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Department of Mechanical Engineering

FXEC/IQAC/Mech/BOS/24-25/EVEN/Cir/May-01

Date: 29.05.2025

Circular

The 13th Board of Studies Meeting is scheduled on 30.05.2025 (Friday) at 11.00am in Presentation Hall. All the members are cordially invited to attend the meeting.

AGENDA

- **Item 24.BOS/13.1:** Dissemination of Vision, Mission, PSO and PEO
- **Item 24.BOS/13.2:** To confirm the action taken report of the previous BOS held on 23.12.2024
- **Item 24.BOS/13.3:** V Syllabus R24 for approval
- **Item 24.BOS/13.4:** Open Elective III Syllabus R 24 discussion and approval
- **Item 24.BOS/13.5:** Professional Elective Verticals R 24 discussion and approval
- **Item 24.BOS/13.6:** Professional Elective – I R24 syllabus discussion and approval
- **Item 24.BOS/13.7:** Tentative NPTEL list of courses for approval (Odd Sem AY 25-26)
- **Item 24.BOS/13.8:** Any other Points for discussion – Ratification in Program Outcomes


Programme Coordinator


Head of the Department

To:

All BOS Members

Copy to:

The Principal

The IQAC Director

All M-Team Members

The File



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Department of Mechanical Engineering

FXEC/IQAC/Mech./BOS/24-25/EVEN/MoM/May-01

Date: 30.05.2025

Minutes of Board of Studies Meeting

Date & Time: 30.05.2025 11.00 AM

Venue: Presentation Hall

The 13th Board of Studies meeting of Department of Mechanical Engineering was conducted on 30.05.2025 at 11.00 a.m.

Members of BOS:

Sl. No	Name	Designation	Position in BOS
1	Dr. R. Samuel Hansen	Head of the Department	Chair Person
2	Dr.A. Krishnaveni	University nominee	Member
3	Dr. V. Senthil Kumar	Academic Peers - Outside the parent University nominee	Member
4	Dr. R. Sudhakarpanthian	Academic Peers - Outside the parent University nominee	Member
5	Mr. R. Srinivasa Raghavan	Industrial experts	Member
6	Mr.S.Valai Ganesh	Alumni	Member
7	Dr. V.Velmurugan	Professor and Principal	Member
8	Dr.M.Kannan	Professor	Member
9	Dr.SM Rajkumar	Associate Professor	Member



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Department of Mechanical Engineering

10	Dr.K.Ariyanayagam	Associate Professor	Member
11	Dr. K.Robinston Jeyasingh Swikker	Associate Professor	Member
12	Dr.K.Vinukumar	Assistant Professor	Member
13	Dr. S.Sheik Sulaiman	Assistant Professor	Member
14	Mr.S.Thanumalaya Perumal	Assistant Professor	Member
15	Mr. J.Jeremy Jeba Samuel	Assistant Professor	Member
16	Mr.R.Rahesh	Assistant Professor	Member
17	Mr.S.Rakesh	Assistant Professor	Member
18	Mr.S.M.Sunder Rajan	Assistant Professor	Member
19	Dr.S.David Blessley	Assistant Professor	Member
20	Dr.J.Sangili Muthukumar	Assistant Professor	Member



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Department of Mechanical Engineering

Agenda:

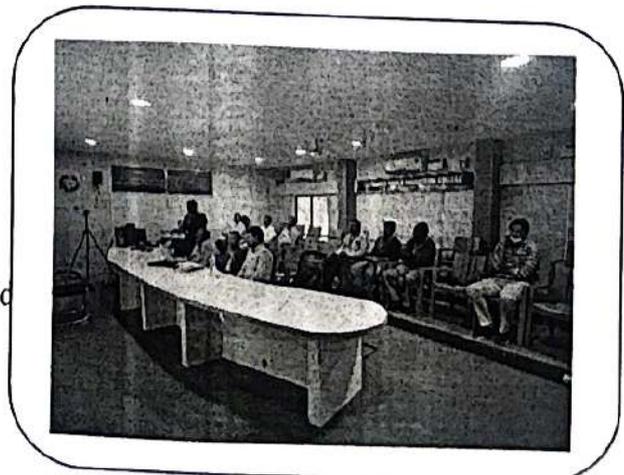
- Item 24.BOS/13.1: Dissemination of Vision, Mission, PSO and PEO
- Item 24.BOS/13.2: To confirm the action taken report of the previous BOS held on 23.12.2024
- Item 24.BOS/13.3: Action Taken during 12th BoS
- Item 24.BOS/13.4: V Sem Syllabus R24 for discussion and approval
- Item 24.BOS/13.5: Professional Elective verticals R 24 approval
- Item 24.BOS/13.6: Professional Elective I Syllabus discussion and approval
- Item 24.BOS/13.7: Open Elective III Syllabus discussion and approval
- Item 24.BOS/13.8: NPTEL list of courses for approval
- Item 24.BOS/13.9: Any other Points for discussion

Opening Protocol:

The 13th BOS started with the prayer by Dr.K.Robinston Jeyasingh Swikker, Associate Professor/Mechanical Engineering.

Dr.J.Sangili Muthukumar, AP/Mech welcomed the members of the BOS.

Dr.K.Ariyanayagam ASP/Mech briefed the agenda of the meeting and the deliberations of 13th BOS.





Department of Mechanical Engineering

Item 24.BOS/13.2: To confirm the Action taken report of the previous BOS held on 23.12.2024

Item 24.BOS/13.2 - Points discussed for action taken during previous BOS held on 23.12.2024	Action Taken	Remarks
Dr.Krishnaveni mam suggested to change the title of the Vth unit in Engineering Thermodynamics as the topics availability, irreversibility were included	Changes have been made as per the given suggestions (Ref: R24 Syllabus Page 106)	-
Dr.V.Senthil Kumar sir suggested to revamp the 5th unit as the syllabus looks vast in the course Manufacturing Technology. He recommended to remove the topics NC Machine tools and CNC Lathe and include in the course CAD/CAM/CIM for automation in 5 th Semester	Changes have been made as per the suggestions given. (Ref: R24 Syllabus Page 91)	-
Mr.S.Valai Ganesh sir suggested to reframe the title of Unit 3 in Fluid Mechanics and Machinery as hydraulic circuits have been included.	Changes have been made as per the suggestions given. (Ref: R24 Syllabus Page 116)	-



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Dr.Senthil Kumar sir suggested to add the topic Introduction to Tensors in Unit II after Principal Planes and Stresses in the course Strength of Materials	Changes have been made as per the suggestions given. (Ref: R24 Syllabus Page 135)	-
Dr. Senthil Kumar sir suggested to add Types of Standards for the course Metrology and Instrumentations.	Changes have been made as per the suggestions given. (Ref: R24 Syllabus Page 145)	-
Dr.Suthakara Pandian sir recommended to add the topic multi degrees of freedom in unit IV in the course Theory of Machines,	Changes have been made as per the suggestions given. (Ref: R24 Syllabus Page 151)	-
Dr.S.Valai Ganesh suggested to revamp the topic Epicyclic gear train as Gear train and its types in II unit of the course Theory of Machines	Changes have been made as per the suggestions given. (Ref: R24 Syllabus Page 151)	-
Dr.Krishnaveni mam suggested that, In Open Elective - 2, For the course Energy Engineering and Management, Unit V, The course outcome may include Energy auditing as key indicator.	Changes have been made as per the suggestions given. (Ref: R24 Open Elective Syllabus Page 17)	-



Department of Mechanical Engineering

Mr.S.Valai Ganesh sir suggested that, In the course, Principles of Mechanical System Automation, Unit IV, Single Board Microcontroller (Rasperry pi) and Single board computer (Arduino) topics can be added	Changes have been made as per the suggestions given. (Ref: R24 Open Elective Syllabus Page 11)	-
Dr.Sudhakarapandian sir suggested to include work study in Engineering Economics and Cost analysis Open elective.	Changes have been made as per the suggestions given. (Ref: R24 Open Elective Syllabus Page 22)	-
Dr.Sudhakarapandian suggested to add Battery Materials in any of the open electives as it may not be offered by other departments	Suggestions may be implanted and get approved in the next BoS	-
Dr.R.Samuel Hansen presented the list of courses and course contents for Skill Based Value Added courses (SVAC)	-	-
Dr.R.Samuel Hansen presented the Additive Manufacturing minor degree courses for R24 Regulation	-	-
Ratification in Program Outcomes. (11 POs as specified by NBA)	-	-



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Department of Mechanical Engineering

Points discussed in the 13th BOS meeting held on 30.05.2025

Points for Discussion and Approval	Action Planned	Responsibility Assigned	Target Date
Item 24.BOS/13.4	Dr.R.Sudhakara Pandian suggested that the recommended NPTEL courses Artificial Intelligence and Machine Learning in Materials Engineering, Fundamentals of Artificial Intelligence are related to AI. This may be made as Professional Core/Professional Elective	Mr.S.David Blessley	05.06.2025
Item 24.BOS/13.4	Mr.S.Valai Ganesh - In Mechatronics and Internet of Things, Unit V title can be revamped as Applications of IoT. In Unit II, concepts related to Architecture of 8085, Microcontroller can be removed as it is outdated currently. In addition, single board microcomputers, single board microcontrollers can be added in unit IV.	Dr.M.Kannan	05.06.2025



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Item 24.BOS/13.5	Mr.S.Valai Ganesh sir suggested that, In Professional Elective, The course Applied Hydraulics and Pneumatics can be considered in Industrial Automation and Management stream which is currently placed in Design stream,		
Item 24.BOS/13.6	Mr.S.Valai Ganesh sir suggested that the title Principles of Management can be revamped as fundamentals of Management	Mr.S.David Blessley	05.06.2025
Item 24.BOS/13.7	Dr.R.Sudhakara Pandian suggested, In Open Elective - I, the subject, 3DPrinting Technology can be renamed as Additive manufacturing Technology.	Mr.S.David Blessley	05.06.2025
Item 24.BOS/13.7	Mr.S.Valai Ganesh sir also suggested that, In Open Elective - IV, it will be fulfilled if Robotics based subject is included	-	-



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Item 24.BOS/13.8	Dr.Krishna Veni Mam has suggested that the NPTEL courses for the upcoming semester has been released very recently. Hence the same can be checked for the recommended courses	Mr.S.David Blessley	05.06.2025
Item 24.BOS/13.9	Mr.S.Valai Ganesh sir provided insights related to NPTEL that, If a student complete any 4 courses in a semester and topper in any of the course, he will be recognized as NPTEL believer from IIT and offered as a pre-doc fellowship for 1 year with stipend and food.		
Item 24.BOS/13.5	Dr. V. Senthil Kumar commended that the recent industry trends are incorporated within the syllabus. He has advised moving forward with the current curriculum accordingly.		



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The meeting came to a close with a vote of thanks by Mr. S.Thanumalayaperumal, AP/Mech.

Prepared By

Dr. S. David Blessley,

Dr. J. Sangili Muthukumar

Approved By

Dr. R. Samuel Hansen

Board Chairman

Dept. of Mechanical Engg.,

Francis Xavier Engineering College



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Department of Mechanical Engineering

Members Present:

Sl. No	Name	Designation	Position in BOS	Signature
1	Dr. R. Samuel Hansen	Head of the Department	Chair Person	
2	Dr.A. Krishnaveni	University nominee	Member	 Dr. A. KRISHNAVENI, M.E., Ph.D., MIS Professor (CAS) Dept. of Mechanical Engineering Govt. College of Engineering Tirunelveli-627 007.
3	Dr. V. Senthil Kumar	Academic Peers - Outside the parent University nominee	Member	
4	Dr. R. Sudhakar Pandian	Academic Peers - Outside the parent University nominee	Member	
5	Mr. R. Srinivasa Raghavan	Industrial experts	Member	
6	Mr.S.Valai Ganesh	Alumni	Member	 30/5/25
7	Dr. V.Velmurugan	Professor and Principal	Member	
8	Dr.M.Kannan	Professor	Member	
9	Dr.S.M. Rajkumar	Associate Professor	Member	
10	Dr.K.Ariyanayagam	Associate Professor	Member	 30/5/25
11	Dr. K.Robinston Jeyasingh Swikker	Associate Professor	Member	 30/5/25



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Department of Mechanical Engineering

12	Dr.K.Vinukumar	Assistant Professor	Member	
13	Dr. S.Sheik Sulaiman	Assistant Professor	Member	
14	Mr.S.Thanumalaya Perumal	Assistant Professor	Member	
15	Mr. J.Jeremy Jeba Samuel	Assistant Professor	Member	
16	Mr.R.Rahesh	Assistant Professor	Member	
17	Mr.S.Rakesh	Assistant Professor	Member	
18	Mr.S.M.Sunder Rajan	Assistant Professor	Member	
19	Dr.S.David Blessley	Assistant Professor	Member	
20	Dr.J.Sangili Muthukumar	Assistant Professor	Member	



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Department of Mechanical Engineering

Members attended Online

Sl. No	Name	Designation	Position in BOS	Signature
1	Dr. V. Senthil Kumar	Academic Peers - Outside the parent University nominee	Member	
2	Dr. R. Sudhakar Pandian	Academic Peers - Outside the parent University nominee	Member	

Members Absent:

Sl. No	Name	Designation	Position in BOS
1.	Mr.R.Srinivasa Raghavan	AVP Manufacturing Alliance Tire Group	Expert member from Industry



Department of Mechanical Engineering

FXEC/IQAC/Mech/Post-BOS/24-25/EVEN/Cir/ 01

Date: 02.06.2025

Circular

The Post-Board of Studies meeting for the 13th BoS is scheduled on 04.06.2025 (Wednesday) at 02.00 am in Mech HoD Cabin. All the members are cordially invited to attend the meeting.

AGENDA

- **Item 24-25.Post BoS/13.1: Review and action taken for 12th BoS minutes**
- **Item 24-25.Post BoS/13.2 Any other points for discussion**


2/6/25

Programme Coordinator


2/6/25

Head of the Department

To:

All Faculty/Mech

The File



Department of Mechanical Engineering

FXEC/IQAC/Mech/Post-BOS/24-25/EVEN/Cir/ 01

Date: 04.06.2025

Minutes of Post Board of Studies Meeting

Date & Time : 04.06.2025 & 02.00PM

Venue : Mech HoD Cabin

The Post meeting after 13th Board of studies meeting of Department of Mechanical Engineering was conducted on 04.06.2025 at 02.00pm

Members of Post Bos

1. Dr.R.Samuel Hansen HoD/Mech
2. Dr.M.Kannan
3. Dr.K.Ariyanayagam
4. Dr.K.Robinston Jeyasingh Swikker
5. Dr.S.M.Rajkumar
6. Mr.S.Thanumalayaperumal
7. Mr.S.M.Sunderrajan
8. Mr.S.David Blessley

Agenda

Item 24-25.Post BoS/13.1: Review and action taken for 12th BoS minutes

Item 24-25.Post BoS/13.2 Any other points for discussion

The Post BoS meeting of 12th BoS was conducted by Dr.R.Samuel Hansen HoD/Mech and the following points are discussed. Dr.R.Samuel Hansen briefed the agenda of the meeting and the deliberations of 13th BoS



Department of Mechanical Engineering

Item 24-25.Post BoS/13.1: Review and action taken for 13th BoS minutes

Points for Discussion and Approval	Action Planned	Responsibility Assigned	Remarks
Item 24.BOS/13.4	Dr.R.Sudhakara Pandian suggested that the recommended NPTEL courses Artificial Intelligence and Machine Learning in Materials Engineering, Fundamentals of Artificial Intelligence are related to AI. This may be made as Professional Core/Professional Elective	S.David Blessley AP/Mech	(Ref: R24 Syllabus Page 12)
Item 24.BOS/13.4	Mr.S.Valai Ganesh - In Mechatronics and Internet of Things, Unit V title can be revamped as Applications of IoT. In Unit II, concepts related to Architecture of 8085, Microcontroller can be removed as it is outdated currently. In addition, single board microcomputers, single board microcontrollers can be added in unit IV.	Dr.M.Kannan Prof/Mech	Changes have been made as per the suggestions given. (Ref: R24 Syllabus Page 175)



Department of Mechanical Engineering

<p>Item 24.BOS/13.5</p>	<p>Mr.S.Valai Ganesh sir suggested that, In Professional Elective, The course Applied Hydraulics and Pneumatics can be considered in Industrial Automation and Management stream which is currently placed in Design stream,</p>	<p>S.David Blessley AP/Mech</p>	<p>Changes have been made as per the suggestions given. (Ref: R24 Elective Verticals Page 2)</p>
<p>Item 24.BOS/13.6</p>	<p>Mr.S.Valai Ganesh sir suggested that the title Principles of Management can be revamped as fundamentals of Management</p>	<p>S.David Blessley AP/Mech</p>	<p>Changes have been made as per the suggestions given. (Ref: R24 Elective Verticals Page 2, 33)</p>
<p>Item 24.BOS/13.7</p>	<p>Dr.R.Sudhakar Pandian suggested, In Open Elective - I, the subject, 3DPrinting Technology can be renamed as Additive manufacturing Technology.</p>	<p>Dr.M.Kannan Prof/Mech</p>	<p>Changes have been made as per the suggestions given. (Ref: R24 Open Elective Syllabus Page 9)</p>
<p>Item 24.BOS/13.7</p>	<p>Mr.S.Valai Ganesh sir also suggested that, while framing Open Elective - IV, it will be fulfilled if Robotics based subject is included</p>	<p>-</p>	<p>Suggestions will be incorporated in the upcoming BoS</p>



Department of Mechanical Engineering

Item 24.BOS/13.8	Dr.Krishna Veni Mam has suggested that the NPTEL courses for the upcoming semester has been released very recently. Hence the same can be checked for the recommended courses	S.David Blessley AP/Mech	Changes have been made as per the suggestions given. (Ref: NPTEL recommended courses)
Item 24.BOS/13.9	Mr.S.Valai Ganesh sir provided insights related to NPTEL that, If a student complete any 4 courses in a semester and topper in any of the course, he will be recognized as NPTEL believer from IIT and offered as a pre-doc fellowship for 1 year with stipend and food.	-	-
Item 24.BOS/13.5	Dr. V. Senthil Kumar commended that the recent industry trends are incorporated within the syllabus. He has advised moving forward with the current curriculum accordingly.	-	-

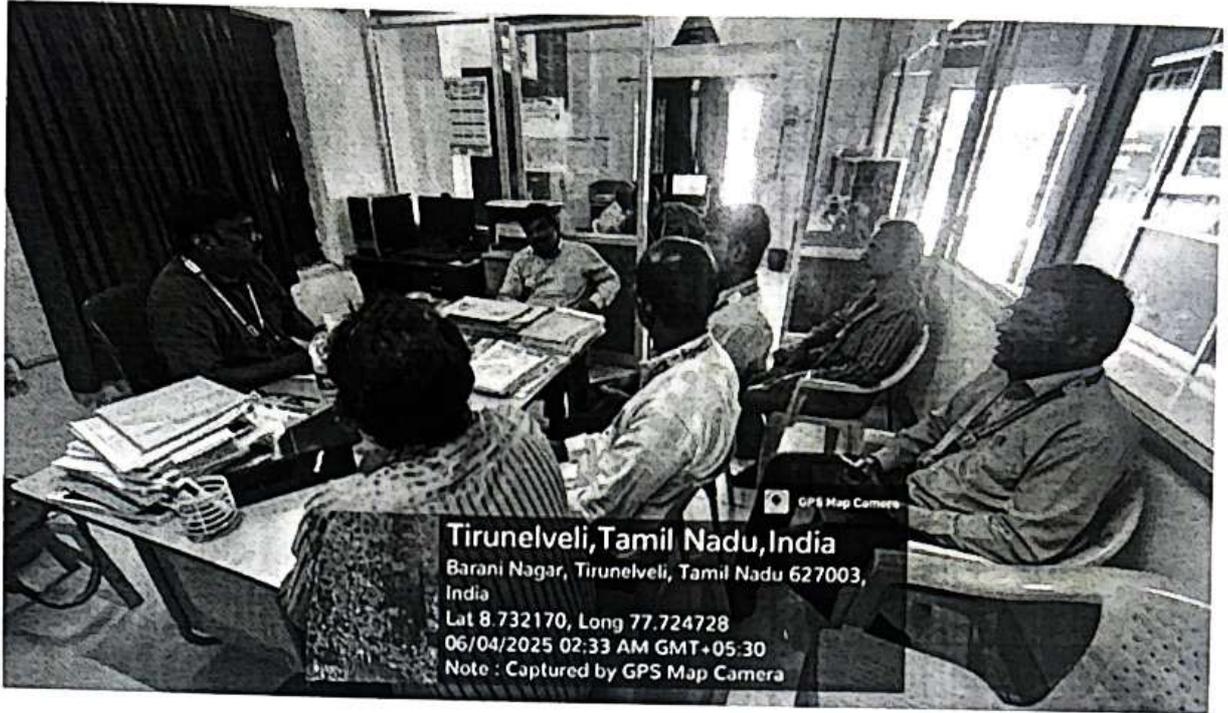


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Signature
 A/6/25

Prepared By
 Dr. S.David Blessley,

Signature
 HOD/Mech 4/6/25

Dr. R.Samuel Nansen



Department of Mechanical Engineering

Attendance Sheet Post-Board of Studies Meeting

S.No.	Name of the Faculty	Signature
1	Dr.R.Samuel Hansen HoD/Mech	
2	Dr.M.Kannan	
3	Dr.K.Ariyanayagam	
4	Dr.K.Robinston Jeyasingh Swikker	
5	Dr.S.M.Rajkumar	
6	Mr.R.Rahesh	
7	Mr.S.M.Sunderrajan	
8	Dr.S.David Blessley	