Pimpri Chinchwad Education Trust's
Pimpri Chinchwad College of Engineering
Sector No. 26, Pradhikaran,
Nigdi, Pune – 411 044

Minutes of Meeting: 10th Board of Studies Mechanical on 28th May 2025

The Tenth Board of Studies Mechanical meeting was held on Wednesday 28th May 2025 at 10.00 am in **Offline and online mode: Google Meet: meet.google.com/wxd-pxhy-jss**

The following members were present:

Sr. No	Name	Designation
1.	Dr Pravin R Kale, Professor Head of Department	Chairman
2.	Dr Gautam S. Chandekar, HOD, Mechanical Engineering Department, Cummins College of Engineering, Pune.	University Nominee
3.	Dr D. G. Thakur, Professor, Department of Mechanical Engineering, Defense Institute of Advanced Technology, Pune	Subject Expert other than Parent Universi
4.	Dr Suhas S. Mohite, Professor, Mechanical Department, COEP, Pune	Subject Expert other than Parent Universi
5.	Dr Nitin Gulhane, Professor, VJTI Mumbai	Academic Representative
6.	Mr. Vidyut Mhetras, Founder and CEO, VINIDAs Gurukulam of Entrepreneurship and HRD	Experts for special courses of Studies
7.	Ms. Shubhda Padwal, Harman International Pvt Ltd, Pune	Alumni Representati
8.	Dr P A Deshmukh, Professor Subject Expert	Subject Expert
9.	Dr Narendra R. Deore, Professor Specialization: Computational Fluid Dynamics	Subject Expert
10.	Mr. Sanjiwan K. Bhoite, Associate Professor Module Coordinator – Manufacturing Engineering	Subject Expert
11.	Mr. A. A. Panchwadkar, Associate Professor Specialization: Noise Vibration & Harshness	Subject Expert
12.	Dr S. B. Matekar – Associate Professor Specialization: CAD/CAM	Subject Expert
13.	Dr Sanjay P. Salve, Associate Professor Specialization: Refrigeration & Air Conditioning	Subject Expert
14.	Dr L. V. Awadhani – Associate Professor Module Coordinator – Design Engineering	Subject Expert
15.	Dr C. L. Ladekar, Associate Professor	Subject Expert

	Specialization: Heat Transfer		
16.	Dr U. G. Potdar, Associate Professor Specialization: Combustion	Subject Expert	
17.	Dr N. Vivekanandan, Asso. Professor Specialization: Industrial Safety Engg	Subject Expert	
18.	Mr. U. I. Shaikh – Asst. Professor Module Coordinator –Thermal Engineering	Subject Expert	
19.	Dr Mrs. N. A. Mandhare- Assistant Professor Specialization: Turbomachines	Subject Expert	
20.	Dr R. A. Gujar-Assistant Professor Module Coordinator-Robotics and Automation Engg.	Subject Expert	
21.	Dr Mrs. J. A. Goyal- Assistant Professor Specialization: Energy Engineering	Subject Expert	

Leave of absence was granted to the following Members and Invitees:

Sr. No	Name	Designation
1.	Dr Hemant Raghunath Sonawane, Executive Director, Pune Metro, Pune	Industry Representative
2.	Dr Nitesh P. Yelve, Assistant Professor, Mechanical Engineering Department, IIT, Bombay, Mumbai	Academic Representative
3.	Mr. Rajendra Londhe, GM, Kubota Agriculture Machinery (I) Pvt. Ltd, Pune	Experts for special courses o Studies
4.	Dr Santosh S. Hosmani. Professor, Department of Metallurgical Engineering and Materials Science, IIT, Indore	Academic Representative
5.	Mr. Rahul Yadav, Vice President, Anand Group of Industries, Chakan Pune,	Industry Representative
6.	Dr A. B. Lingayat-Assistant Professor PG Coordinator- Computational Mechanics Module Coordinator-Proficiency Courses	Subject Expert

The agenda for the meeting was as under:

Sr. No.	Description	Action Required
1.	**Statutory Matters** Confirm the MOM and Action taken report of 9th BOS meeting dated 30th November, 2024.	Confirmation from the BOS
2.	TY B Tech Syllabus for Regulation 2023	Discussion and Approval
3.	Minor Changes in FY, SY, Regulation 2023, B Tech Regulation 2020, M Tech Engineering Design, M Tech Computational Mechanics	Discussion and Approval
4.	Internship / On Job Training, and Project Guidelines for UG	Discussion and Approval
5.	Open elective-IV for TY Odd Semester offered by Mechanical	Discussion and Approval
6.	Introduction of New MDM/ Minor Programmes.	Information
7.	Minor Changes in Existing Honor / Minor Programmes	Approval
8.	Minor Changes in B Tech Programme for Working Professionals	Approval
9.	Suggestions received through Academic Audit	Information
10	Any other point with the permission of Chair	Discussion and Suggestions

Dr L V Awadhani welcomed all the members of the Board of Studies Mechanical.

10:01 Statutory matters

To confirm the Minutes of the last BoS Meeting (dated:30/11/2024)

Dr P R Kale welcomed all the new members of the BoS Team, he presented and read the MOM of the last BOS.

Dr P R Kale also expressed actions taken-

In the syllabus in Autonomy Cycle 2, the weightage for theory and lab is nearly 50% each. Courses are with 2 Th + 2 Lab credits and 3 Th + 1 Lab. As per suggestions Mini project for workshop practice 3 is included. Exit policy credits for students leaving course to be earned within min 2 months and maximum 6 month. 200 papers are presented as outcome of Baby conference, few papers will be forwarded to iMACE 2025.

It was resolved to confirm the minutes of the Ninth BoS meeting.

10:02 TY B Tech Syllabus for Regulation 2023

Dr L.V. Awadhani proposed the UG structure in accordance with NEP implementation highlighting the inclusion of self-study hour for courses, Sustainability and AI in curriculum. Dr D G Thakur suggested meticulous monitoring and effectiveness. It is informed to BoS that activity-based assignments and monitoring after 2-3 turns is planned.

Ms. Shubhda Padwal mentioned considering self-study activity be given among a group of 2-3 students. Mr Vidyut Mhetras suggested to plagiarism and chatGPT free activity check.

Dr Nitin Gulhane suggested to have 3 credits for Theory and 1 credit lab for Machine Design and Heat Transfer. It is informed to BoS that Few courses have 2 Th + 1 Tut. He also suggested including simulation case studies and more one-to-one interaction with students. It is informed to BoS that the content of each tutorial class is well planned in the course meeting and implemented in the academic year 2024-25. Dr G. Chandekar suggested to assign same teacher for Theory and Tutorial to ensure expected outcomes.

It is informed to BoS that total 17 Multi-Disciplinary Minors (MDM) were offered to students in 2024-25. Student's awareness and counselling was done for Choice of MDM. MDM offered by mechanical had enrolment of 72 students for 3D printing and 140 for Entrepreneurship. Design thinking was one of the course offered under MDM under Product Development and Design. MDM like Gen AI, IOT and Digital Twin were offered. BoS appreciated including AI content for Mechanical courses.

Honors in Automation and Robotics is offered from Academic year 2025-26.

It is presented to BoS that project is offered as Stage 1 and Stage 2 along with swapping of semester 7^{th} and 8^{th}. Project groups will be formed as per scheme so that these students can undergo on job training.

Dr L V Awadhani presented highlights of proposed TY Curriculum. All module coordinators presented program core, program elective, and open elective courses under their module. It was Informed that the curriculum was reviewed by experts from industry, academia, and alumni working in the respective domains. The inclusion of AI content, software in lab work and Advancements with contemporary issues were presented.

Mr. U I Shaikh presented thermal module courses;

It was suggested to recommend only 2-3 text books for each course.

Dr R A Gujjar presented Automation module courses;

Dr D G Thakur suggested to map the contents of each unit with the assigned hours for mechatronics theory course. Dr Gautam Chandekar expressed concern on mapping of 2 CO's with 13 experiments and suggested to change it.

Dr Nitin Gulhane suggested to have minimum 3 and maximum 6 CO statements.

Dr Suhas Mohite suggested including specific applications in Automobile domain like application to ADAS, engine control system, Antiskid braking system, assignment on fuzzy control and Cruise control for control systems lab.

Mr. S K Bhoite presented Production module courses;

Dr D G Thakur advised to name the course as Machining Processes instead of Machining Science.

Dr Suhas Mohite advised to include dry and wet coolants.

Dr Nitin Gulhane advised to purchase ECM and EDM setups.

Dr. L V Awadhani presented Design module courses;

Dr Suhas Mohite advocated to include Scaling of dimensions and Parametric design in Machine Design. For FEA course he suggested to include Transient and Harmonic analysis by removing fifth unit. For FEA Lab, comparison of simulation result with theoretical solution can be included.

The BoS members appreciated the designed contents on Transmission system of HEV and EV, use of design software, Material selection using AI tools, Hands on Training for Workshop Practice and Case studies in FEA.

It was resolved to approve TY syllabus for regulation 2023

- *Proposed by.: Dr L V Awadhani*
- *Seconded by.: Dr N Vivekanandan*

10:03 Minor Changes in FY, SY, Regulation 2023, B Tech Regulation 2020, M Tech Engineering Design, M Tech Computational Mechanics

Dr L V Awadhani presented minor changes in different curriculum summarised below

a. Redistribution of credits from 2+2 to 2+1+1 for Engineering Thermodynamics.
b. Minor change in Course content
c. Course outcome statements.
d. Minor changes in MDM

It was resolved to approve Minor Changes in FY, SY, Regulation 2023, B Tech Regulation 2020, M Tech Engineering Design, M Tech Computational Mechanics

- *Proposed by: Dr P A Deshmukh*
- *Seconded by: Dr S B Matekar*

10:04 Internship / On Job Training, and Project Guidelines for UG

Mr V K Aher presented Internship / OJT guidelines. Change in the credits as per NEP was discussed. He proposed three options for undertaking internships. However the third option provides benefit to the student to complete internship in second and third year. In final year these students can complete on job training for six months.

In the guidelines, it is recommended to complete three months internship in a single company for deriving the expected outcomes. However, in few circumstances student can complete minimum one month internship during the semester brakes.

He presented guidelines on timeframe for three options, assessment and rubrics,.

It was resolved to approve Internship / On Job Training, and Project Guidelines for UG.

- *Proposed by: Mr Ishan Sathone*
- *Seconded by: Mr A A Panchwadkar*

10:05 Open elective-IV for TY Odd Semester offered by Mechanical

Six different open electives offered by mechanical department were discussed. It is informed that Professional Ethics and sustainability in the Age of AI is offered to all students while remaining open electives are offered to other departments.

- *Proposed by: Dr N Vivekanandan*
- *Seconded by: Dr S B Matekar*

It was resolved to approve Open elective-IV for TY Odd Semester offered by Mechanical

10:06 Introduction of New MDM/ Minor Programs.

It is informed to BoS that new MDM's namely Sanskrit, Upyojit Marathi, Indian Classical Music and Public Administration System are added from 2025_26. It is also informed that three minor programs Green Energy Technology, Sustainable HVAC using AI and Corporate Policies and e-Governance are under development. These minor programmes will be submitted to SPPU for approval.

10:07 Minor Changes in Existing Honor / Minor Programmes

Dr L V Awadhani presented minor changes different Honours and Minors curriculum of Systems Engineering, Automation and Robotics, and Entrepreneurship Development summarised below

They are-

a. Minor change in Course content
b. Course outcome statements.
c. Assessment scheme for integrated project / Internship

- *Proposed by: Dr N Vivekanandan*
- *Seconded by: Dr R A Gujar*

It was resolved to approve Minor Changes in Existing Honor / Minor Programmes

10:08 Minor Changes in B Tech Programme for Working Professionals

Dr Upendra Maurya presented minor changes in BTech Program due to transfer from Non NEP framework to NEP framework.

BoS suggested to have more hands on Training in Manufacturing Practice lab.

Also the depth of Manufacturing Technology course has to be appropriated for working professionals.

- *Proposed by: Dr Upendra Maurya*
- *Seconded by: Dr N R Deore*

It was resolved to Minor Changes in B Tech Programme for Working Professionals

10:09 Suggestions received through Academic Audit

Mr U I Shaikh presented the suggestions received through Academic Audit. The BoS suggested the following actions

a. The course Applied Thermodynamics is appropriate at First Year as it is in continuation with HSC Physics Corse,
b. A separate course on Automobile Engineering need not be required as most of the contents are covered in different courses except Chassis Design.
c. Include NPTEL courses for self-study.
d. Include Case studies in Lab assignments.

- *Proposed by: Mr U I Shaikh*
- *Seconded by: Dr S B Matekar*

10:10 Any Other Point with the permission of Chair –

a. Guidelines for Question Paper

Question papers to be drawn in accordance to BLM Levels, Analyse and Design level questions can be of 20% was suggested.
Dr D G Thakur and Dr Gautam Chandekar also advocated to have subject specific proportions of BLM levels.

b. *Inclusion of Self Study hours in the Curriculum*

BoS was informed of inclusion of Self-study hours in curriculum as per guidelines of ASC.

c. *Flexible Examination Scheme*

Mr. S K Bhoite presented proposed flexible examination scheme. As green channel – Standard examination Track, and Red Channel – scheme A: Open Book Track and scheme B: Open Ended Questions Track.

Dr Gautam Chandekar Suggested to have the different scheme's for different courses.
Dr D G Thakur and Dr Nitin Gulhane advocated to have scheme B: Open Ended Questions Track at higher levels.
BoS unanimously suggested to opt for green channel – Standard examination Track and Red Channel – scheme B: Open Ended Questions Track.

d. *Strategy for Advanced learners*

Mr. S K Bhoite presented strategy for advanced learner. He presented various tracks which students can choose such as advanced learning options, skill development, research opportunities, and global exposure. This can help students to unlock their full potential, preparing them for leadership roles in academia, industry and entrepreneurship.

Dr D G Thakur suggested to set the eligibility criteria and considering the implementation after SY academics. The strategy will also help the students interested for early completion of the course.

Dr Nitin Gulhane and Dr Gautam Chandekar suggested for requirement of flexibility in time table.

BoS appreciated the efforts taken by Team PCCoE in coming up with different strategies and teaching learning habitat for students

e. Structure for new programme Robotics and AI

Dr R A Gujar presented a proposed structure for new program in Robotics and AI Engineering. It is informed to BoS that PCCoE is applying for a new BTech Degree program to AICTE. BoS suggested to verify the availability of infrastructure and faculty in the domain.

On behalf of PCCoE and Team Mechanical, HOD and BoS Chairman Dr P R Kale expressed gratitude towards the contribution and Time devoted by all the external BoS members.

Prepared by:
Mr A A Panchwadkar

Dr P R Kale
Professor and Head,
Chairman Board of Studies
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