



# MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY



**An Autonomous Institution**

Affiliated to Pondicherry University, Approved by AICTE, New Delhi,

Accredited by NAAC with 'A' Grade

Kalitheerthalkuppam, Puducherry- 605 107.

## DEPARTMENT OF ROBOTICS AND AUTOMATION

### Minutes of 2<sup>nd</sup> Board of Studies Meeting

The Second Board of studies meeting of Department of Robotics and Automation was held on **28<sup>th</sup> January 2026 at 10:00 am** through online mode at Manakula Vinayagar Institute of Technology with the Head of the Department in the Chair.

The following members were present for the BoS meeting

S.NO	Name of the Member with Designation and official Address	Members as per UGC Norms
1.	<b>Dr. V. Govindan</b> Associate Professor HOD I/C	Chairman
2.	<b>Dr. R. Prasanth,</b> Professor Centre for Green Energy Technology Pondicherry Technological University	University Nominee
3.	<b>Dr. Vinod B</b> Professor and Head Department of Robotics and Automation Engineering PSG College of Technology, Coimbatore	Subject Expert
4	<b>Dr. C. Karthik</b> Associate Professor Department of Biomedical Engineering Mepco Schlenk Engineering, Sivakasi , Tamil Nadu	Subject Expert
5.	<b>Mr. R. Samivel, Assistant Manager – Design</b> L&T Rubber Processing Machinery Kanchipuram.	Industry Expert
6.	<b>Dr. S. Saravana Perumaal,</b> Associate Professor, National Institute of Technical Teachers Training and Research (NITTTR) Taramani, Chennai.	Special Expert
7.	<b>Dr. P. Baskara Sethupathi, Assistant Professor (Sr.G),</b> SRM Institute of Science and Technology, Kattankulathur Chennai.	Special Expert

7.	<b>Mr.S.Hariharan</b> Graduate Engineer Trainee at New product development Eaton Power Quality Pvt Ltd. Sedarapet , Puducherry.	Alumni Member
8.	Dr.T.Manochandar , AP/RA Mr. A. Baskaran, AP/RA Ms. J.V. Peshu, AP/RA Mrs. D. Dharani, AP/RA Mrs. T. Sudha, AP/RA Mrs. S. Ramya, AP/RA	Internal Members

### Agenda of the Meeting

1. Review of feedback on curriculum, syllabus, effectiveness of content delivery and assessment methodologies.
2. Discussion on the introduction of new elective courses or specializations and review of Course Outcomes (COs) and Program Outcomes (POs).
3. Discussion on changes, if any, required in the curriculum, syllabus and evaluation methods for the forthcoming academic year/semester.
4. Clarification on passing requirements
5. Review of faculty development programs, training needs and student feedback to enhance the quality of teaching and learning.
6. Discussion on Industry collaboration opportunities, Internship programs, and activities to bridge the gap between academic learning and industry requirements.
7. Any other item with the permission of the Chair.

### Minutes of the Meeting

Dr. V. Govindan, Chairperson of the Board of Studies (BoS), formally welcomed all external, internal and co-opted members. He expressed his sincere appreciation for their acceptance of the invitation and their esteemed presence at the meeting. Following the welcome address, the approved agenda items were introduced and the deliberations commenced accordingly.

<b>Item No:RA/1.1</b>	<ul style="list-style-type: none"> <li>• The Board reviewed the feedback collected from students, alumni, faculty members and industry experts regarding the existing curriculum and</li> </ul>
-----------------------	---

syllabus.

- The members observed that the curriculum structure is relevant and aligned with current technological trends in Robotics and Automation.
- Suggestions received regarding strengthening practical components and incorporating more industry-oriented case studies were discussed.
- The BoS members observed that certain Course Outcomes contained non-measurable verbs such as “study,” “learn” and “understand.” The Board recommended replacing these with measurable and action-oriented verbs such as apply, analyze, design, evaluate, calculate, formulate, interpret, and solve, in alignment with Bloom’s Taxonomy.
- The Board recommended renaming the course “Robotics” to “Fundamentals of Robotics.” They also suggested creating separate units for Forward Kinematics, Inverse Kinematics, Velocity Kinematics, and Homogeneous Transformations to ensure better structure and clarity.
- The Board discussed the proposal to remove PLC content from Unit IV of the Hydraulics and Pneumatics subject. However, it was observed that basic PLC concepts are required for practical sessions, particularly for writing ladder diagrams and implementing control circuits.
- The Board suggested to check whether Fourier Series is already included in the Mathematics subject. If so, the syllabus of Signals and Systems may be revised to prevent duplication of content.
- The Board suggested reviewing CO3 and CO4 of the Analog and Electronic Circuits subject to ensure they are clear, measurable and properly aligned with the course objectives.
- The Board noted that Microcontroller and Microprocessor topics are included in the HP Lab before students study them in theory. Since students are familiar with Arduino, it was suggested to align the lab accordingly or provide basic introductory inputs.
- The Board recommended including Troubleshooting and a Hydraulic Power Pack experiment in the HP Lab to enhance practical understanding and hands-on skills.
- The Board suggested reviewing Experiment 10 in the Robotics Lab and making necessary revisions, if required, to ensure clarity and technical correctness.

	<ul style="list-style-type: none"> <li>• The Board recommended clearly highlighting the year of publication and edition of the prescribed textbooks in the syllabus.</li> </ul>
<b>Item No: RA /1.2</b>	<ul style="list-style-type: none"> <li>• The Board discussed the introduction of new elective courses and specializations in line with emerging technologies and industry needs. The members also reviewed the Course Outcomes and their alignment with ProgramOutcomes.</li> <li>• It was suggested to refine the COs to ensure they are clear, measurable and properly mapped to the relevant POs. Necessary modifications will be incorporated accordingly.</li> <li>• The Board recommended including <b>Mobile Robotics</b> in the Robotics syllabus to reflect current advancements and industry relevance.</li> </ul>
<b>Item No: RA/1.3</b>	<ul style="list-style-type: none"> <li>• The Board discussed the required changes in the curriculum, syllabus and evaluation methods for the forthcoming academic year/semester and recommended incorporating minor updates to reflect recent technological advancements while avoiding content overlap across subjects.</li> <li>• The members advised refining Course Outcomes wherever necessary to ensure clarity and proper alignment.</li> <li>• A balanced evaluation pattern with appropriate weightage for internal assessments and end-semester examinations was recommended, and the necessary revisions will be implemented from the upcoming academic year.</li> </ul>
<b>Item No: RA/1.4</b>	<ul style="list-style-type: none"> <li>• The members clarified and finalized that the passing requirement is a minimum of 40% marks in Internal and End Semester examinations together, with a minimum of 40% marks in the End Semester Examination separately, and this shall be clearly updated in the regulations. This provision is already being followed under the Pondicherry University Regulation (R–2023), and the same may be adopted in the B.Tech Regulation 2025 under the autonomous system.</li> </ul>
<b>Item No: RA/1.5</b>	<ul style="list-style-type: none"> <li>• The Board reviewed the faculty development programs, identified training needs, and analyzed student feedback to enhance the quality of</li> </ul>

	<p>teaching and learning.</p> <ul style="list-style-type: none"> <li>The members recommended encouraging faculty participation in advanced FDPs, workshops and industry-oriented training programs. Based on student feedback, it was suggested to strengthen practical exposure, improve mentoring support, and adopt innovative teaching methodologies to further enhance learning.</li> </ul>
<b>Item No: RA/1.6</b>	<ul style="list-style-type: none"> <li>The Board discussed opportunities for strengthening industry collaboration and enhancing internship programs.</li> <li>The members emphasized establishing MoUs with relevant industries, encouraging structured internships, and promoting industry-sponsored projects. It was also suggested to organize guest lectures, industrial visits, and skill-based certification programs to effectively bridge the gap between academic learning and industry requirements.</li> </ul>
<b>Item No: RA/1.7</b>	The Board briefly discussed general academic improvements and emphasized the continuous review of syllabus relevance and teaching effectiveness.

The meeting was concluded at 12:30 PM with vote of thanks given by **Dr. V. Govindan**, Chairman, Board of Studies, Department of Robotics and Automation

<b>S.NO</b>	<b>Name of the Member with Designation and official Address</b>	<b>Responsibility in the BoS</b>	<b>Signature</b>
1.	<b>Dr. V. Govindan</b> Associate Professor HOD I/C	Chairman	
2.	<b>Dr. R. Prasanth,</b> Professor Centre for Green Energy Technology Pondicherry Technological University	University Nominee	
3.	<b>Dr. Vinod B</b> Professor and Head Department of Robotics and Automation Engineering PSG College of Technology, Coimbatore	Subject Expert	

4	<b>Dr. C. Karthik</b> Associate Professor Department of Biomedical Engineering Mepco Schlenk Engineering, Sivakasi , Tamil Nadu	Subject Expert	
5.	<b>Mr. R. Samivel</b> Assistant Manager – Design L&T Rubber Processing Machinery Kanchipuram.	Industry Expert	
6.	<b>Dr. S. Saravana Perumaal,</b> Associate Professor, National Institute of Technical Teachers Tranning and Research (NITTTR) Taramani, Chennai.	Special Expert	
7.	<b>Dr. P. Baskara Sethupathi, Assistant Professor (Sr.G),</b> SRM Institute of Science and Technology, Kattankulathur , Chennai	Special Expert	
8.	<b>Mr.S.Hariharan</b> Graduate Engineer Trainee at New product development Eaton Power Quality Pvt Ltd. Sedarapet , Puducherry.	Alumni Member	
9.	<b>Dr. S.Sivaramakrishnan</b> Professor Department of Mathematics	Co-Opted Member	
10.	<b>Dr.P Natarajan</b> Assistant Professor Department of Mechanical Engineering	Co-Opted Member	
11.	<b>Dr.T.Manochandar</b> Assistant Professor Department of Robotics and Automation	Internal Member	
12.	<b>Mr. A. Baskaran,</b> Assistant Professor Department of Robotics and Automation	Internal Member	
13.	<b>Ms. J.V. Pesha</b> Assistant Professor Department of Robotics and Automation	Internal Member	
14.	<b>Mrs. D. Dharani</b> Assistant Professor Department of Robotics and Automation	Internal Member	
15.	<b>Mrs. T. Sudha</b> Assistant Professor Department of Robotics and Automation	Internal Member	
16.	<b>Mrs. S. Ramya</b> Assistant Professor/RA Department of Robotics and Automation	Internal Member	

