

MINUTES OF THE 39<sup>th</sup> MEETING OF THE  
BOARD OF STUDIES IN MECHANICAL ENGINEERING  
05-03-2022

The minutes of the meeting of the Board of Studies in Mechanical Engineering held on 05-03-2022 at 11:00 AM in Main Building A/C Conference Hall.

The following members were present in the meeting.

SL. NO.	NAME	DESIGNATION	SIGNATURE
1.	Dr. K. Marimuthu	Chairman	
2.	Dr. D. Noorullah	University Nominee (UG/PG)	
3.	Dr. P. K. Palani	Expert Member - Academic	Pre-occupied
4.	Dr. P. R. Thyta	Expert Member - Academic	Pre-occupied
5.	Mr. A. S. Shivakumaran	Expert Member - Industry	
6.	Mr. N. Sampath Kumar	Expert Member - Industry	Pre-occupied
7.	Dr. T. Sridhar	Member	
8.	Dr. R. Rajesh	Member	
9.	Dr. N. Rajam Ramaswamy	Member	
10.	Dr. A. S. Krishnan	Member	
11.	Dr. G. Suresh Kannan	Member	
12.	Mr. P. Ramakrishnan	Member	
13.	Dr. M. Velliangiri	Member	
14.	Dr. G. Suganya Priyadarshini	Member	
15.	Mr. M. Karthikeyan	Member	
16.	Mr. K. Karthik	Member	
17.	Dr. C. Balaji Ayyanar	Member	
18.	Dr. A. Karthikeyan	Member	
19.	Dr. P. Thangarasu	Member	
20.	Dr. S. Balamurugan	Member	

SL. NO.

21. Dr. C.

22. Dr. G. S.

23. Dr. P.

24. Dr. S. S.

25. Mr. D. P.

26. Dr. P. M.

27. Dr. R. V.

28. Dr. G.

29. Mr. R. S.

30. Dr. M. I.

31. Dr. C. M.

32. Ms. P.

33. Dr. H. S. R.

34. Mr. S. T.

35. Dr. S. V.

36. Dr. Ton.

37. Mr. S. K.

38. Dr. R. E.

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THE	SL.NO	NAME	DESIGNATION	SIGNATURE
ENGINEERING	21.	Dr. C. Vivek	Member	
15-03-2022	22.	Dr. G. Sivakumar	Member	
Board of	23.	Dr. P. Mohan	Member	
eld on	24.	Dr. S. Selvam	Member	
ding A/C	25.	Mr. D.P. Bam Solomon	Member	
sent in the	26.	Dr. P. Manivel	Member	
	27.	Dr. R. Vishnu	Member	
	28.	Dr. G. Balamurugan	Member	
	29.	Mr. R.S. Mohan Kumar	Member	
	30.	Dr. M. Muruganandam	Member	
SIGNATURE	31.	Dr. C. Manivannan	Member	
	32.	Ms. P. Aruna Devi	Member	
	33.	Dr. H. Sivarathinamoorthy	Member	
Pre-occupied	34.	Mr. S. Thirumurugan	Member	
Pre-occupied	35.	Dr. S. Vellingiri	Member	
	36.	Dr. Tony Punrose Valayil	Member	
Pre-occupied	37.	Mr. S. K. Pradeep Mohan	Member	
	38.	Dr. R. Sathish Kumar	Member	
	39.	Mr. S. Praveen Kumar	Member	
	40.	Mr. G. Ram Kumar	co-opted Member	

Dr. K. Marimuthu, Professor and Head, chairman of BOS, Department of Mechanical Engineering welcomed the gathering and invited Dr. G. Suganya Prujadharsini to present the agenda and the topics for discussion. Dr. G. Suganya Prujadharsini began the presentation with the agenda of the meeting.

All the resolutions, approval and discussion pertain to Regulation 2019, unless explicitly mentioned.

Item N

Item No. 1: Resolved and approved the following three program specific Outcomes for the B.E. program in Mechanical Engineering  
The students will be able to:

1. Apply principles of Mechanical Engineering and physical sciences to model, analyze, design and select appropriate materials and manufacturing processes to create engineering solutions (products, systems or processes) during their Mini-Project and Thesis Project work.

Item N

2. Work with contemporary technologies through multi-pronged opportunities such as Industry-linked One credit courses, In-plant Training, and Internships together with a Fast-tracked curriculum.

Item N

3. Participate in team hackathons and develop critical thinking skills via hands-on-experience in research experiments to become an entrepreneur or initiate a start-up.

Item No. 2: Resolved and it be a recommendation that the following course be included as a Professional Elective for BE program in Mechanical Engineering:  
Smart Materials.

Discussion  
explicitly

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Item No. 3 : Resolved and it be a recommendation that the following NPTEL courses be included as Professional electives for BE program in Mechanical Engineering:

1. Product Design and Manufacturing
2. Fundamentals of Nuclear Power Generation
3. Applied Ergonomics.

Item No. 4 : Resolved and it be a recommendation that the following courses be included as one credit Electives for BE program in Mechanical Engineering:

1. Innovation and Entrepreneurship
2. 3D Scanning Technology

Item No. 5 : Resolved and it be a recommendation that the following NPTEL courses be included as Professional Electives for ME program in Advanced Manufacturing Technology:

1. Material characterization
2. Foundations of Computational Materials Modelling
3. Quantitative Research Methods and Research Writing.
4. Fundamentals of Surface Engineering Mechanisms, Processes and Characterization.
5. Non-Metallic Materials.
6. Production Operation and Management.
7. Modelling and Analytics of Supply Chain Management.

Item No. 6 : Resolved and it be a recommendation that the following course be included as a Special Elective for ME Program in Advanced Manufacturing Technology: Materials, Testing and Characterization Techniques.

Item No. 7 : Resolved and recommended

ratification of the following for the laboratory courses for BE Program in Mechanical Engineering:

1. The course code for Fluid Mechanics and Machinery Laboratory has been changed from 19ME36 to 19MEL36A.
2. The course code for Electrical Machines and Drives and Embedded Systems Laboratory has been changed from 19ME36 to 19MEL36B.
3. The course code for Material characterization and Testing Laboratory has been changed from 19ME48 to 19MEL47A.
4. The course 19ME48 - Dynamic, Instrumentation and Controls Laboratory has been replaced by 19MEL47B - Manufacturing Process Laboratory.

Item No. 8 : Resolved and recommended ratification of the following for the course on Engineering Graphics for BE Program in Mechanical Engineering: Inclusion of topics on Involutives and Special Curves.

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## Discussions

- 1 The Chairman suggested that a textbook be added for the course on Smart Materials. Dr. N. Rajam Ramasamy, Assoc. Professor seconded this and added that up to two textbooks can be given.
- 2 Dr. T. Sridhar, Prof. of Mechanical Engineering, and the Chairman suggested that the COs for the course on Smart Materials be revised. Mr. K. Karthik suggested increasing the number of COs and reconstructing it to facilitate evaluation of the outcomes. Dr. T. Sridhar added that Bloom's Taxonomy action words of higher cognitive levels be used for the same.
- 3 Er. A. Shivakumaran, GM, Koso India expressed that the content of the course on Smart Materials is broader than required and suggested that the focus can be on the different types of materials and the areas in which they are used. The Chairman endorsed this and suggested revising the course content.
- 4 Dr. T. Sridhar insisted that the COs for the course on Innovation and Entrepreneurship be revised. Dr. G. Suresh Kannan added that the split-up for hours among various modules be given. Er. A. Shivakumaran added that SITARC (Scientific and Industrial Testing And Research Center) can be approached for a tie-up wherein calibration and testing

- pertaining to the pump industry is carried out.
5. Dr. M. Murganandam was invited by the Chairman, to present the contents of course on 3D scanning. He explained the various aspects including assessments and resources required. Dr. A. Shivakumaran commented that the course is an emerging field and emphasized on organizing factory visits, arranging seminars / lectures using Industrial personnel. Dr. G. Suresh Kannan indicated that the LPTC of the course needs to be revised. It was collectively suggested to use 0 0 2 1. Dr. T. Sridhar added that the COs be revised.
  6. The Chairman suggested the faculty members to develop and offer one credit courses on contemporary topics.
  7. Dr. N. Rajam Ramasamy mentioned that topics on Involute and Special Curves in the course Engineering Graphics are prerequisite for courses in Engineering Mechanics and Design of Machine Elements. Faculty members handling the course expressed their concern on time constraints. The Chairman suggested that this may be discussed among those faculty members handling the course and suitable solution(s) be proposed.
  8. Dr. G. Sivakumar was invited to give an overview of webinar on Geometric Tolerances by Industry Experts to the students. Dr. Noorullah, University Nominee, suggested

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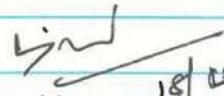
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that this may be extended for students from other colleges as well, and added that this could be useful in the process of accreditation too. He also queried on the availability of resources to conduct the course.

9. Dr. T. Sridhar rendered the Vote of Thanks.

  
18/12/2022  
CHAIRMAN

BOARD OF STUDIES