Completed registration form should be sent to the following address:

Prof. Ambarish Kunwar

Course Coordinator

Department of Biosciences and Bioengineering,

IIT Bombay, Powai, Mumbai – 400 076.

Phone: (022) 2576 7799

Fax: (022) 2572 3480

Email: akunwar [at] iitb.ac.in

Important Dates

Last date for receipt of registration: **Apr 01, 2016**

Notification of acceptance: **Apr 15, 2016**

Course dates: **Jun 06-11, 2016**

Notes:

- Incomplete application forms will not be entertained.
- For multiple registrations, copy the form or type in the given format.

- Registration form can be also downloaded from the following course website

  http://www.bio.iitb.ac.in/~akunwar/bfe2016/

Venue for Course:

Course will be held at the Victor Menezes Convention Centre, IIT Bombay.

Date & Time of Registration:

Jun 6, 2016, 9.00 AM at course venue, IIT Bombay.

REGISTRATION

There is no registration fee for the course. All short-listed candidates are required to confirm their participation by sending a **Demand Draft of Rs. 1,000/- in the name of "Registrar IIT Bombay"**. The above amount will be refunded to the participant if he / she attends the course. In case a participant does not attend the course, the above amount will be forfeited.

Candidates should complete the enclosed registration form, and send it by mail, email or fax to the Coordinator. Confirmation of eligible candidates will be on a first come first served basis up to a maximum of 30 candidates.

The completed registration forms should be received by the Coordinator latest by **March 20, 2016**.

For any further information regarding QIP programs at IIT Bombay, please contact:

Professor-In-Charge, CE & QIP,
IIT Bombay, Powai, Mumbai–400 076
Phone: (022) 25767006
Email: qip@iitb.ac.in
For further details: www.iitb.ac.in/~cep

Quality Improvement Programme (QIP)

Short Term Course

Biology for Engineers

June 06 - 11, 2016

Course Coordinator

Prof. Ambarish Kunwar

Department of Biosciences and Bioengineering

Office of
Continuing Education &
Quality Improvement Programme
Indian Institute of Technology Bombay
Powai, Mumbai - 400 076

Introduction

Today, the mutual dependence of modern biology and engineering/ technology is far more than it was at any time in the past. Advances in engineering and technology in areas such as instrumentation has allowed biologists to ask and answer questions not even dreamed of earlier. Development of devices and implants for the welfare of (human) health, be it early diagnosis or treatment, has also made substantial impact on society. Conversely, billions of years of evolution have made living organisms into systems from which lessons can be learned by engineers regarding design principles, control and regulation, and can be applied. Therefore, it is the need of hour to include an introductory biology core course in the curriculum of first year engineering courses.

Broad Objectives

The short term course is intended to train the faculty members of engineering colleges for developing a biology course for the first year B. Tech students, who will pursue their studies in different branches of engineering. The course content assumes that faculty members/students have an exposure to CBSE 10th grade Biology and exposure to Physics and Mathematics at 10+2 level. The short term course aims to highlight a wide variety of aspects of modern biology without going into great depth.

Course Contents

This short-term course is divided into three parts. The first part of course will be molecular biology which will bring forth the components building a cell and cellular processes. The second part of the course will be Physical Biology/Biophysics which shall illustrate how one can use Physics and Mathematics to understand various biological systems/processes. The last part shall use a few notable examples to illustrate the engineering perspective with an emphasis on applications.

Teaching Faculty

The core teaching faculty will be from the Department of Biosciences and Bioengineering who have been teaching the compulsory Biology course for B. Tech. first year students at IIT Bombay as well as other faculty members. Subject experts from other departments at IIT Bombay as well as other institutes will be invited for special lectures/panel-discussion/tutorials.

Eligibility

Faculty members of engineering colleges recognized by AICTE, are eligible to attend the course. Faculty member should have exposure to Physics and Mathematics at 10+2 level and exposure to Biology at 10th level.

Lecture Notes

Hard copies of the lecture notes/presentations will be made available to participants at the end of lecture/presentation.

Course Evaluation

Successful participants would be awarded `Course Completion Certificate'.

Transport, Boarding & Lodging

Participants are entitled for Second Class (Sleeper Class) or III AC railway fare to and fro by the shortest route from college to IIT Bombay. All participants will be given auto fare from Kanjurmarg/Andheri to IIT on the dates of arrival and departure. Local participants will be paid second class railway fare or BEST Bus fare.

Boarding and lodging will also be provided free of cost. Accommodation will be provided in the students Hostels. Since accommodation is limited, family members of the participants cannot be accommodated.

QIP Short Term Course on

BIOLOGY FOR ENGINEERS

June 06 - 11, 2016

Registration Form

Name* (in block letters): (Mr/Mrs/Ms) _____

_____

Designation*: _____

Organization*: _____

Mailing Address*: _____

_____

_____

Telephone: _____ Mobile*: _____

Fax: _____

Email*: _____

Educational Qualifications*: _____

Discipline/Specialization*: _____
Accommodation Required*: YES / NO

Exposure to 10+2 level Physics/Maths*: YES/NO
Whether college/institute has a compulsory Biology course for all first year B. Tech. students*: YES/NO

Name of course (only if answer is YES): _____

Signature of Applicant*:

Sponsorship & signature of Head of the College / Institute (with date & seal)*.

(Can also be attached separately along with the registration form).
* Required fields