.
- Accenture for Japanese language training, benefiting 150 students.

#### **Innovative Courses and Certifications**

- The NIELIT Kolkata collaboration led to the training of faculty members and students in Blockchain Technology. A comprehensive Bridge Course was conducted, which helped faculty gain certifications, while students completed the Blockchain Technology certification course.

#### **Professional Development and Industry Collaboration**

##### **Faculty Development Programs (FDP):**

- Nine Professional Development Programs (PDPs) and five seminars were organized by IEEE student branches, covering contemporary topics such as Quantum Intelligence, Blockchain Technology, and Artificial Intelligence.
- The Institute hosted a workshop on "Innovation and Entrepreneurship as a Career Opportunity", and a series of webinars and invited talks on emerging technologies and their applications.

#### **Collaboration with Industry**

The Institute's collaboration with NASSCOM under the Future Skill Prime project led to the training of faculty and students in Blockchain Technology. Additionally, an industry-academia interface was maintained through various events, conferences, and placements.





### Future Plans

- ❖ Further expansion of interdisciplinary research projects and submission of more proposals for sponsored research.
- ❖ Continued enhancement of digital teaching facilities and the implementation of more student innovation projects.
- ❖ Strengthening collaborations with industry partners, focusing on entrepreneurship, technology transfer, and faculty/student exchange programs.

### Conclusion

The IQAC at Netaji Subhash Engineering College has consistently worked to enhance academic and research quality, student engagement, faculty development, and infrastructure. Through strategic collaborations, initiatives, and fostering a culture of innovation, the institute continues to provide an environment that nurtures the development of both students and faculty. Moving forward, we remain committed to our vision of becoming a center of excellence in education and innovation.



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Prof. (Dr.) SUKUMAR ROY  
Co-ordinator-IQAC  
Netaji Subhas Engineering College  
Techno City, Garia  
Kolkata-700 152