Academic Audit Dept of Computer Engineering and Information Technology, College of Engineering, Pune

A meeting was held on Friday 21st September 2018 with some of the faculty members of the dept of computer engineering and information technology, COEP to perform an academic audit. Here we summarize some of the key observations and recommendations.

Following up an earlier recommendation, the two undergraduate programmes (B.Tech in CE and IT) have been merged. Starting academic year 2018, no students are admitted to the B.Tech IT programme and instead the B.Tech CE programme's strength has been suitably increased. Further, Honours and Minor certification schemes have been introduced. The minor certification option is available to students from other departments. current requirement for this certification is that the student must have completed pre-specified four courses (one course per semester) in the last four semesters. It was felt that this restriction 'to the last four semesters' is unnecessary and it is recommended to remove this. A student interested in pursuing a minor may start taking the specified four courses, subject to prerequisites, starting from the third semester itself. This will give interested students enough time to explore several options such as a) do more advanced level courses, b) apply the CE knowledge they have learned in their projects during the last year or c) keep the last semester(s) free to explore industrial interactions through projects etc.

Another recommendation is that for honours certification, more courses should be made available (the current list has four courses and one must do all of them to be eligible for honours certification). Of course, all this will mean increased demand for the infrastructure (classrooms, lab, computing resources etc) which is inadequate even for the current needs!

The current faculty strength is 34 (7 are PhDs and 9 are pursuing PhDs). In comparison, the shortage of good technical staff (currently only 3 lab assistants have suitable technical qualifications) is a serious matter of concern.

The curriculum structure has been recently revised (academic year 2015-16). The overall contents of the syllabus are satisfactory (DUPC periodically undertakes the exercise of revision). A noteworthy feature of the academic audit process was the 'question paper analysis' part. A quick review of the recent question papers pertaining to the following two courses a) DSGT (discrete structures and graph theory) and b) theory of computation was carried out. It was felt that the limited time available for the academic audit activity is insufficient to carry out a thorough analysis of the question papers. It was recommended that this part be done over e-mail and in consultation with subject experts spanning most of the subareas of computer science and engineering.

It was observed that the dept has close associations with various industries in and around Pune. This has helped in many ways such as organizing special lectures/short-courses by industry experts, summer-internships/projects for students etc. The R&D funding for ISEA (Information Security, Education and Awareness) project funded by DoT, Govt of India was also brought to the notice. Several achievements of the students and the department were also highlighted.

It is heartening to note that in recent years the faculty of the dept have made conscious efforts to improve the quality of research publications. They have been publishing their work in international conferences and journals. It is recommended that some standard well known rankings such as CORE be used in selecting the conferences and journals for publication. Further, a better area-wise organization of the publication list along-with the standard ranking of the venues is desirable and strongly recommended.

Bharat Adsul, CSE, IIT Bombay