

9.1 Mentoring system to help at individual level (5)

Proctorial System

- The Institute has a proctorial system under which a senior staff is deputed as the Chief Proctor. Each class is divided into batches of about 20 students and a teacher is deputed as the Proctor for the batch to act as the mentor. Each batch of students elects a Prefect and an Assistant Prefect from among themselves, apart from a Captain and Vice Captain of the class.
- To understand the problems of students, the concerned Proctor remains in regular contact with the Prefect and the Assistant Prefect. He also conducts quarterly Class Committee meetings. During these meetings Class Proctors discuss various issues with the students of their batches and provide necessary counselling.
- The details such as student's address, his parents details, contact numbers, economic background etc. are kept in record.
- Student diary is issued to each student with detailed calendar and names of coordinators of various activities. A sample is given in https://www.dei.ac.in/dei/index.php?option=com_content&view=article&id=862&Itemid=420
- During the Class Committee meeting Performance in internal and final examinations, attendance in class, special achievements by the student etc, are discussed.
- In addition to this, Batch Proctor takes regular feedback from the students and Class Representatives about the difficulties and problems of students and discuss with the Dean and Head periodically. He verifies the statement of marks and attendance of the students every quarter before informing to the parents. He also interacts with parents/guardians of the students as and when necessary.
- Normally, the Batch proctor has the fair idea of the performance, skill and attitude of a student. He informs the Dean if any student is not attending the classes/practical/tests etc. The Proctor with the help of prefect and Assistant Prefect monitors the implementation of Institute rules such as dress code.
- Regular Parent-Teacher-Committee meetings are held to monitor progress of students
- Feedback from various stakeholders is sought regularly to improve monitoring quality
- Help from established alumni is taken in mentoring individual students for specific needs

Responsibilities of the Batch Proctor as a counsellor includes:

- Identifying strengths and weaknesses of the student and work for his strengths.
- Providing guidance in selecting the job/higher education.

- Motivating the students to take GATE examination and go for higher studies.
- Guiding the students to excel.
- On completion of the course, recording the future plans and communicate to the placement cell.
- Motivating the students to take up minor research work/article writing/community service/field studies/ industrial training etc. which will ensure value addition and provide competitive edge.
- Organize small educational tours, class level cultural activities, sports, literary and academic programmes to break the monotony of the class.
- Recognize the students with learning difficulties and chalk out programmes to assist them.
- Any other related matter.

Outcome of mentoring system

- Students who perform badly in initials tests are able to improve due to the assignments given, question paper solving and effective guidance.
- A system of remedial coaching is in place for each student who could not perform well in regular pattern to clear supplementary and join back the mainstream without time lapse
- The motivation given right from the first year to prepare for GATE encourages the students to perform well in the exam.
- Regular mentoring is helping the students in selecting specialization at undergraduate and post graduate levels.
- Over the years, number of students who clear GATE has increased.
- Students who lose focus and interest in academics are counselled and motivated.

Other curricular, co-curricular and extra-curricular activities in which mentoring is provided are as follows:

- Projects, Seminars, Industrial visits, Internships for B. Tech. students.
- Participatory learning activities are adopted by the faculty to facilitate student-centric learning, apart from class room instructions.
- Seminar, case study, group discussion and demonstration, conceptual quiz, role-play, mini project, disssertation work, internship, industrial visits, and hands on-/field training forms an integral part of participatory learning methodologies.
- All models of the curriculum meant for the UG and PG students incorporate one or more of such participatory techniques in the teaching learning process as a compulsory component.

- Students and scholars are involved and given responsibilities in organising events such as association meetings, seminars, conferences, workshops during the period of study and hence are provided an opportunity to develop/enhance administrative and leadership traits.
- The institution encourages e-learning by enabling access to online resources (e-books/journals/databases) and digitized resources made available in the central library.
- The wi-fi environment of the campus makes it as a 24x7 learning spot, especially for post graduate students and scholars.
- To enable slow learners overcome the learning disabilities remedial classes are being conducted and individual care is taken to bring out the inherent talents of each and every individual student and for the overall development of the students to make them as a valuable citizens.
- Project work is integral part of all post graduate courses and faculty members provide guidance and evaluate the thesis too.
- As a whole, the Teaching –Learning process advocates principles of Life Long Dynamic Learning by the inclusion of
 - i. Mentored learning
 - ii. Stimulated learning
 - iii. Experiential learning
 - iv. Self-Paced learning
 - v. Learning by research
 - vi. Self-learning
 - vii. Interdisciplinary and Multidisciplinary learning
 - viii. Culturally inclusive learning
- Where ever required, technology is incorporated into teaching-learning process in the form E-Class rooms, multimedia facilities, use of software, Projectors etc.
- ICT based instructional strategies find a definite place in the teaching process to augment chalk and talk method for enhanced visualization of concepts.
- The following ICT facilities are available in the institution for technology enhanced learning are utilized in addition with
 - i. Video Conferencing Facilities (EDUSAT, A-view, NPTEL and NKN facilities)
 - ii. DELNET/INFLIBNET
 - iii. Virtual and ICT enabled classrooms
 - iv. Working models
 - v. Simulated software
 - vi. Video lectures
 - vii. Interactive boards [Smart Boards]
 - viii. Visualizers

ix. LCD and LED Projectors

- An allied paper on Computer Science is made mandatory for all Undergraduate programmes in order to make the students familiar with ICT skills.
- To ensure computer literacy an interdisciplinary course in basic computing aspects is offered in all UG programmes.
- Post graduates and research students present their seminars using ICT facilities.
- All students have to attend a compulsory Orientation Programme on admission. The wide range of continuous assessment components that include, Daily Home Assignments, Class Assignments, Seminars and Group Discussions, Additional Assignments, Quizzes, Class Tests, Projects, Internships, Viva-voce examinations and attendance, enable effective assessment of learning levels of students. In addition, teacher-student interactions, reports of Class Committees and Proctorial meetings help in identification of different levels of learners. Faculty members and various Committees regularly review the academic progress and counsel students to improve their performance to ensure their academic growth.

The Institute offers a number of opportunities for advanced learners to augment their talent and meet their learning needs for which mentoring is offered on need basis:

1. Under-Graduate Research Awards (UGRA): to encourage select bright UG students to undertake research projects.
2. Students are encouraged to make research contributions in their major project at the PG level and publish their results in journals and also present it at National and International Conferences.
3. Students are encouraged to participate in summer research fellowship programmes at prestigious research institutes and laboratories.
4. The Institute, in collaboration with the Systems Society of India, organizes various competitions and an Annual Students' Systems Conference (Paritantra) and Technical Colloquia regularly and gives prizes and awards.
5. Vertical and Horizontal Progression: Provision has been made for bright students to undertake advance credit courses and lateral entry to higher degree programs.
6. MoUs and Collaboration: Students are encouraged to work in laboratories of National and International Institutes and Universities with MoU.
7. Financial support is provided to students for participation in National and International Conferences.
8. The Institute, in association with Association of Alumni and Friends of DEI (AAFDEI) registered in USA, provides financial support for boarding and lodging and travel assistance to students on their visit abroad for higher studies or for conferences.
9. Earn while you learn provision has been made for UG, PG and research students for part time jobs in the large number of projects running in the Institute. This helps them learn state of the art techniques and also get remuneration.

10. Students are encouraged to help slow learners in their class and in junior classes.

Special measures are taken to support relatively slow learners, are :

- *Organizing Extra Classes*
- *Remedial and Tutorial Classes are held to prepare them for remedial exams*
- *Assistance from classmates and senior students is arranged*
- *Providing tutorial assignments*
- *Providing lectures uploaded on web and extra reading material to improve basic understanding of subject*
- *Encouraging them to study courses on developing soft skills to master understanding of language*
- *Encouraging them to participate in various activities to develop social skills*

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Students and scholars are involved and given responsibilities in organising events such as alumni association meetings, seminars, conferences, workshops during the period of study and hence are provided an opportunity to develop/enhance administrative and leadership traits under the mentoring of faculty.

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