

Department of Mechanical Engineering Board of Studies – First meeting

Program Offered

B.E. Mechanical Engineering

Date & Time

1st September 2023 at 10.30 a.m.

Venue

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NPRCET Rear block seminar hall – RBSH006

The Members of the Board are:

S. No.	Member Category	Name, Designation and Affiliation
1	Chair Person	Dr. T. Saravana Kannan Professor & Head Department of Mechanical Engineering NPR College of Engineering & Technology, Natham – 624401 Dindigul.
2	University Nominee	Dr. K. Linga Durai Professor & Dean Anna University Regional Campus, Madurai. Madurai – 625019, Tamil Nadu.
3	Subject Experts from outside of the parent university	Dr. M. Adam Khan Professor, Mechanical Engineering Kalasalingam Academy of Research and Education Krishnankoil – 626126. Virudhunagar District.
4		Dr. R. Sudhakara Pandian Professor, Department of Manufacturing Engineering School of Mechanical Engineering, VIT University, Vellore Campus, Vellore, Tamil Nadu – 632014.
5	Industrial / Corporate sector / Allied Sector Expert	Dr. G. Balakrishnan Engineering Manager, Caterpillar India Engineering Solutions Private Limited, Chennai – 600 113. Tamil Nadu.
6	Department Alumni	Mr. B. B. Arun Karthick Senior Engineer, BOSCH Global Software Solutions, Bangalore.
7	Experts from outside the Autonomous college	Dr. PL. K. Palaniapan Professor, Department of Mechanical Engineering Thiagarajar College of Engineering, Madurai – 625 015



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		Dr. S. Paulsingarayar, Associate Professor
		Mr. K. Aruna Senthil Kumar, Assistant Professor
		Mr. G. Sundararajan, Assistant Professor
	Members of the faculty of Mechanical Engineering	Mr. T. Balasubramani, Assistant Professor
8		Mr. M. Mathan Raj, Assistant Professor
		Mr. B. Gopi, Assistant Professor
		Dr. C. Manivel, Assistant Professor
		Mr. M. Saravana Kumar, Assistant Professor
		Mr. M. Prakash, Assistant Professor
		Mr. P.G. Sam Infant Jones, Assistant Professor

Dr.T. Saravana Kannan, Chairman, Board of Studies of the Department of Mechanical Engineering welcomed and introduced the BoS members for the first BoS meeting. He started the presentation with a brief introduction to the PEO, PO & PSO of Mechanical Engineering. He explained the highlights of the new curriculum to the members.

B.E. Mechanical Engineering

Based on the following suggestions given by the members, the Chairman of BoS suggestions were incorporated appropriately in the Curriculum and Syllabus of Semester 1 & 2.

Suggestions given by Dr. K. Linga Durai - University Nominee

- 1. In Semester II and III, Laboratory courses credit can be rounded off.
- Two Continuous assessment tests can be conducted having equal distributions of marks to obtain even distribution of Course Outcomes.
- The course Fluid mechanics and machinery can be moved to fourth semester from third semester and similarly the course on strength of materials can be offered in third semester.
- As per AICTE norms two mandatory courses need to be offered in curriculum in fifth and sixth semesters.
- 5. The Value Added Course credit need not be accounted for CGPA calculation.
- 6. Environmental science and Engineering course can be offered in the third semester
- 7. Finite element analysis can be offered as theory cum practical course in seventh semester.
- Project work course can be offered as phase 1 (2 credits) in 7th semester and phase 2 (8 credits) in eight semester.



Suggestions given by Dr. PL. K. Palaniapan - Subject Expert

- The course content of physics for mechanical engineering and engineering materials and metallurgy can be merged into a single course that can be offered in second semester.
- Hydraulics and Pneumatics course can be offered in sixth semester.
- 3. Industrial management course can be offered in fifth semester.

Suggestions given by Dr. G. Balakrishnan - Industrial Expert

- The value added courses geometric dimensioning and tolerance, fixture design need to be offered in higher semesters.
- The value added course Patent drafting for beginners, innovations by design, understanding of design, stress management were approved to be offered in third and fourth semester.
- 3. In fourth semester, Theory of machines can be offered as a theory cum practical course.
- In fifth semester, Computer Aided Design can be offered as theory course and for CAD Lab CATIA, CREO, NX softwares were suggested.
- Integrated product development course may be introduced along with mini project.
- The courses on Disaster and Risk reduction management and industrial safety can be offered. A course inclusive of yoga and sports can be offered.

Suggestions given by Dr. M. Adam Khan - Subject Expert

- In Second semester, Basics of Electrical and Electronics Engineering can be offered as theory cum practical course
- The material characterization techniques, surface corrosion topics can be given weightage in the course on Engineering Materials and Metallurgy.
- 3. Metrology and Measurement can be offered as a theory cum practical course offered in fourth semester. The course title can be changed to Metrology and computer aided inspection. Experiments including machine vision/Image processing can be included.

Suggestions given by Mr. B. B. Arun Karthick - Alumni

- After recruitment, industry will train the students on required skills. Institute can offer technology development based courses.
- 2. The knowledge on Machine learning and Artificial Intelligence can be given to the students.

Any other matters/discussion:

- Industry supported courses can be offered with 1 credit.
- Minor/Honours degree awareness to be given to the students.

Finally, the meeting was concluded with a vote of thanks by Mr. K. Aruna Senthil Kumar, Assistant Professor, Department of Mechanical Engineering. The chairman thanked all the members for their suggestions and substantial inputs provided in the meeting.



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BoS, Chair Pers	on		University Nominee
Dr. T. Saravana Ka Professor & Hea Department of Mechanical NPR College of Engineering & Te - 624401, Dindig	d Engineering chnology, Natham	Anna Un M	Dr. K. Linga Durai Professor & Dean iversity Regional Campus, Madurai. Iadurai-625019, Tamil Nadu.
Subj	ect Experts from o	utside of the pare	nt university
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Professor, Mechanical Engineering Kalasalingam Academy of Research and Education Krishnankoil 626126 Virudhunagar Dist. Tamil Nadu		Dr. R. Sudhakara Pandian Professor, Department of Manufacturing Engineering School of Mechanical Engineering, VIT University, Vellore Campus, Vellore, Tamil Nadu - 632014.	
Industrial / Corporate sector Expert Departmen		alai	6000 Z
		nt Alumni	Experts from outside the Autonomous college
Dr. G. Balakrishnan Engineering Manager Caterpillar India Engineering colutions Private Limited, Chennai – 600 113. Tamil Nadu.	Mr. B. B. Ar Senior E BOSCH Glob Solutions, E	ngineer oal Software	Dr. P.L. K. Palaniapan Professor, Department of Mechanical Engineering Thiagarajar College of Engineering, Madurai – 625 015



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Department of Mechanical Engineering

Board of studies Meeting - Attendance Report

Date

: 01.09.2023

Time

:10.30 a.m.

Venue : NPRCET Rear block Seminar Hall

S. No	Name	Designation	Association	Signature
1	Dr. T. Saravana Kannan	Professor & Head	Board of Chairman	nel
2	Dr. K. Linga Durai	Professor & Dean	University Nominee	10 Minj T.
3	Dr. M. Adam Khan	Professor	Subject Experts	4 fler
4	Dr. R. Sudhakara Pandian	Professor	Subject Experts	online
5	Dr. G. Balakrishnan	Engineering Manager	Industrial / Corporate sector	h. \$1.9.
6	Mr. B. B. Arun Karthick	Senior Engineer	Alumni	13 May
7	Dr. PL. K. Palaniapan	Professor	Experts from outside the Autonomous college	200001
8	Dr. S. Paulsingarayar	Associate Professor	Faculty Member	Mulay
9	Mr. K. Aruna Senthil Kumar	Assistant Professor	Faculty Member	Profile
10	Mr. G. Sundararajan	Assistant Professor	Faculty Member	G. 604
11	Mr. T. Balasubramani	Assistant Professor	Faculty Member	T. But
12	Mr. M. Mathan Raj	Assistant Professor	Faculty Member	nna
13	Mr. B. Gopi	Assistant Professor	Faculty Member	B.C.
14	Dr. C. Manivel	Assistant Professor	Faculty Member	8mprs
15	Mr. M. Saravana Kumar	Assistant Professor	Faculty Member	A8 7 16
16	Mr. M. Prakash	Assistant Professor	Faculty Member	Wat
17	Mr. P.G. Sam Infant Jones	Assistant Professor	Faculty Member	असीची 1912



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Invited Members				
18	S. Sathish Kumar	Assistant Professor	Faculty Member	Prest
19	Dr. A. Kanimozhi	Associate Professor	Faculty Member	10/23
20	Dr. N. Prabhakaran	Associate Professor	Faculty Member	4. 800
21	Mr. B. KARUPPUSAMY	Assistant Professor	Faculty Member	Excusto

Dr. T. Saravana Kannan Chairman BoS



Department of Mechanical Engineering Minutes of the Board of Studies Meeting -1

The Following faculty members have been identified for Question paper setting & Examiners.

SI. No	Name & Designation	Association
1	Dr. R. Dhinakaran Professor	Puducherry Technological University, Pondicherry.
2	Dr. J. Thanikachalam Associate Professor	Mepco Schlenk Engineering College, Sivakasi.
3	Dr. T. Ramesh Associate Professor	National Institute of Technology, Tiruchirappalli
4	Dr. M. Balakrishnan Assistant Professor	Nehru Institute of Engineering & Technology, Coimbatore
5	Dr. L. Poovazhagan Associate Professor	SSN College of Engineering, Chennai
6	Dr. A. Suresh Babu Professor	Anna University, Chennai
7	Dr. S. Jeyanthi Professor	Vellore Institute of Technology, Chennai.
8	Dr. T. Venugopal Professor	Vellore Institute of Technology, Chennai.
9	Dr. S. Prabhu Professor	SRM University, Chennai
10	Dr. P. Maran Professor	Thiagarajar College of Engineering, Madurai.
11	Dr Babu S Associate Professor	PSG College of Technology, Coimbatore.
12	Dr. K. Arumugam Assistant Professor	University College of Engineering Ramanathapuram



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BoS, Chair Person

Dr. T. Saravana Kannan Professor & Head Department of Mechanical Engineering NPR College of Engineering & Technology, Natham – 624401, Dindigul.

University Nominee

Dr. K. Linga Durai Professor & Dean Anna University Regional Campus, Madurai. Madurai-625019, Tamil Nadu.

Subject Experts from outside of the parent university

Dr. M. Adam Khan

Professor, Mechanical Engineering
Kalasalingam Academy of Research and
Education
Krishnankoil 626126
Virudhunagar Dist. Tamil Nadu

online

Dr. R. Sudhakara Pandian
Professor, Department of Manufacturing
Engineering
School of Mechanical Engineering,
VIT University, Vellore Campus,
Vellore, Tamil Nadu - 632014.

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Industrial / Corporate sector	

Dr. G. Balakrishnan
Engineering Manager
Caterpillar India Engineering
Solutions Private Limited,
Chennai – 600 113. Tamil
Nadu.

Department Alumni

Mr. B. B. Arun Karthick Senior Engineer BOSCH Global Software Solutions, Bangalore. Experts from outside the Autonomous college

Dr. PL. K. Palaniapan Professor, Department of Mechanical Engineering Thiagarajar College of Engineering, Madurai – 625 015



Department of Mechanical Engineering <u>Board of Studies – First meeting – Action taken report</u>

Action taken Report through the minuted BOS meeting based on the recommendation of feedback received from all stakeholders.

BOS Meeting - 1

Members	Suggestions	Action Taken
Dr. K. Ļinga	In Semesters II & III, Laboratory	Laboratory course credits in
Durai	course credit can be rounded off	Semester III have been rounded off
University		from 1.5 to 2.0 credits. However, in
Nominee	* * * * * * * * * * * * * * * * * * * *	semester II, the credit in the
		common lab courses remains the same.
	Two Continuous assessment	It is planned to follow three
	tests can be conducted having	continuous internal assessment
	equal distributions of marks to	common for all departments.
	obtain an even distribution of	- Common for an expansion
	Course Outcomes.	40.70
	The course Fluid Mechanics and	As per the suggestions from the
	Machinery can be moved to the	advisory committee, Fluid
	fourth semester from the third	Mechanics and Machinery course
	semester and similarly, the	has been swapped to the fourth
	course on strength of materials	semester, and the Strength of
	can be offered in the third	Materials" course in the third
	semester.	semester
	As per AICTE norms two	Two mandatory courses will be
	mandatory courses need to be	offered in the third and fourth
	offered in the curriculum in the	semesters to meet the AICTE
	fifth and sixth semesters.	requirement.
	The Value-Added Course credit	Yes, the value-added course credit
	need not be accounted for in	is not accounted for in the CGPA
	CGPA calculation.	calculation.
~	Environmental science and	It has been decided to offer in the
	Engineering courses can be	4 th semester as we planned earlier.
	offered in the third semester	Because a common arrangement is
	A MARK TO SERVICE AND ADDRESS OF THE PROPERTY	made for all departments to offer in
		the 4 th semester.
	Finite element analysis can be	Finite Element Analysis will be
	offered as a theory cum practical	offered as a theory cum practical
	course in the seventh semester.	course in the seventh semester.
	Project work courses can be	The project work course is offered
100	offered as phase - 1 (2 credits) in	with 10 credits similar to Anna
	the 7th semester and phase - 2 (8	University R 2021 to give more



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	credits) in the eighth semester.	importance to industry-based projects.	
Dr.PL.K. Palaniapan	The course content of physics for mechanical engineering and	Merged the course content of Physics for Mechanical	
Subject Expert	engineering materials and	Engineering and Engineering	
	metallurgy can be merged into a single course that can be offered	Materials and Metallurgy into a single course as Materials Science	
	in the second semester.	and Technology in the second semester.	
	Hydraulics and Pneumatics	Offered the Hydraulics and	
	courses can be offered in the sixth semester.	Pneumatics course in the sixth semester.	
	Industrial management courses	It is planned to offer in the 7 th	
	can be offered in the fifth semester.	semester as similar to R2021.	
Dr.G.	The value-added courses	The value-added courses on topics	
Balakrishnan	geometric dimensioning and	like "Geometric Dimensioning and	
Industrial	tolerance, and fixture design need to be offered in higher	Tolerance" and "Fixture Design" will be considered in higher	
Expert	semesters.	semesters as per the suggestion.	
	The value-added courses Patent	Value-added courses such as Patent	
	Drafting for Beginners,	Drafting for Beginners, Innovations	
	Innovations by Design,	by Design, Understanding of	
	Understanding of Design, and	Design, and Stress Management	
	Stress Management be offered in	will be considered in the third and	
	the third and fourth semesters.	fourth semesters as per panel suggestions.	
	In the fourth semester, Theory of	It is difficult to teach the syllabus	
	Machines can be offered as a	within the allocated time if we offer	
	theory cum practical course.	Theory cum practical for this	
		course. So, we decided to continue	
	In the COL consists Committee	the same as we planned earlier.	
	In the fifth semester, Computer- Aided Design can be offered as a	Computer-Aided Design and Manufacturing is offered as a	
	theory course, and for CAD Lab	theory course in the fifth semester.	
*	CATIA, CREO, and NX	In addition, CATIA, CREO, and	
	software were suggested.	NX software will be used in the	
		CAD/ CAM Laboratory.	
*	An integrated product	We decided to follow the common	
	development course may be	course the Mini-project for all	
	introduced along with a mini-	departments as we planned.	
	project. Courses on Disaster and Risk	Offer mandatory courses on	
	reduction management and	Disaster and Risk Reduction	
	industrial safety can be offered.	Management and Industrial Safety	
	A course inclusive of yoga and	as per the Anna University	



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	sports can be offered.	curriculum. Yoga and sports can also be offered optionally as per the
		AICTE model curriculum.
Dr. M. Adam Khan	In the Second semester, Basics of Electrical and Electronics	As we received feedback from the EEE department that it is difficult
Subject Expert	Engineering can be offered as a theory cum practical course	to cover the syllabus if we offer theory cum practical for this course.
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	The material characterization techniques and surface corrosion topics can be given weightage in the course on Engineering Materials and Metallurgy.	Weightage is given to material characterization techniques and surface corrosion topics in the proposed curriculum.
	Metrology and Measurement can be offered as a theory cum practical course offered in the fourth semester. The course title can be changed to Metrology and computer-aided inspection. Experiments including machine vision/Image processing can be included	This will be discussed again in the next BoS meeting to frame the syllabus if possible. At this moment we decided to follow similar to Anna University R2021 as we planned earlier.
Mr. B. B. Arun Karthick	After recruitment, the industry will train the students in the required skills. The institute can offer technology development-	It is planned to Introduce technology-development-based courses along with curriculum and value-added courses.
Alumni	based courses. The knowledge of Machine learning and Artificial Intelligence can be given to the students.	Machine learning and artificial intelligence-based courses are offered in the curriculum.
Common Suggestions	Industry-supported courses can be offered with 1 credit.	Offer industry-supported courses with I credit along with the regular curriculum, but the credits are not accountable for CGPA calculations.
2 2	Minor/Honours degree awareness to be given to the students.	Provide awareness to the students about minor or honors degree options from the first semester onward. Make all the students either go for honors or minors along with their degree courses.

BoS Chairman

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(Dr. T. Saravana Kannan)

Head of the Department
Department of Mechanical Engineering
NPR Coffege of Engineering & Technology
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