

DEPARTMENT OF BIOTECHNOLOGY

Innovations by the Faculty in Teaching and Learning

Faculty members engage in the following actions to improve the teaching-learning process:

- Faculty members are using classic chalk and blackboard teaching methods as well as use ICT tools such as Power Point Presentation, animation videos, audio-visual teaching through smart board / projector.
- Faculty members enrich students by providing high-quality study materials via Google classroom, websites, handouts, etc.
- Apart from that, demonstration part of some important / hard topics that are difficult to comprehend has been presented in front of the students by various videos and animations.
- Students are advised to watch NPTEL lecture videos and visit other websites related to course topic to further their understanding of the subject.
- The course file, which includes the syllabus, capturing faculty course plan and evaluation system, is distributed to students well in advance of the start of class by the course teacher.
- Faculty provides innovative assignments such as creation of poster (PPT), models, memes, animation videos etc.
- In classrooms and other student learning spaces, modern teaching tools such as LCD/LED projectors, Internet-enabled computer systems, and Wi-Fi-enabled laptops are commonly used.
- A centralized Wi-Fi system allows students to access the internet in order to gain relevant knowledge.
- The Institute central library is a major resource for self-education. The Institute central library not only has a large number of books to suit students' syllabus-related needs, but it also has a large number of books by prominent national and international authors on a wide range of themes that students can use to sharpen and widen their knowledge.
- In addition to the central library, students can use the departmental library to access books and reference materials.
- NPTEL videos are circulated among the students for their better learning. Apart from that, study materials pertaining to the course and assignments for the registered NPTEL candidates are used as innovations in teaching learning by the faculties.
- The library also has a variety of magazines and periodicals pertaining to many disciplines of science and technology that student can access easily. The library also has subscriptions to a variety of online and print periodicals, which are made available to students.
- The department also hosts lectures, seminars, and webinars offered by industry and academic professionals to broaden students' understanding of industry technologies.
- For their general growth, students are also invited to engage in different technical events, quizzes, personal conversations, personality development workshops, and other activities organized by the department.
- Mini seminar topics relevant to the curricula are distributed among students. Presentation of the seminars improves the concept and communication / presentation skill of the students nourishing lifelong learning.
- The Training and Placement cell holds soft skill classes for various departments on a regular

basis, depending on availability and demand, in order to improve students' communication skills, grooming, and body language in preparation for the professional world.

- To catch up with the advanced level of knowledge and abilities, faculty members are urged to participate in short term courses, faculty development programs and seminars, MOOC courses on diverse areas.
- To broaden their knowledge, the faculties have presented papers at national and international conferences and published articles in national and international journals and books.

Various multimedia tools used:

Tools	Methods	Metaphor
Smart Class Room	Teaching through smart board	Interactive Based
Power Point Presentation	Easy to prepare and it can be prepared with many of the popular multimedia resources	Slide Based
Videos Lectures	Easy to prepare and download	Web Based Learning
Adobe Acrobat Reader	Easy to prepare with word documents	Book Based