

### **2.1.1. State the process for designing the program curriculum (10)**

An extensive multi-step process has been put in place for the design of program curriculum to ensure that the curriculum is continuously updated and stays in sync with the fast paced changes in the industry requirements. The various Institute Bodies and mechanisms that have integrated to this end are as follows.

#### **Feedback processes**

- (i) The Department has a Proctorial System wherein every class has a Class Proctor and elected representative's viz., Class Captain, Vice-Captain and every batch (smaller subgroups in a class) has a Prefect and an Assistant Prefect. Feedback is taken from the students in Proctorial meetings.
- (ii) Parent Teachers meetings are held every year for obtaining feedback from the parents. The Institute observes January 31 every year as an Open Day wherein the portals of the Institute are thrown open to the public at large. Parents are encouraged to come and see all the Laboratories, facilities and meet the Faculty members to give their feedback.
- (iii) There is a very strong Alumni Network that meets in various places in the country. Faculty members attend these meetings to obtain feedback regarding the latest industry trends and need for curriculum changes.
- (iv) Every year a batch of students that graduated 25 years ago visits the Institute for its Silver Jubilee reunion as a tradition. Feedback is obtained from them regarding industry trends.
- (v) There is an External Exam component in every course wherein the paper is set by an Examiner from outside the Institute. This evaluation is completely transparent to the Department and is handled at the Institute level. The Examiner is requested to provide Question wise performance report and also overall report of the performance of the students in the course. These are shared with the Departments and any significant feedback is analyzed for curriculum enhancement and corrective measures.
- (vi) The Academic and Administrative Audit Committee of the Institute that has a large number of external members including both academicians and industry personnel meets the students every year for their inputs and suggestions regarding the Curriculum contents and delivery. The report is sent to the Departments and discussed in a meeting of all the faculty members with the AAAC.
- (vii) At the apex level, guidelines are provided by the Advisory Committee on Education that is a think tank for suggesting inter alia measures for enhancing the quality of the education in the Institute. It consists of Faculty members, and eminent academicians and persons from industry. Invited members also include eminent academicians from Universities in Germany, Japan, US etc.
- (viii) Feedback is obtained from the Industry mentors who mentor the students in their compulsory Co-op training that is for a period of five months at the end of the 3<sup>rd</sup> year.

This is very useful as the students typically work on live projects in the industry and the industry has sufficient time to observe any points of concern (five months). This feedback is, therefore, very helpful.

**Curriculum Update Processes that receive inputs from the above feedback mechanisms and act thereupon**

- (i) The Department invites proposals from the Faculty members for Curriculum changes and introduction of new courses in the Month of January every year. These are discussed in the Department meeting as a preparation for the Department Board of Studies to be held in February. The BoS also considers the feedback obtained from various sources for curriculum update.
- (ii) Every Department has a Board of Studies that consists of the HoD, all the Professors in the Department, two other Faculty members of the Department by rotation and three or more external members from outside the Institute including both Academicians and Industry Experts. The BoS meets for a full – day meeting every year in the month of February as a calendar event to consider the proposals already prepared in (i) as above.
- (iii) The proposals that are cleared by the Department Board of Studies are discussed in the Faculty Board of Studies meeting held after the Departmental BoS every year. The Faculty Board of Studies consists of the Dean, HoD, Professors in each Department, two other Faculty members of each Department by rotation and three or more external members from outside the Institute including both Academicians and Industry Experts.
- (iv) The proposals that are cleared both by the Departmental BoS and the Faculty BoS are discussed in the meeting of the Institute Academic Council in March / April every year. The Institute Academic Council consists of Director of the Institute, Registrar, Controller Examinations, All HoDs, and external experts from Academics as well as Industry. The proposals that are cleared by the Academic Council are implemented from the next session that starts in July every year.
- (v) In case there are some proposals that arise from the Departments / Faculties that need urgent consideration there is provision for creation of the Standing Committee of the Academic Council at the Institute level that considers them. The proposals that are approved by the Standing Committee are then sent for ratification by the Academic Council.

The above process is followed every year for keeping the curriculum updated. However, periodically, there are major revisions that are carried out. These major overhauls are done only after extensive one or two day workshops with external experts from the industry and academia. Details of the last workshop are as follows.

Sl. No.	Topic of the Workshop / Seminar	Organized by	Date
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1	Curriculum development workshop	Prof. A.K. Saxena	2018
2	Curriculum development workshop	Prof. A.K. Saxena	21 & 22-11-2016
3	Curriculum Development workshop	Prof. Bhagwan Das	24 to 26-10-2016
4	Curriculum Development of B.Voc.RE	Dr. Gaurav Pratap Rana	18-08-2015
5	Physics curriculum Redesign - Workshop	Dr. Shiroman Prakash	19 to 20-12-2014