

Department of Biochemical Engineering and Biotechnology
Minutes of the Departmental Faculty Board Meeting
(DFB-04/2023-2024)

06/10/2023

The fourth meeting of the *Departmental Faculty Board* for the academic session 2023-2024 was held on **Tuesday, October 3rd, 2023**, at **03:00 PM** in the Committee Room of the Department. It was a special meeting called by the HoD to discuss the proposed revisions in the curriculum of IITD for UG, PG, and PhD programs by the curriculum review committee (CRC).

The following members were present:

Prof. Ritu Kulshreshtha, Chairperson
Prof. Prashant Mishra
Prof. D. Sundar
Prof. Preeti Srivastava
Prof. Ziauddin Shaikh Ahammad
Prof. Ravikrishnan Elangovan
Prof. Ishaan Gupta
Prof. Lucinda Doyle
Prof. Kumari Priti Sinha
Prof. Anjan Roy
Prof. Amit Das, Convener

Item 1: Confirmation of minutes of the 3rd DFB meeting held on September 26th, 2023

*The minutes of the previous regular DFB meeting (DFB-03 of 2023-24) held on **September 26th, 2023**, were discussed and confirmed.*

As matters-arising, DFB suggested the BTP and MTP coordinators share the marks of evaluations of BTP and MTP with the DBEB faculty before sharing with the students through Moodle.

Furthermore, DFB suggested a slight modification of the PLN03F budget allocation – two desktops for PS and AD and one laptop for the HOD office, which any new faculty joining the department in the near future will receive.

Item 2: UG curriculum revision as proposed by the CRC

The BTech program coordinator, Prof Priti, presented before the DFB the main points of the proposed UG curriculum revision by the CRC. Overall, the DFB agrees with most of the suggested changes. DFB also found some of the changes insightful and exciting for the future, e.g., the new proposed courses on Environment and Sustainability (E&S), Creative Expression and Ethical Reasoning (CEER), and Emerging Trends and Technology (E&T). DFB also commented on several points and suggested some to be revisited and discussed in the next meeting of the DUGC. The leading DFB suggestions are:

- 1. Basic science courses – All the 1st year students take these courses. The new curriculum proposes that the AU make the final decision on the composition of basic science from a pool of courses offered. Not just that, for a given course, the AU will have a choice to pick the modules to be taken by their students – even the AU will be able to ask the concerned basic science department to offer specific modules. DFB welcomed this idea.*
- 2. General Engineering courses – The proposed alterations in this area are pretty significant. DFB suggested that the 3 courses: Introduction to Electrical Engineering, Introduction to Engineering Mechanics, and one course on material science – should be kept mandatory in the GE course.*
- 3. Courses on humanities, management, and policy – DFB suggested that allocating credits in these three areas must be revisited. DFB proposed that one possibility is merging the three total credit allocations*

to 15 credits, where the student may be allowed to decide how to fulfill them. At the least, they have to choose a minimum of one course from each of humanities, management, and policy.

4. CEER courses – DFB welcomed the introduction of such courses. CRC has proposed three main areas to be covered by this set – all with AU-specific flavours: Engineering Visualization (EV), Product Realization through Manufacturing (PRM), and Design and/or Ethical Reasoning (DER). DFB considered possible offerings from our department. Modelling and simulation in Bioprocess is a candidate for an EV course., Bioprocess Technology is a possible PRM course. Bioprocess plant design includes both EV and PRM. DBEB may float a Bioethics course as a DER course. DFB also suggested that the total credit requirement for such courses may be restricted to 3.
5. E&S course – DFB liked the idea of this course. DFB also pointed out that only one course is sufficient in this category.
6. Emerging trends and technology requirements – DFB indicated that the existing current topics in biochemical engg and biotechnology already represents that course.
7. Branch change – CRC proposed the branch change option to be discontinued. DFB suggested to revisit the rules related to this point and emphasized that the option may not be discontinued.
8. DFB welcomed the proposal of BTP to be made optional.

DFB is enthusiastic about the proposal and agreed overall.

Item 3: PhD curriculum revision as proposed by the CRC

CRC proposed many changes in the PhD program. DFB welcomed most of the suggested changes except a few. Following are the leading points of discussion and emergent questions:

1. *DFB proposed requesting flexibility for 700-level courses to be considered appropriate for pre-PhD courses.*
2. *DFB welcomed the idea of the removal of a CGPA cutoff for U-grade. At the same time, DFB expressed some concern about the suggestion of making a minimum B- grade in any course the new threshold for a U-grade. DFB suggested that this point should be revisited.*
3. *As per the suggested changes in the new curriculum, SRC will decide the courses to be taken by the student right after joining. The student will also have the option of replacing the comprehensive exam with an additional 3-credit course. DFB welcomed these changes. DFB also proposed that SRC decide the courses for the mandatory credits as well as the other 3 credits equivalent to the comprehensive exam.*
4. *DFB liked the idea of a course on research communication, logic, ethics, and reasoning.*
5. *DFB suggested that the proposed mandatory reading club may be organized between the 3rd and 5th semesters with one credit allocation.*
6. *As per the current proposal, the thesis submission requirement as part of the exit option through MSR is unclear.*

Item 4: MSR curriculum revision as proposed by the CRC

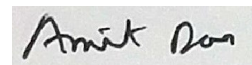
DFB liked the flexibility offered in the CRC proposal, but the point regarding the omissible synopsis presentation is ambiguous. DFB suggested that the final SRC meeting is equivalent to a synopsis presentation.

Item 5: MTech curriculum revision as proposed by the CRC

The leading points discussed by the DFB regarding the MTech program are the following:

1. DFB suggested continuing with the current 53-credit structure for practical exposure with some extra credits for the research communications course, bioethics course, and reading club. DFB also indicated that one PE can be converted into an OE.
2. DFB agreed with the proposal of 3 credits for an audited course.
3. DFB suggested we introduce the proposed Industry Connect course as a special module on professional practices – a one-credit course to be taught by an industry person, possibly online.
4. DFB agreed with the proposed MTP evaluation timeline but suggested that the grading should be done at the end of the 3rd and 4th sem.

The meeting ended with a vote of thanks to the chairperson.

A handwritten signature in black ink that reads "Amit Das". The signature is written in a cursive style and is placed on a light gray rectangular background.

**Amit Das,
DFB Convener**