Report of the Academic Audit of Electrical Engineering Department, HBTU Kanpur held on Nov. 06, 2023

As part of ensuring quality standards in academics, a need for getting the academic audit was felt and the issue was discussed at various forums in the University. The academic audit is basically aimed at understanding the existing system; assessing the strengths and weaknesses of the Departments; suggesting methods for improvement; overcoming the weaknesses and identifying the opportunities for academic reforms. Accordingly, the Dean CE&IQA was entrusted with the responsibility of devising the Performa and deciding the modalities for getting the academic audit done for all departments of the university. In compliance with the same, the Format for Academic Audit was prepared and circulated amongst all the departments. It is seen that the format has seven criteria with 55 sub-criteria. These criteria pertain to academics, research, outreach, infrastructure, human resources, and outcomes. The details of the criteria with their scores are given in Table 1. The performa of the academic audit and the summary sheet for the same was made available to all the Heads of the departments. All the departments were asked to make the preparation in line with the format and make a detailed presentation of the same. The departments were also asked to produce documentary evidence in support of each of the criteria / sub-criteria and arrange them properly in a file.

| S. No. | Criteria | Maximum Score |
|--------|--|---------------|
| 1 | Academics (A.1)- Teaching and learning | 130 |
| 2 | Academics (A.2)- Industry- Institute Interaction | 70 |
| 3 | Academics (A.3) - Laboratory Development | 50 |
| 4 | Research (B) | 70 |
| 5 | Outreach Activities (C) | 70 |
| 6 | Departmental Infrastructure and Human resource (D) | 100 |
| 7 | Outcomes (E) | 60 |
| Total | | 550 |

 Table 1: Academic Audit Criteria and Scores

The date of the academic audit was notified by the Dean (CE&IQA) to be Nov. 06, 2023. The following experts were present as part of the expert academic audit committee:

- 1. Prof. M. Jaleel Akhtar, Department of Electrical Engineering, IIT Kanpur
- 2. Prof. Sanjiv Kumar, Officiating Dean, School of Engineering, HBTU Kanpur
- 3. Prof. Vandana Dixit Kaushik, Dean, CE&IQA, HBTU Kanpur

In addition, all faculty members of the Electrical Engineering department were also present during the audit. The Dean (CE&IQA) customarily welcomed all present during the audit. This was followed by a presentation by Prof. C. N. Singh, Head, Electrical Engineering Department who gave all details as per the audit format. In addition, a brief presentation highlighting the SWOT analysis of the department was also delivered by the Head, EED. The expert committee raised few queries during and after the presentation to understand the academic system in practice. The audit team also interacted with faculty members and staffs and also visited all of the major infrastructural facilities present within the department including the laboratories and departmental library. The expert audit team expressed their satisfaction with the majority of the criteria and improvement in a few aspects.

Specifically, the audit team expressed satisfaction with the quality of students admitted to the department, full sanctioned faculty positions with diverse specializations, and the alumni base of the department. It was also observed that the department has adequate physical Infrastructure in terms of classrooms, faculty rooms, laboratories, ICT enabled facilities. The team expressed satisfaction at the Consultancy which has led to some resource generation for the department and the university.

The team observed that there were few limitations in terms of shortage of qualified technical staffs in different laboratories of the department. Also, the department needs to encourage newly joined faculty members to submit research projects to various funding agencies. It was also emphasized that the department has great potential to initiate start-up culture, and expand academic collaboration with CFTIs.

To conclude, the audit team opined that on a whole the department is doing quite well in academics, research, development of physical infrastructure and facilities.

The audit concluded with a vote of thanks from the Head, EED to the academic audit team and the faculty present. Some of the photographs taken during the academic audit meeting are presented below:



Fig. 1: Sample photograph of Academic Audit meeting in the Committee Room of the Department of Electrical Engineering. (From Left to Right): Mr. Jameel Ahamad; Prof. Archana Singh; Prof. Yaduvir Singh; Prof. Sanjiv Kumar; Prof. M. Jaleel Akhtar, EED, IIT Kanpur; Prof. C. N. Singh, Head, EED; and Dr. C. B. Vishwakarma. (Back row): Dr. Chhavi Lal.



Fig. 2: Sample photograph of the presentation during Academic Audit meeting in the Committee Room of Department of Electrical Engineering.