

Department of Mechanical Engineering, IIT Guwahati
Minutes of Departmental Faculty Meeting (No. 67/2021: April 7th, 2021)

Opening Remarks

Department faculty meeting headed by the Head of the Department (Prof S. Senthilvelan) was held in online mode on March 3rd, 2020 at 5:00 PM. A total of 37 faculty members (Prof. S. Bag, Prof. A. Banerjee, Prof. S. Basireddy, Prof. D. N. Basu, Prof. P. Biswas, Prof. A. Dalal, Prof. M. Das, Prof. A. De, Prof. U. S. Dixit, Prof. S. K. Dwivedy (in meeting with Dean II&SI), Prof. S. S. Gautum, Prof. S. M. Hazarika, Prof. Shrikrishna N. Joshi, Prof. K. Kalita, Prof. S. Kanagraj, Prof. S. Kapil, Prof. S. K. Kakoty (on DD duty), Prof. P. Khanikar, Prof. K. S. R. Krishna Murthy, Prof. V. Kulkarni (on JEE duty), Prof. B. Kumar, Prof. P. Kumari, Prof. G. Madhusudhana, Prof. S. Mandal, Prof. T. K. Mankodi, Prof. P. Mondal (on leave), Prof. N. Muthu, Prof. P. Muthukumar, Prof. A. Nandy, Prof. G. R. Narayan, Prof. S. Pal (on leave), Prof. S. Panda, Prof. B. Panda, Prof. M. Pandey, Prof. P. S. Robi, Prof. U. K. Saha, Prof. N. Sahoo, Prof. S. Senthilvelan, Prof. D. Sharma, Prof. A. Soti, Prof. R. Tiwari) were in attendance.

Approval of Faculty Meeting (No. 66/2021: March 3rd, 2021)

Minutes of the previous faculty meeting dated March 3rd, 2021 were approved by the members.

Agenda

1. Prof. Atanu Banerjee on behalf of a six-member committee (Prof. A. K. Dass, Prof. A. Banerjee, Prof D. Sharma, Prof. K. Kalita, Prof. G. Madhusudhana and Prof. N. Muthu) presented the committee observations on the course allocation policy (Pl. find the details in Appendix 1). In particular, it was suggested that one of the three instructors for the ME101 Engineering Mechanics will be coordinating the course, setting examination papers, distribution of assignments question paper and solution, and maintaining, finalizing and submitting the grades. It was further suggested that the coordinator will not be given any teaching load (not even Lab) in the previous semester, for planning and preparation of the teaching materials and the other two instructors will not be given any Lab courses in the present as well as in the coming semesters. The recommendation of the committee were unanimously accepted by the members.

Prof. S. Senthilvelan thanked the committee for their detailed report on the course allocation policy. Prof M. Pandey enquired if the assignment sheets will be common for the entire batch and will the teaching material provided by the coordinator be common for instructors. Prof. A. Banerjee replied that the assignment will be common and basic slide/weekly road-map will be provided to the instructors. However, the instructors will be free to decide the depth of the concept and can provide a wide range of examples as a part of their lecture. Prof. S. Senthilvelan directed that the recommendation of the committee will be implemented from the next cycle (July 2022 onward).

2. SAE student committee had requested the department for space and funding for future activities. After due discussion with Prof. S. Pal (Central Workshop In-charge), Mr. N. K. Das (Assistant Workshop Superintendent) and the department, the members were informed the recommendation that 516 inches \times 336 inches space on the workshop machine floor will be allocated for the SAE activities. The space allotted will have a separate door which will be accessible from the outside at all times. Further, the department will request for additional fund from the institute. Several members (Prof. P. Kumari and Prof. K. Kalita) welcomed this decision and opined that this will greatly benefit the undergraduate students in gaining

hands-on experience in various aspects of mechanical engineering.

3. Prof. P. Khanikar shared the information regarding the suggestions by AER with the members of the house. The members were requested to give their inputs and suggestions of prospective foreign honorary faculties who can come to IITG.

4. The members were informed that Prof. T. K. Mankodi has joined the Computational Fluid Dynamics Lab. Additionally, Prof. A. Dalal has opted out of the lab and Prof. A. De will be lab in-charge of the CFD lab.

5. Prof. Swarup Bag, on behalf of the DPPC, invited views on the cancellation of clause 10.5 approved in the 109th IPPC meeting. As per the decision, course work will be made mandatory for PhD students with Masters degree from IITs/IISc. Several members including Prof. S. Senthilvelan, Prof. P. Muthukumar, Prof S. Kanagraj, Prof. P. S. Robi expressed their strong reservation against the removal of the clause. Further, the original clause made the institute attractive for experienced students from reputed research organization such as HAL, NAL, ISRO and ADA. Also, QIP students visit the institute for a limited time and the mandatory coursework will discourage good candidates. DPPC requested the members to provide feedback on this issue and form a database of current and past students who availed benefits of the said clause which will be helpful in representing the concerns of the department. The members agreed to take this matter up in the next IPPC meeting.

6. Prof. Swarup Bag, on behalf of the DPPC, requested inputs on the following two points:

- The PhD quota for the faculties to be released after submission of thesis instead of submission of synopsis.
- The details of the faculties with PhD vacancy to be communicated to the PhD candidates.

Prof. P. Muthukumar opined that new students interact with experienced PhD students and this overlap helps proper running of the lab and the project. Prof. R. Tiwari and Prof. P. Kumari also supported the older rule. Prof. S. Senthilvelan with the suggestions of the house prescribed to continue with the existing rule. Additionally, Prof. S. Senthilvelan informed the house that a list of faculties not interested in taking students will be tabulated and relevant information will be communicated to the PhD candidates shortlisted for the final round of interviews.

7. Prof. Basireddy enquired about the procedure for increasing the strength of the minor course in Robotics and AI. Prof. S. Senthilvelan suggested to take this matter through a proper channel via the DUPC. Prof. S. N. Joshi and Prof. Basireddy with inputs from the faculties involved with the minor course will further this point at the appropriate forum.

8. Prof. A. Nandy in consultation with the members of the house discussed and finalized the allotment of course coordinator for the lab and the core courses with multiple instructors for the July-Dec 2021 semester.

Adjournment

The meeting adjourned at 6:20 pm with vote of thanks.

Suggestions of Course Allocation Committee

Attendees- **Prof. Anoop K. Dass, Dr. Deepak Sharma, Dr. Nelson Muthu, Dr. Gavara Madhusudhana, Dr. Karuna Kalita, Dr. Atanu Banerjee**

Presently, Dept. of Mechanical Engineering has to provide **three** instructors for Engineering Mechanics and **one** for Engineering drawing. The present committee has been assigned to make a policy to ease the process of finding instructors for these courses. Most of the faculty members in the department feel that, mainly because of the managerial load in conducting these courses, the faculty members do not come forward to be instructors for these courses. Hence, one way to resolve this issue, is to make two pools of faculty members from which department can assign instructors in a given order. In that case, an individual faculty member will be forced to take either of these courses at least once in their entire tenure. Some of the committee members have expressed similar views. However, some of the committee members have opined that a course like Engineering Mechanics can get diluted, if an unwilling faculty member is forced to be an instructor. In view of that, the committee proposes the following scheme for rewarding the instructors of Engineering Mechanics.

In a given year, out of the three instructors, the **one** having **at least two years of experience** as an instructor in **Engineering Mechanics (ME101)** will be the **coordinator**. The coordinator will be responsible for the following tasks:

- Planning and preparing day-wise teaching materials,
- Instructing one group of students,
- Planning and preparing Quiz papers, Mid-Sem and End-Sem papers and their solutions (in consultation with other instructors),
- Timely distribution of assignments, question papers and solutions,
- Communicating with tutors, other instructors as well as the students during the semester,
- Maintaining, finalising and submitting grades,
- Makeup exams (if any)

Other instructors [Two (ME) + One (Civil)] will be responsible for:

- Instruction in class
- Making assignments (approximately 3 to 4 per head) and their solutions (neatly and correctly) in consultation with the coordinator. The tutorial sheets are to be handed over to the coordinator well ahead of the scheduled tutorials.

Suggestions:

- Coordinator will not be given any teaching load (not even Lab) in the previous semester, for planning and preparation of the teaching materials.
- A particular faculty has to serve as instructor of ME101 for at least two years to become a coordinator. However, he/she cannot act as a coordinator for more than two years, so as to allow other instructors to become coordinator in the subsequent sessions.
- The other two instructors will not be given any Lab courses in the present as well as in the coming semesters.

- Though the committee feels that the faculty members from Design specialization fit best to serve as instructor for this course, however, any faculty member from other specializations, willing to act as instructor, are also welcome.
- It is also suggested that the teaching materials, assignments and questions developed by the group of instructors should be passed onto the next group, so that over time, sufficient teaching materials become available to the department, which will ease the life of the instructors and in the years to come, the faculty members will voluntarily come forward to take this course.