

Department of Mechatronics Engineering

KPR Institute of Engineering and Technology



4th Board of Studies Meeting

Venue: Primrose Hall (Hybrid mode)

Date: 25.11.2023

Meeting ID: 868 3232 7116

Time: 10.00 am

Agenda:

To discuss and pass

- Discussion on the minutes of previous BoS meeting and action taken.
- Stakeholders' inputs on Curriculum Design.
- Curriculum and syllabi for V to VIII semesters of UG programme under Regulations 2021 (Revised)
- Professional electives offered under Regulations 2021_(Revised)
- MOOC/Online Courses
- Industry-oriented courses (one credit courses)
- Value-added courses
- Any other matter brought by the Chair


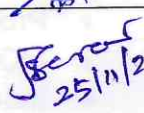



Members Present:

S.No	Name of the member with designation	Category	Signature
1	Dr. R. Kiruba Shankar Professor & Head Department of Mechatronics Engineering KPR Institute of Engineering and Technology.	Chairperson	
2	Dr. S. Ayyappan Associate Professor Department of Mechanical Engineering Government College of Technology, Coimbatore	University Nominee	Online
3	Dr. T. Asokan Professor Department of Engineering Design Indian Institute of Technology Madras Chennai	Subject experts from outside Anna University-1	Online
4	Dr. B. Ashok Associate Professor & Head Department of Automotive Engineering School of Mechanical Engineering Vellore Institute of Technology Vellore.	Subject experts from outside Anna University-2	Online
5	G. V. Devadas Director AAtek Robo Private Limited, Coimbatore.	Industry Expert	Absent
6	Shrihariprasath Basuvaiyan Technical Specialist ZF Technology Centre, Hyderabad.	Alumni	Online

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S.No	Name of the member with designation	Category	Signature
7	Dr Shahbaz Ahmed Siddiqui Professor & Head Department of Mechatronics Engineering Manipal University, Jaipur.	Special Invitee- 1	Online
8	Dr. Raguraman Munusamy Assistant Professor Department of Mechanical Engineering IIITDM Kancheepuram, Chennai.	Special Invitee- 2	Absent
9	Dr R Sampathkumar Assistant Professor (Sl.G.) Department of Mechatronics Engineering KPR Institute of Engineering and Technology.	BoS Member	 25/11/23
10	Dr K Saravanan Assistant Professor (Sr.G.) Department of Mechatronics Engineering KPR Institute of Engineering and Technology.	BoS Member	 25/11/23
11	Dr C Naveen Assistant Professor (Sl.G.) Department of Mechatronics Engineering KPR Institute of Engineering and Technology.	BoS Member	 25/11/23
12	Dr Arpit Anil Panwar Assistant Professor (Sr.G.) Department of Mechatronics Engineering KPR Institute of Engineering and Technology.	BoS Member	 25/11/23
13	Mr A Balaji Assistant Professor (Sr.G.) Department of Mechatronics Engineering KPR Institute of Engineering and Technology.	BoS Member	 25/11/23

Minutes of the 4th Meeting of The Board of Studies:

Dr. R. Kiruba Shankar, Chairman- BoS, Department of Mechatronics Engineering welcomed the members of the Board of Studies and presented the Vision, Mission, PEOs, POs, PSOs, Curriculum for all semesters, Syllabi for V - VIII semester and Syllabi for Professional elective courses offered under regulations 2021 (revised) in UG Programme.

Following points were discussed in the Board of Studies,

1. Action taken on the minutes of the 3rd BoS meeting:

The minutes of the 3rd BoS meeting and the action taken thereon were approved. The following corrections were taken and updated:

Sr. no.	Suggestion	Action taken
1	Semester III: Sensor and Signal Processing To introduce signal conditioning alongside signal processing course.	The changes were incorporated and approved.
2	Semester III: Manufacturing Processes To change the unit IV title from Advanced Manufacturing Process to Non-Conventional Manufacturing Processes.	The changes were incorporated and approved.
3	Semester V and VI: To swap CNC and Metrology Laboratory with Modelling and Analysis Laboratory	The two courses were swapped as recommended.
4	To offer same number of courses in every vertical.	A total of eight subjects has been approved for each of the six verticals.
5	Professional Electives: To change the title of the vertical IV: Intelligence Systems to Intelligent Systems To change the subjects name- Vertical III – Vehicle dynamics and Control to Vehicle Dynamics Vertical VI – Guidance and Control to Guidance and Control of Avionics	The necessary changes were made and approved.

2. The Curriculum and syllabi for V to VIII Semesters of UG Programme under Regulations 2021 (Revised)

Resolved that the following recommendations may be placed for approval of the Academic Council. The curriculum and syllabi for V - VIII Semesters of UG Programme under Regulations 2021 (Revised) be passed with the following changes:

(i) V Semester:

- In Robotics and Automation Lab, the experiment namely, 'To test the speed control circuits of single acting and double acting cylinders using pneumatic module', could be included in Pneumatics and Hydraulics Laboratory experiments

(ii) VI Semester

- Bond Graph Modelling will be removed from Mechatronic Systems Design
- Suggested Modelling and Analysis of Mechatronic Systems can have experiments such that it becomes a project-based learning subject
- In Electric and Hybrid Vehicle Technologies in Automobiles, a unit can be added to incorporate about ICE Engines

(iii) Other recommendations:

- To ensure that there is no overlap between core courses and professional elective subjects
- The latest edition textbooks and reference books are to be recommended for all the subjects

3. Professional Elective Courses offered under Regulations 2021

Following are the suggestions given by BoS members regarding Professional Elective courses offered by the department of Mechatronics Engineering which shall be presented to the Academic Council for approval through the standing committee.

(i) Vertical I

- Ensure that there is <20% overlap between topics amongst the eight subjects

(ii) Vertical III

- To include subject covering fundamentals of automobile components like steering, suspension, brakes, chassis and engine as one of the units in the subject

- Automotive Electronics - Unit I, must be corrected for overlap of few topics with core courses

(iii) Other recommendations:

- Ensure whether pre - requisite is applicable for certain professional elective courses

4. MOOC/Online courses

The MOOC/online courses presented by the Chairman were reviewed and approved.

5. Industry oriented courses (one credit courses)

The Industry oriented courses presented by the Chairman were reviewed and approved.

6. Value-added courses

The value-added courses presented by the Chairman were reviewed and approved.

7. Other matters brought by the Chair

Resolved that the following recommendations will be placed to the Academic Council for approval through the standing committee.

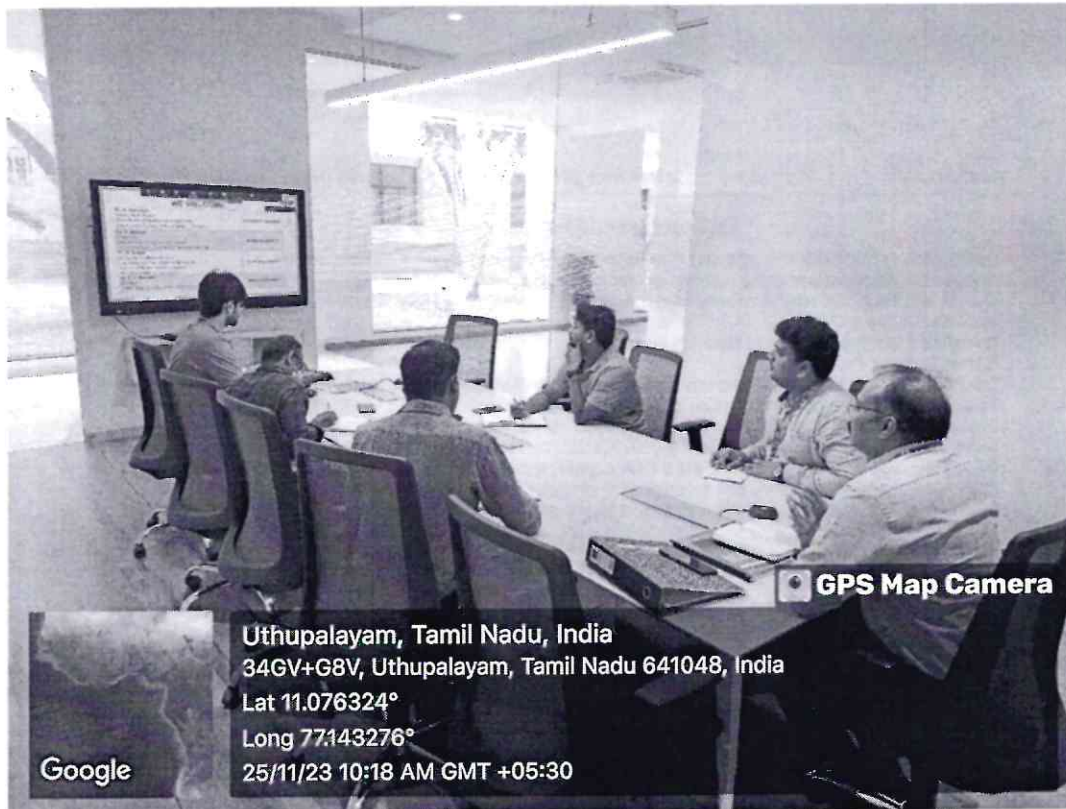
- (i) Simcenter Amesim Software platform is recommended for Modelling and Analysis of Mechatronic Systems Laboratory in order to meet the industry requirements on modeling and analysis of multi-domain systems.
- (ii) Utilization of MATLAB for teaching the core and professional electives is recommended

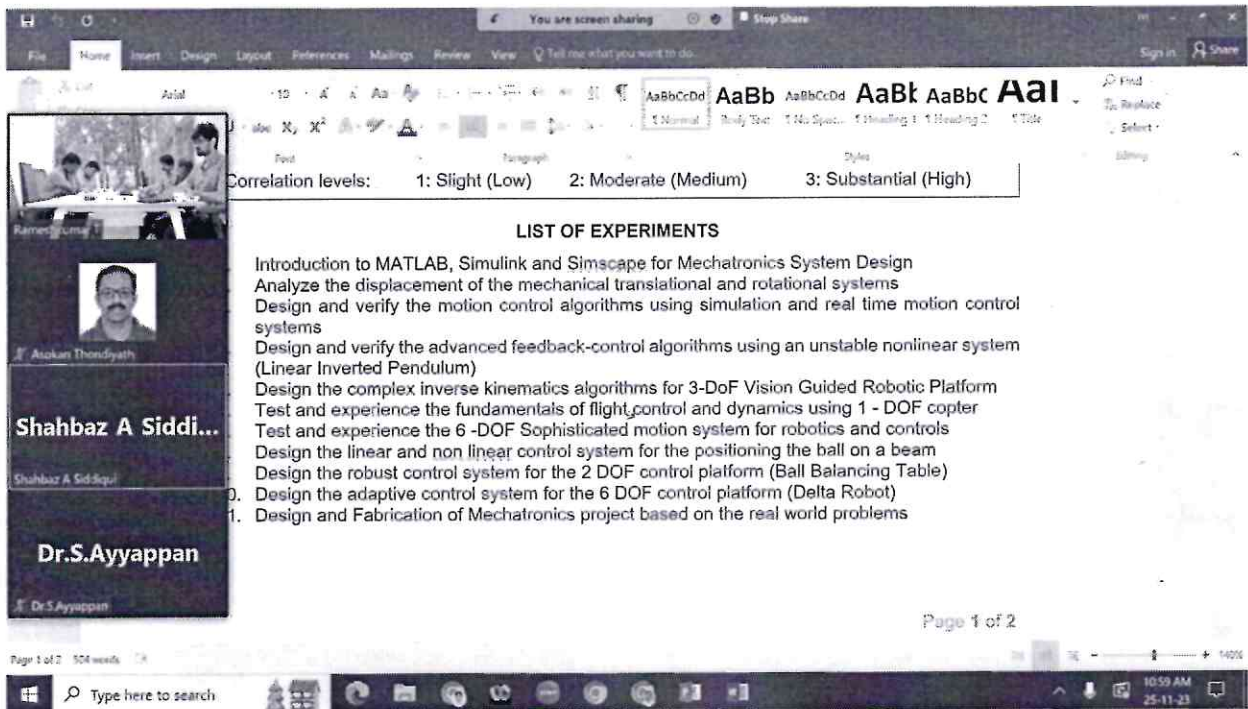
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25/11/23

Chairman – BoS/MI

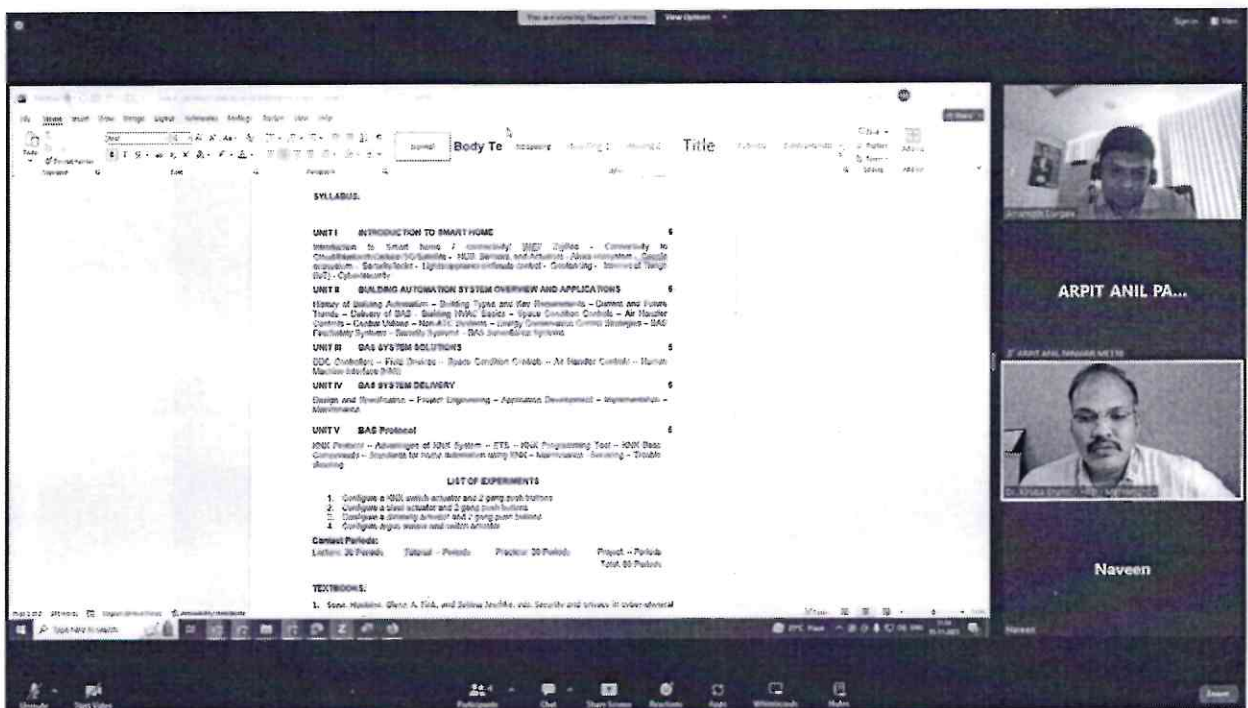
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4th BoS Meeting_Screenshot of Zoom Meeting



Industry Expert Meeting for Syllabus Preparation_Schnider Electric