



## DEPARTMENT OF MECHANICAL ENGINEERING

### REPORT ON BOARD OF STUDIES

**Date and Time :** 26.05.2021 between 10:00 a.m. and 12:00 p.m.  
**Mode :** One line through Google meet <https://meet.google.com/bzd-unjx-ihw>  
**Members :** Reference Enclosure 1  
**Report :**

The Department of Mechanical Engineering Board of Studies started sharply at 10:00 a.m. with all its members present on-time.

Dr.R.Karthikeyan, Professor and Head of the Department of Mechanical Engineering and the Chairman of the Board gave the Welcome address and the Introduction of AMET University. The accreditation, achievements and facilities of the University and the department was addressed by the chairman of the Board, in the Introduction to AMET University.

A brief introduction about external experts was given to the internal experts of the Board of Studies (BOS) by Mr.G.Vijayaganth, Assistant Professor, Department of Mechanical Engineering. The details of the contributions and the achievements of the experts was presented to all the BOS members.

The need for curricula revision, the Industrial scenario and Industrial expectation was presented by Mr.A.R.Sivaram, Assistant Professor, Department of Mechanical Engineering. He stressed that due to the continuous change in the Global technology, large scale manufacturing, increased automation in manufacturing through smart manufacturing technologies, change in transportation technology from conventional IC engine Vehicles to Electric Vehicles, has made the mechanical engineers to possess a blended knowledge on electronics and automation in addition to the knowledge on core Mechanical Engineering. Due to this progression in technology, the change in curriculum and syllabi is the need and compulsion of the hour.

Dr.A.Adinarayanan, Associate Professor, Department of Mechanical Engineering, presented the stakeholders feedback analysis. The feedback were collected from Employers, Alumni, Faculty, Parents and Students The feedback includes the feedback on curriculum and IQAC Feedback form which includes teaching-learning process and facilitates of the University. The Feedback analysis and the action taken in the draft curriculum was presented to the BOS members

The draft UG (B.E. Mechanical Engineering) and PG (Thermal and Fluid Engineering) program curriculum was presented by Mr.P.Ramanathan, Assistant Professor, Department of Mechanical Engineering to BOS members after presenting the Vision and Mission of the University, Vision and Mission Department, Program Educational Objective, Programs Outcomes and Program Specific Outcomes and the AICTE Model curriculum. The draft UG curriculum has 163 credits and PG curriculum with 70 credits. The credit distribution and curricular components for both UG and PG

program was presented. The draft curriculum addresses the global and industrial needs by the inclusion of relevant courses in the curriculum, aiming to produce Job- ready engineers suitable for Industry.

The Highlights and the special features of the draft curriculum was presented by Dr.V.Leela Vinodhan, Associate Professor, Department of Mechanical Engineering, to the BOS members. The highlights include that the draft UG Mechanical Engineering curriculum has four domains - Thermal, Manufacturing, Design and Automation, equally spread in the program. Students not only learn technical aspects but also learn specific course like Universal Human Value and Gender sensitivity to transform the students to global citizen. Student enhance their communication skills through the courses like Communication skill laboratory, Interpersonal communication and Professional Communication. Students get exposure to modern design tools, like Computer Aided Drafting (AUTOCAD), Modelling software like Solid works, CATIA., Analysis software like ANSYS etc. Students can select Professional course of their choice, specific to their area of interest from the domains like Thermal, Manufacturing, Design and Automation. Students with better academic records are given privilege of taking their Professional elective courses through MOOC platform and the credits can transferred as per the AICTE guidelines. Students learn updated technological courses like Robotics, Industrial Automation, Electric Vehicle Technology and Internet of Things. Students have the opportunity to select courses from other streams of engineering through Open Elective courses. The new curriculum is designed in such a way to produce professional engineers

The discussion on the draft curriculum begin with remarks given by Dr. N. Nallusamy, Registrar, Shiv Nadar University. He appreciated the revised curriculum and pointed out that it addressed global and industrial needs and it was in accordance with AICTE model curriculum. He suggested that Workshop Practices Laboratory could be renamed as “Design Thinking and Engineering Practices Lab” and syllabus for the same could also be changed accordingly. He suggested to have theory and practical courses together in the same semester. He recommended to include theory courses in 3<sup>rd</sup> semester for PG programme in accordance with AICTE model curriculum. He suggested to award 1 credit for 15 hours value added courses and 2 credits for 30 hours value added courses and include foreign language courses in curriculum.

Mr. K.Venugopal, TQM & Six Sigma Leader, WABCO India Limited, appreciated the revised curriculum as it addressed industrial needs by inclusion of electronics, PLC and IOT. He expressed the importance of soft skills and conduct of soft skill training programme in collaboration with an external agency. He suggested to give more opportunities for students to conduct programmes which could help them to improve managerial skills. He suggested to have application-oriented course in which theory and practical could be joined together.

Mr. A. Jeyabal, Plant Head – SPU, Ashok Leyland presented the key points pertaining to current industry trends. He suggested to include courses covering topics such as agile manufacturing, SAP, digital design and manufacturing, smart shop floors, EEI and low-cost automation technologies. He expressed his interest to collaborate with AMET for projects and industrial visits.

Dr. T. Sasilatha, Dean – Academic suggested to include Artificial Intelligence and Data science courses in 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> semester. She further suggested to give importance to Swayam and MOOC courses. Dean – Academic further suggested to address curricular gap and maintain threshold higher than earlier.

Dr. N. Srinivasan, Director – Placements suggested to increase the number of students enrolling in Swayam courses offered by IIT and IISc. He recommended to encourage students to opt for two Swayam courses during their 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> semester of study in UG program.

Dr. D. Arivazhagan, Director – Ranking and Accreditation suggested to include specific industry related courses from first year. He encouraged to have more industry institute interaction. He suggested to offer automation courses from 3<sup>rd</sup> semester onwards to UG students

Mr. Suraj Kumar, Automation Engineer, SIEG Industrial Services and SPM Machines, one of the distinguished alumni suggested to include automation courses, PLC theory and practical and SCADA. He suggested to train the students to handle power tools and organize frequent mock interviews to improve communication skills.

Mr. E. Vinoth, Senior Analyst - Procurement and Supply Chain, Flextronics Technologies, one of the distinguished alumni suggested to include supply chain management as an elective in 8<sup>th</sup> semester. He suggested to give importance to soft skills.

Mr. A. Austin Caleb Yugaraj, final year student of. B.E – Mechanical Engineering suggested to have more industrial visits.

Mr. P. Vasanth, third year student of. B.E – Mechanical Engineering suggested to include IOT and its practical from 3<sup>rd</sup> semester.

Dr. A. Thanikasalam, Assistant Professor, Department of Mechanical Engineering suggested to include theory papers in 3<sup>rd</sup> semester of PG curriculum.

**After discussion Board recommended the draft UG and PG curriculum to the Academic Council of the University.**

The Board concluded with the vote of thanks given by Dr. D. Madhesh, Professor, Department of Mechanical Engineering.



Dr R Karthikeyan  
HOD / Mech

Chair person  
Board of Studies  
Department of Mechanical Engineering

**Enclosure:**

1. Annexure – 1 - Members present in the Board of studies meeting.
2. Annexure – 2 - Photography of the Board of studies meeting



DEPARTMENT OF MECHANICAL ENGINEERING  
MEMBERS PRESENT IN THE BOARD OF STUDIES  
ANNEXURE - 1

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S.No	Name	Membership Category	Office / Department
<b>CHAIRPERSON</b>			
1	Dr.R.Karthikeyan	Professor and Head Department of Mechanical Engineering	AMET
<b>EXTERNAL MEMBERS</b>			
2	Dr. N. Nallusamy	External Expert – Academic	The Registrar, <a href="#">Shiv Nadar University</a> , Rajiv Gandhi Salai (OMR) Kalavakkam – 603 110, Tamil nadu
3	Mr. A. Jeyabal	External Expert – Industry	<a href="#">Ashok Leyland</a> Unit – Head – SPU, Plot No. K-2, Sipcot Indl. Estate, Areni Village, Sriperumbudur - 602105
4	Mr. K.Venugopal,	External Expert – Industry	Reginal Six Sigma Leader, <a href="#">WABCO India Limited</a> , III Main Road, Ambuttur Indl. Estate Chennai - 600058
<b>SPECIAL INVITIEES</b>			
5	Dr. D. Arivazhagan	Director – Accreditation and Ranking	AMET
6	Dr. Srinivasan	Director – Placement	AMET
7	Dr. T. Sasilatha	Dean – Academic Dean – Dept of Electrical & Electronics Engineering	AMET
8	Dr. L. Rajendran	HoD – Dept. of Mathematics	AMET
<b>INTERNAL EXPERTS</b>			
9	Dr.D.Madhesh	Professor	AMET

10	Dr.A.Adinarayanan	Associate Professor	AMET
11	Dr.V.Leela Vinodhan	Associate Professor	AMET
12	Mr.P.Ramanathan	Assistant Professor	AMET
13	Mr.A.R.Sivaram	Assistant Professor	AMET
<b>ALUMINI</b>			
14	Mr. M. Suraj Kumar	Roll.No. MEC082 Reg. No. BME15030	Automation Engineer, SIEG Industrial Services and SPM Machines.
15	Mr. E. Vinoth	Roll No. MEC088 Reg.No. BME15036	Senior Analyst - Procurement and Supply Chain, Flextronics Technologies
<b>STUDENT REPRESENTATIVE</b>			
16	Mr. A. Austin Caleb Yugaraj	Roll No. MEC204 Reg,No. BME17013	Final Year Student
17	Mr. P. Vasanth	Roll No. MEC355 Reg,No. BME18090	Third Year Student



Dr R Karthikeyan  
HOD / Mech

Chair person  
Board of Studies  
Department of Mechanical Engineering



DEPARTMENT OF MECHANICAL ENGINEERING  
**PHOTOGRAPH DURING THE BOARD OF STUDIES MEETING**  
**ANNEXURE 2**

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