

## DEPARTMENT OF MECHANICAL ENGINEERING Minutes of Meeting – 2<sup>nd</sup> BoS – 7<sup>th</sup> May, 2021

# MINUTES OF THE 2<sup>nd</sup> ONLINE MEETING

#### BOARD OF STUDIES OF MECHANICAL ENGINEERING

**DATE:** 7<sup>th</sup> May, 2021, Friday **Time:** 3.00 PM – 7.00 PM

**PLATFORM:** GOOGLE MEET

Meeting Link: meet.google.com/ogm-zccs-ray

## **IN ATTENDANCE:**

S.No	Name of the Expert	Designation	Capacity
1	Dr. A. Valan Arasu, M.E., Ph.D.	Professor/ Mechanical Engineering Thiagarajar College of Engineering, Madurai	Anna University Nominee
2	Dr. S.C. Vettivel, M.E., Ph.D.	Associate Professor/Mechanical Engineering Chandigarh College of Engineering and Technology, Chandigarh	Academic Council
3	Dr. V. Anandhakrishnan, M.E., Ph.D.	Associate Professor/Production Engineering National Institute of Technology, Tiruchirapalli	nominated BoS Members
4	Er. K. Rajarathinam B.E.,	Proprietor Essar Engineers, Coimbatore	Industrialist



5.	Er. R. Mayakannan M.Tech.,	CAE Engineer Renault Nissan Technology and Business Centre, Chennai	Alumni
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FACULTY OF MECHANICAL ENGINEERING	MEMBERS
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S.No	Name of the Faculty	Designation
1	Dr. S. Senthil	Chairman / HoD-MECH
2	Dr. S. S. Saravana Kumar	Associate Professor / MECH
3	Dr. P. Narayanasamy	Assistant Professor / MECH
4	Mr. T. Ramesh	Assistant Professor / MECH
5	Mr. S. Chidambara Kumaran	Assistant Professor / MECH
6	Mr. D. Palani Kumar	Assistant Professor / MECH
7	Mr. P. Siva Subramanian	Assistant Professor / MECH



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8	Dr. B. Prabhu	Assistant Professor / MECH
9	Mr. B. Balavairavan	Assistant Professor / MECH
10	Mr. N. R. Madhan	Assistant Professor / MECH
11	Mr. B. K. Parrthipan	Assistant Professor / MECH
12	Mr. S. Devaraj	Assistant Professor / MECH
13	Mr. M. Prithiviraj	Assistant Professor / MECH
14	Mr. T. Suresh	Assistant Professor / MECH
15	Mr. A.Sankara Narayana Murthy	Assistant Professor / MECH
16	Mr. K. Murugananthan	Assistant Professor / MECH
17	Mr. P. Senthamarai Kannan	Assistant Professor / MECH
18	Dr. S. Thanga Kasi Rajan	Assistant Professor / MECH UG Programme Coordinator



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19	Mr. R. Sakthivel Murugan	Assistant Professor / MECH PG Programme Cooordinator
20	Mr. S. David Blessley	Assistant Professor / MECH
21	Mr. L. Loganathan	Assistant Professor / MECH
22	Mr. S. Muthu Natarajan	Assistant Professor / MECH

#### **THE MINUTES:**

The meeting is called for considering the Undergraduate curriculum of B.E. Mechanical Engineering (III Semester to VIII Semester) and its syllabi & PG Syllabus Amendments.

#### **DISCUSSIONS:**

- 1. Dr. S. Senthil welcomed the gathering and the external experts.
- 2. Dr. S. Senthil gave a brief presentation about the action taken on the 1<sup>st</sup> BoS meeting and minutes of the 1<sup>st</sup> BoS meeting held on July 31, 2020. The members of the BoS approved the same.
- 3. Dr. S. Thanga Kasi Rajan presented the framework involved in designing the curriculum and syllabus. He also presented the proposed UG curriculum, Process in framing the curriculum and syllabus, syllabus framing sub-committee, common and audit courses



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and syllabus. Finally he presented the proposed curriculum and syllabus of Manufacturing stream / domain.

- 4. Er. B. Balavairavan presented the proposed UG curriculum for Design stream / domain
- 5. Dr. B. Prabhu presented the proposed UG curriculum for Thermal stream / domain
- 6. The Expert Members appreciated the way of organizing the presentation in a good manner. Dr. V. Anandakrishnan suggested that the discussion would be better more if we concentrate the subjects of 3<sup>rd</sup> and 4<sup>th</sup> semester alone instead of discussing the entire curriculum so that, the recent advancements if any could also be included in the near future. Dr. S.C. Vettivel also requested to keep some space for the latest trend to be incorporated.
- 7. Dr. A. Valan Arasu agreed with the points shared by Dr. V. Anandakrishnan. He suggests to provide year wise curriculum and syllabi approval so that their involvement in the syllabus framing could be more. Also, latest trends could be included in the upcoming semesters.
- 8. As per the recommendations, the 2<sup>nd</sup> year syllabus is presented in detail. The third year and final year B.E. Mechanical Engineering curriculum could be given as a proposed curriculum to the students of B.E. Mechanical Engineering.
- 9. The domain experts presented the respective individual courses of their domain in detail. The Course outcomes, Text books, and the syllabus content were discussed and analysed meticulously. Very few modifications and minor corrections were suggested by Dr. V. Valan arasu and Dr. V. Anandakrishnan.
- 10. Dr. V. Anandakrishnan suggested not to remove any topics from the referenced AU curriculum in the name of obsolete topic, instead it could be bracketed as basic problems, introductory level only, simple problems only etc.,



- 11. Dr. V. Ananda Krishnan also mentioned that, In ME1302, Manufacturing Technology I, few topics are mentioned under "not for exam" that could be replaced as study purpose or introductory level
- 12. Dr. A. Valan arasu suggested that Couse outcome should be framed with a view that it should be measurable as it is essential for NBA, NAAC purposes. Hence appropriate key verbs should be preferred.
- 13. Dr. A. Valan arasu also mentioned that the course outcome and its knowledge level should also be printed in the QP scrutiny and curriculum so that the QP setter can understand at what knowledge level that the questions should be asked. Dr. S. Thanga Kasi Rajan assured that the same will be implemented in curriculum after getting approval from the Dean academic courses.
- 14. Dr. A. Valan arasu also suggested that instead of simply mentioning "Objectives and Outcomes" in syllabi, it could be mentioned as "Course Objectives and Course Outcomes"
- 15. Dr. V. Ananda Krishnan suggested that, In ME1404 Strength of Materials course, the topics like conjugate beam and strain energy-Maxwell's reciprocal theorem was removed. Instead of removing, it can be put under introductory level so that the students may not feel that they are missing few concepts when comparing with University syllabus.
- 16. In ME1301 Thermodynamics subject, Dr. A. Valan Arasu suggested that the CO4 can be refined as "Determine/Analyze the performance of steam power plant by using rankine cycle and CO5 can also be refined in a similar manner.
- 17. In ME1306 Fluid Mechanics and Machinery, Dr. V. Ananda Krishnan suggested that, In Course Objectives, the sentences "To understand the importance of ....." is repeated thrice and the same should be modified with suitable sentences. Dr. A. Valan arasu



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mentioned that CO1 and CO5 could be set to K3 levels and also suggested to change CO3.

- 18. In ME1405 Thermal Engineering, Dr. A. Valan arasu requested to modify the course outcome to be more specific (like determine/evaluate the performance of .....)
- 19. Dr. S. Thanga Kasi Rajan expressed the suggestion given by the Mathematics BoS members on the subject MA1304 Probability, Statistics and Numerical Methods that either the syllabus content should be reduced or credits for the subjects has to be increased. After the discussion, Dr. S. Senthil concluded to remove the unit 3 Design of Experiments and could be offered as separate elective course. The BoS members approved the same. Dr. A. Valan arasu suggested to organize the contents of 4 units that could be distributed as 5 units equally. Hence 3 credits only given to the subject MA1304 Probability, Statistics and Numerical Methods.
- 20. Dr. S. Thanga Kasi Rajan presented the common courses and the syllabi, Audit courses and the syllabi. The 2<sup>nd</sup> year common course syllabus and curriculum being discussed in detail.
- 21. For online courses, Dr, A.Valan arasu requested to include one member from thermal discipline in the committee. Dr. S.C.Vettivel also suggested to include industry persons in approving committee for online courses if possible.
- 22. The BoS members approved the three member committee for Value added courses and Industry Internship.
- 23. Er. B. K. Parrthipan, Presented the Performance of the students in the end semester examination Nov/Dec -2020 (pass percentage, results of  $2^{nd}$ ,  $3^{rd}$  and Final year courses).
- 24. Dr. S. Senthil presented the following PG curriculum amendment (M.E. Manufacturing Engineering).



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S.P.G.C.Nagar, K.Vellakulam - 625 701, (Near Virudhunagar), Madurai District.

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		6.	Optical profile projector	1 no			
		7.	tool makers microscope	1 no			



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8.	Measuring gauges for hole depth and height.		
9.	Sine Bar	1 no	

The BoS members approved the same.

- 25. Dr. S. Senthil discussed about addition of new UG and PG programme in Department of Mechanical Engineering from the AICTE emerging areas. B.E. Robotics and Automation course can be introduced in the future. Similarly for PG Manufacturing Engineering course could be converted to M..E. Robotics subject to the approval.
- 26. The BoS members and our Alumni Er. Mayakannan appreciated the team work of all the faculty members.
- 27. The meeting ended up with Vote of Thanks proposed by Dr. S.S. Saravana Kumar.

Digitally signed by Dr.S.Senthil Date: 2021.05.24 12:09:27 +05'30'

Dr.S.Senthil

HoD-Mech