



# NETAJI SUBHASH ENGINEERING COLLEGE

Techno City, Garia, Kolkata – 700 152

## IQAC Annual Report 2018-2019

The Internal Quality Assurance Cell (IQAC) of Netaji Subhash Engineering College (NSEC) has played a vital role in improving the quality of education, research, and student development in the academic year 2018-2019. With a focus on entrepreneurial growth, academic excellence, and overall student enrichment, the initiatives under IQAC were aligned with the objectives of fostering innovation, improving teaching-learning processes, and enhancing industry-academia collaboration.

### **Support for Entrepreneurial Development and MSMEs**

A proposal was submitted to be recognized as a Host Institute for the implementation of the scheme *Support for Entrepreneurial and Managerial Development of MSMEs through Incubator*. The proposal was approved in the meeting of PMAC held on 20th December 2019 in New Delhi, marking a significant achievement in nurturing the entrepreneurial ecosystem at the institute.

### **Institution Innovation Council (IIC) Performance**

The Institution Innovation Council (IIC), formed under MHRD's Innovation Cell, Government of India, made remarkable strides in organizing events that promote entrepreneurship and innovation. The college achieved two full golden stars in the first two quarters of the year, scoring 21.65/25 in the first quarter and 23.32/25 in the second, with an overall score of 44.97/50. Some of the major events organized included Entrepreneurship workshops, Smart India Hackathon, Entrepreneur's Talks, and Idea to Prototype Competitions.

### **Internship Initiatives**

In the 2018-2019 academic year, 23 winter internships were arranged for students across various start-ups and industries, providing valuable hands-on experience in the field. Additionally, the Institute's focus on internships and field projects saw 85 students completing internships across 33 reputed organizations, while 19 students completed their field projects in 7 organizations.

### **Patent and Research Development**

NSEC continued to encourage research and innovation. One patent was published in the Patent Journal by students and faculty, and two more patents were filed by students during the academic year. This underscores the institute's commitment to fostering a culture of innovation.

### **National Board of Accreditation (NBA) Compliance and Re-accreditation**

Compliance reports for the re-accreditation of four B.Tech programmes (Biomedical Engineering, Computer Science Engineering, Electronics Communication Engineering, and Electrical Engineering) were submitted on 8th March 2019. After an expert team verification on 27th May 2019, all four programmes were re-accredited for the academic years 2019-2022.

### **Implementation of Modified ERP System**





The institute upgraded its ERP system from version V.1.0 to V.2.0 to enhance paperless communication and improve operational efficiency within the academic environment. The upgraded system has streamlined administrative and academic processes.

#### **Student Feedback System**

An online students' feedback system was developed by the Information Technology department. This system introduced for the first time, helped enhance the teaching-learning process. Approximately 73% of eligible students participated in the Value Added Training (VAT) process, which was also incorporated for the first time in the institute.

#### **NPTEL Local Chapters and Online Courses**

As a local chapter of NPTEL (National Programme on Technology Enhanced Learning), the institute maintained a position in the top 100 colleges in India with an "A" rating. Over the academic year, numerous students and faculty members pursued certificate courses, and 40 of them emerged as all-India toppers in their respective categories, with 16 ranking in the top 5%, 13 in the top 2%, and 11 in the top 1%.

#### **Student Participation in Hackathons and Competitions**

The CII-NSEC Innovation Club, in collaboration with the Entrepreneurship Development Cell (EDC), organized several events, including a Table Top Prototype Exhibition and the Hult Prize 10th Annual Challenge, with participation from 186 students across 46 teams. Students also took part in various National Innovation Contests, including the 3M-CII Young Innovators Challenge Award 2019, where they won the first prize in the Product Innovation division for their product "WHITE COAL" made from jute sticks, receiving a prize of Rs. 3 Lakh. Furthermore, the institute saw student teams rank as finalists in the Smart India Hackathon (SIH) and IEST Innovation contests.

#### **On-line Students Attendance System**

The institute implemented the "SARTHAK" attendance software, which allows faculty to track students' attendance and send automated notifications to both students and their guardians in case of repeated absences. The system enhances transparency and accountability in maintaining student attendance records.

#### **Seminars and Conferences**

In the academic year 2018-2019, NSEC hosted several high-profile seminars and conferences. Notable events include:

A seminar on *"Is Blockchain an Invention or a Disruption?"* organized by the ECE department on 17th March 2019, with speakers Mr. Gourav Sarkar and Mr. Sayantan Roy, both alumni.

An International Seminar on *Robotics*, organized by the IT, CSE, and ECE departments on 25th February 2019, with Dr. Monica Anderson from the University of Alabama as the keynote speaker.

#### **Conclusion**

The academic year 2018-2019 was marked by significant achievements in terms of innovation, industry collaboration, research, and teaching-learning enhancements. The initiatives driven by IQAC helped position NSEC as a leading institution in nurturing entrepreneurial talent, fostering innovation, and enhancing academic standards. These efforts will continue to contribute to the holistic development of students, ensuring that they are equipped with the skills required to thrive in the competitive global landscape.



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