

8<sup>th</sup> Board of Studies Meeting

Venue: Daffodil hall (Online)

Date: 29.11.2022

Meeting ID: <https://meet.google.com/ogn-rhfc-fku>



Time: 10.30 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
- Professional Electives offered in different verticals under Regulations 2021
- Open electives offered to other branches under Regulations 2021
- Research methodology course
- Suggest Methodologies for innovative teaching and evaluation techniques
- MOOC / Online Courses
- Industry oriented courses (one credit courses)
- Value added courses
- Industrial Training / Internship
- Any other matter brought by the Chair

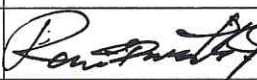

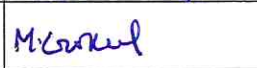
**Members Present:**

S.No	Name of the member with Designation	Category	Signature
1.	<b>Dr. S.Ramesh Babu,</b> Professor and Head Mechanical Engineering, KPRIET	Chairman	 29/11/22
2.	<b>Dr.S.Ayyappan</b> Associate Professor (CAS) Department of Mechanical Engineering Government College of Technology, Coimbatore	University Nominee	 29.11.2022
3.	<b>Dr.Santhakumar Mohan</b> Associate Professor, Mechanical Engineering Dean, Industry Collaboration and Sponsored Research Indian Institute of Technology (IIT) Palakkad	Academic Expert-1	Online

# Department of Mechanical Engineering

KPR Institute of Engineering and Technology



4.	<b>Dr.RamuMurugan</b> Associate Professor, Mechanical Engineering, Amrita VishwaVidyapeetham, Coimbatore	Academic Expert-2	Online
5.	<b>Dr.A.Udayakumar</b> Principal Scientist, Material Science Division, CSIR-National Aerospace Laboratories, Bangalore	Professional society	Online
6.	<b>Mr.V.Krishnamoorthy</b> Manager-R&D Bimetal Bearings Ltd, 18, race course road, Coimbatore	Industry Expert	Online
7.	<b>Mr.VinuSargunan</b> Manager- R&D Eppinger Tooling Asia pvt ltd, SF 345/2A 2B, Kondampatti, Coimbatore	Industry Expert (Special Invitee - 1)	Online
8.	<b>Mr.V.Murali</b> Manager- R&D Shanthi Gears Lintied, Coimbatore	Industry Expert (Special Invitee - 2)	Online
9.	<b>Mr.E.T.Dineshraj</b> Engineer CAE Valeo India Private Limited Chennai.	Alumnus	Online
10.	<b>Mr.S.RaviPrasath</b> MECH, KPRIET	Second Year student	
11.	<b>Mr.RA.Vibin</b> MECH, KPRIET	Third Year student	
12.	<b>Mr.M.Gokul</b> MECH, KPRIET	Final year student	
13.	All the faculty Members of the Department		

## Minutes of the 8<sup>th</sup> Meeting of The Board of Studies:

The meeting started with the Chairman, Dr.S.RameshBabu, HOD, Department of Mechanical Engineering welcoming the members of the Board of Studies and presented the Vision, Mission, POs, PEOs, PSOs, Syllabus content of Curriculum and syllabi for V and VIII semesters of UG programme under regulations 2021.

Following points were discussed at the Board of Studies.

**RESOLUTIONS:**

**1. Action taken on the minutes of the 7<sup>th</sup> BOS meeting:**

The minutes of the 7<sup>th</sup>BoS meeting and the action taken thereon are approved

**2. Stakeholders inputs on Curriculum Design**

- Suggested to add MATLAB in Finite element course.
- Industrial applications can be included in “Sensors and Transducers” course.
- Stability analysis can be added in “Measurements and Controls” course.
- Reverse engineering topic can be included in “Additive Manufacturing” course.
- Bio materials can be added as separate unit in “Smart Material” course.
- Electro rheological and magneto rheological fluids can be included in the smart material course as separate unit.
- Course name can be changed to “Smart Materials and Structures”.
- Distributorless Ignition system, Coil-on-plug ignition system (CoP), Triple spark technology topics can be included in the Unit 2 of “Automotive Engine and Subsystems” course.
- Bio-fuels, hybrid engine technology topics can be included in the Unit 5 of “Automotive Engine and Subsystems” course.
- ARM Architecture and Pulse Width Modulation (PWM) topics can be included in “Embedded Systems and Programming” course.
- Latest developments in Space propulsion can be added in “Gas Dynamics and Jet Propulsion” course.
- Advancement in ultrasonic testing & radiography can be included in the “Non-Destructive Testing of Materials” course.
- The topic on PLM can be added in the “CAD” course.
- Battery disposal methods can be added in “Electric and Hybrid Vehicles” course.
- Syllabus & curriculum are framed based on current scenario.
- Recent textbooks can be added for “Non-traditional machining process” course.
- Recent edition text books can be added for “Process Planning and Cost Estimation” course.



### **3. The Curriculum and syllabi for V and VIII Semesters of UG Programme under Regulations 2021**

Resolved to approve the following recommendation may be passed to the standing committee of the Academic Council. The curriculum and syllabi for V to VIII Semesters of UG Programme under Regulations 2021 be passed with the following suggestions.

- (i) Dr.S.Ayyappan, University Nominee, reviewed the complete syllabus of V and VIII semester. He suggested to include recent books in the syllabus.
- (ii) Dr.Santhakumar Mohan, Subject Expert, minor degree credits can be reduce from 18 to 13 credits.
- (iii) Dr.Ramu Murugan, Subject expert, insisted to map courses such as Design clinic I, Design clinic II, Proto clinic II and Proto clinic II in to J component.
- (iv) Mr.Vinu Sargunan, Industry Expert (Special Invitee 1), suggested to add lubricants topic in the Design of machine elements or Design of Transmissions system courses.
- (v) Dr.A.Udayakumar, Professional society member, insisted to add few more PLC experiments in the Mechatronics Laboratory course.
- (vi) Mr.E.T.Dineshraj, Alumni, suggested to incorporate ANSYS workbench experiment in the Simulation and Analysis Lab course.
- (vii) Mr.V.Krishnamoorthy, Industry Expert, appreciated the entire curriculum.

### **4. Professional Electives offered in different verticals under Regulations 2022**

Following are the suggestions given by BoS members regarding Professional Electives courses which shall be presented to the standing committee of the Academic Council for discussions

- i. Dr.A.Udayakumar, Professional society member, suggested to include topics such as various reinforcement phases, fibers and composite manufacturing technique's as separate unit in "Mechanics of Composite Materials" course.
- ii. Dr.Ramu Murugan, Subject expert, suggested to change the UNIT III title as surface treatment process in "Non-Traditional Machining Processes" course. He also suggested to remove Refrigeration and Air Conditioning course. The similar content is observed in "Heating, Ventilation and Air Conditioning" course.
- iii. Dr.S.Ayyappan, University Nominee, insisted to remove prototyping topic in "FMEA and Prototyping" course. He also suggested to add operational research as separate course.

## 5. Open electives offered to other branches under Regulations 2021

Following are the suggestions given by BoS members regarding Open Electives offered by the department of Mechanical Engineering which shall be presented to the standing committee of the Academic Council for discussions

All the BOS members are recommended for further proceedings of open electives.

In addition to that Research methodology & Innovation and Product Development common courses across all programs is approved by the BOS members.

## 6. MOOC/ Online Courses , Industry oriented courses, Value added courses and Industrial Training / Internship

Board approved and recommended the following MOOC/ Online Courses, Industry oriented courses, Value added courses and Industrial Training / Internship suggested by DCC and the same can be submitted before the standing committee of the Academic Council for discussions:

All the BOS members are recommended for further proceedings of MOOC/ Online Courses, Industry oriented courses, Value added courses and Industrial Training / Internship.

## 7. Any other matter brought by the Chair

It is resolved that the following recommendations may be passed to the standing committee of the Academic Council.

- Dr.A.Udayakumar, Professional society member, appreciated the efforts taken by the Department for preparing R2021 syllabus.
- Dr.S.Ayyappan, University Nominee, suggested to review CO-PO articulation matrix for all the courses.
- Mr.V.Murali, Industry Expert (Special Invitee 2), appreciated the curriculum and syllabus of R2021 has been prepared is aligned with industry needs. .



1/12/22  
**Chairman – BoS/MECH**

