

Aiming to create leaders in biosciences

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Biotech Public Schools No 4

The department of biosciences and bioengineering (BSBE) at Indian Institute of Technology (IIT) Bombay is a noted center for applying science and engineering principles to further enhance the fundamental knowledge and applications in biology and biomedical engineering. The academic program currently consists of the MSc biotechnology, MTech biomedical engineering, integrated MSc-PhD and PhD courses.

The department aims to create an ambience for the smooth pursuit of scholarly activities in research and education, thereby making an international impact to produce future leaders in the field of biosciences and bioengineering. A four-semester program imparts in-depth knowledge of molecular cell biology and computational biology. The program is sponsored by the Department of Biotechnology (DBT), Government of India.

During 2011-12, the number of applications received for the MSc program stood at 5,015, out of which 25 students were admitted through Joint Admission Test (JAM) held by IIT. So far the department has published 220 research papers in the international publications. Out of 32 national patents filed, three patents were granted, whereas five international patents have also been filed. During the year 2011-12, two students were placed in Strand Life Sciences and TCS among the seven companies that approached for the campus placements.

Apart from the theory courses offered by the institute, there is also an emphasis on practical training. In addition to the routine microscopy facilities, the department has a state-of-the-art differential interference contrast microscope (DIC) and time lapse video microscope with fluorescence attachments. The institute's fermentation facility provides the ability to grow microorganisms for various purposes including large-scale protein purification. National biosafety procedures are followed in all tissue culture facilities and laboratories at the department. The department also has a dedicated facility for working with radioactivity that includes scintillation counters.