

9th Board of Studies Meeting

Venue: Daffodil hall (Hybrid)

Date: 28.04.2023

Meeting ID: <https://meet.google.com/kcw-gguq-prs>



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
- UG-Professional Electives offered in different verticals under Regulations 2021
- Open electives offered to other branches under Regulations 2021
- Curriculum and syllabi for I to IV semesters of PG programme under Regulations 2023
- Common electives-Entrepreneurship, Innovation and venture development course under Regulations 2021
- 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.	Dr. S.RameshBabu, Professor and Head Mechanical Engineering, KPRIET	Chairman	 28/4/2023
2.	Dr.S.Ayyappan Associate Professor (CAS) Department of Mechanical Engineering Government College of Technology, Coimbatore	University Nominee	 28.04.2023
3.	Dr.Santhakumar Mohan Associate Professor, Mechanical Engineering Dean, Industry Collaboration and Sponsored Research Indian Institute of Technology (IIT) Palakkad	Academic Expert-1	Online

Department of Mechanical Engineering


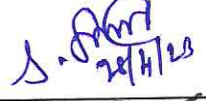



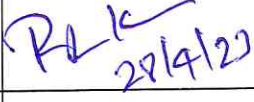




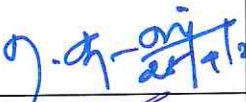


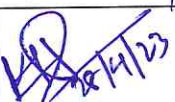
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4.	Dr.RamuMurugan Associate Professor, Mechanical Engineering, Amrita VishwaVidyapeetham, Coimbatore	Academic Expert-2	Online
5.	Dr.A.Udayakumar Principal Scientist, Material Science Division, CSIR-National Aerospace Laboratories, Bangalore	Professional society	Online
6.	Mr.V.Krishnamoorthy Manager-R&D Bimetal Bearings Ltd, 18, race course road, Coimbatore	Industry Expert	Online
7.	Mr.VinuSargunan Manager- R&D Eppinger Tooling Asia pvt ltd, SF 345/2A 2B, Kondampatti, Coimbatore	Industry Expert (Special Invitee - 1)	Online
8.	Mr.V.Murali Manager- R&D Shanthi Gears Lintied, Coimbatore	Industry Expert (Special Invitee - 2)	Online
9.	Mr.E.T.Dineshraj Engineer CAE Valeo India Private Limited Chennai.	Alumnus	Online
10.	Dr.K.Ravi Kumar Professor Mechanical Engineering, KPRIET	Faculty	<i>Dr. Ravi Kumar</i> <i>28/04/23</i>
11.	Dr.M.Kumar Associate Professor Mechanical Engineering, KPRIET	Faculty	<i>M. Kumar</i> <i>28/4/23</i>
12.	Dr.B.Arulmurugan Associate Professor Mechanical Engineering, KPRIET	Faculty	<i>B. Arulmurugan</i> <i>28/4/23</i>
13.	Dr.S.Ravishankar Associate Professor Mechanical Engineering, KPRIET	Faculty	AB
14.	Dr.L.Rajeshkumar Associate Professor Mechanical Engineering, KPRIET	Faculty	AB
15.	Dr.P.Manoj Kumar Associate Professor Mechanical Engineering, KPRIET	Faculty	<i>P. Manoj Kumar</i> <i>28/4/23</i>

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16.	Dr.M.Makeshkumar Associate Professor Mechanical Engineering, KPRIET	Faculty	 28/4/23
17.	Dr.S.Sathish Assistant Professor (Sl.G) Mechanical Engineering, KPRIET	Faculty	 28/4/23
18.	Dr.S.Dharanikumar Assistant Professor (Sl.G) Mechanical Engineering, KPRIET	Faculty	 28/4/23
19.	Dr.L.Prabhu Assistant Professor (Sl.G) Mechanical Engineering, KPRIET	Faculty	AB
20.	Dr.V.Arivazhagan Assistant Professor (Sl.G) Mechanical Engineering, KPRIET	Faculty	OD
21.	Dr.V.Bhuvaneswari Assistant Professor (Sl.G) Mechanical Engineering, KPRIET	Faculty	 28/4/23
22.	Dr.N.Karthi Assistant Professor (Sl.G) Mechanical Engineering, KPRIET	Faculty	 28/4/23
23.	Dr. R. Anandakumar Assistant Professor (Sl.G) Mechanical Engineering, KPRIET	Faculty	 28/4/23
24.	Dr.D.Balaji Assistant Professor (Sr.G) Mechanical Engineering, KPRIET	Faculty	 28/4/23
25.	Dr.R.Senthilkumar Assistant Professor (Sl.G) (SL.G) Mechanical Engineering, KPRIET	Faculty	 5/3/23
26.	Dr.S.Gokulkumar Assistant Professor (Sr.G) Mechanical Engineering, KPRIET	Faculty	 28/4/23
27.	Mr.N.Vigneshkumar Assistant Professor (Sr.G) Mechanical Engineering, KPRIET	Faculty	 28/4/23
28.	Mr.N.Udhayakumar Assistant Professor (Sr.G) Mechanical Engineering, KPRIET	Faculty	 28/4/23
29.	Mr.S.Deepan Assistant Professor (Sr.G) Mechanical Engineering, KPRIET	Faculty	 28/4/23
30.	Mr.P.Boobalakashnan Assistant Professor (Sr.G) Mechanical Engineering, KPRIET	Faculty	 28/4/23
31.	Mr.T.Kannan Assistant Professor (Sr.G) Mechanical Engineering, KPRIET	Faculty	 28/4/23

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32.	Mr.S.N.Dinesh Assistant Professor (Sr.G) Mechanical Engineering, KPRIET	Faculty	S.N.D 28/4/23
33.	Mr.B.K.Saravanan Assistant Professor (Sr.G) Mechanical Engineering, KPRIET	Faculty	BKM 28/4/23
34.	Mr.S.Vasanthaseelan Assistant Professor (Sr.G) Mechanical Engineering, KPRIET	Faculty	S.V. 28/4/23
35.	Mr.E.Joel Assistant Professor (Sr.G) Mechanical Engineering, KPRIET	Faculty	E.Joel 28/4/23
36.	Mr.P.Arunkumar Assistant Professor (Sr.G) Mechanical Engineering, KPRIET	Faculty	P.A. 28/4/23
37.	Mr.R.Vignesh (OIR) Assistant Professor Mechanical Engineering, KPRIET	Faculty	R.V. 28/4/23
38.	Mr.P.Sureshkumar Assistant Professor Mechanical Engineering, KPRIET	Visiting Faculty	P.S. 28/4/23
39.	Mr.W.Anto Monish UG-II Year Mechanical Engineering, KPRIET	UG student	W.Anto Monish 28/04/23
40.	Mr.K. Namburigha UG-II Year Mechanical Engineering, KPRIET	UG student	K.N. 28/04/23
41.	Mr.M. Arulkumar UG-III Year Mechanical Engineering, KPRIET	UG student	M.A. 28/4/23
42.	Mr.S.R.vivekanandh UG-III Year Mechanical Engineering, KPRIET	UG student	S.R.V. 28/4/23
43.	Mr.K. Praveen PG-I Year Mechanical Engineering, KPRIET	PG student	K.P. 28/4/23
44.	Mr.A. Prabu PG-II Year Mechanical Engineering, KPRIET	PG student	A.P. 28/4/23

Minutes of the 9th 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 UG-Professional Electives offered in different verticals under Regulations 2021, Syllabus content of PG-I to IV semesters of PG programme under Regulations 2023.

Following points were discussed at the Board of Studies.

RESOLUTIONS:

1. Action taken on the minutes of the 8th BOS meeting:

The minutes of the 8thBoS meeting and the action taken thereon are approved

S.No	Points discussed	Action taken report
1	Suggested to include recent books in the syllabus	Recent text books are included in the syllabus.
2	Minor degree credits can be reduce from 18 to 13 credits	Updated as per discussion in Academic council meeting. The credits for minor degree courses are framed by Anna University.
3	Map courses such as Design clinic I, Design clinic II, Proto clinic II and Proto clinic II in to J component.	Updated as per discussion in Academic council meeting.
4	Suggested to add lubricants topic in "Design of machine elements" or "Design of Transmission system" courses.	Lubricant topic is included in the course of "Tribology and industrial applications.
5	Add few more PLC experiments in "Mechatronics Laboratory" course.	Few PLC experiments have been included in the "Mechatronics Laboratory" course.
6	Suggested to incorporate ANSYS workbench experiment in Simulation and Analysis Lab course	ANSYS workbench software will be conducted as value added course.
7	Suggested to include topics such as various reinforcement phases, fibers and composite manufacturing technique's as separate unit in "Mechanics of Composite Materials" course.	Suggested topics are included in course of "Composite material".
8	Suggested to change the UNIT III title as surface treatment process in "Non-Traditional Machining Processes" course.	UNIT-III title is changed in "Non-Traditional Machining Processes" course.
9	Suggested to remove Refrigeration and Air Conditioning course. The similar content is observed in "Heating,	"Advanced Internal Combustion Engines" course is added instead of "Refrigeration and Air Conditioning"

	Ventilation and Air Conditioning” course.	course.
9	Insisted to remove prototyping topic in “FMEA and Prototyping” course	The prototyping topic is removed.
10	Suggested to add Operations Research as separate course.	Operations Research course is included in the professional elective course.
11	Suggested to review CO-PO articulation matrix for all the courses.	CO-PO articulation matrix is reviewed for all the courses.

2. Stakeholders inputs on UG Curriculum Design

- Stability analysis can be added to the Measurements and Controls course.
- Reverse engineering can be added as a topic in the Additive Manufacturing course.
- Biomaterials can be added as a separate unit in the Smart Materials course.
- Electro-rheological and magneto-rheological fluids can be included in the Smart Materials course as a separate unit.
- The course name can be changed to "Smart Materials and Structures."
- Topics such as Distributorless Ignition system, Coil-on-plug ignition system (CoP), and Triple spark technology could be included in Unit 2 of the Automotive Engine and Subsystems course.
- Biofuels and hybrid engine technology topics could be included in Unit 5 of the Automotive Engine and Subsystems course.
- Topics such as ARM Architecture and Pulse Width Modulation (PWM) could be included in the Embedded Systems and Programming course.
- The latest developments in space propulsion can be added to the Gas Dynamics and Jet Propulsion course.
- Advancements in ultrasonic testing and radiography can be included in the Non-Destructive Testing of Materials course.
- The topic of PLM could be added to the CAD course.
- Battery disposal methods can be added to the Electric and Hybrid Vehicles course.
- Recent textbooks can be added to the Non-Traditional Machining Processes course.
- Recent edition text books can be added for “Process Planning and Cost Estimation” course.

3. UG- Professional Electives offered in different verticals under Regulations 2021

Resolved to approve the following recommendation may be passed to the standing committee of the Academic Council. The syllabi for professional

electives offered in different verticals under Regulations 2021 are passed with the following suggestions.

(i) Dr. S. Ayyappan, the University Nominee, reviewed the complete syllabus of V and VIII semesters and appreciated the entire syllabi of professional elective courses.

(ii) Dr. Santhakumar Mohan, the Subject Expert, suggested increasing the number of courses in each vertical of professional elective courses.

(iii) Dr. Ramu Murugan, another Subject Expert, insisted on adding "Advanced Internal Combustion Engines" as a professional elective course in the Automotive & Energy Engineering vertical.

(iv) Mr. Vinu Sargunan, an Industry Expert (Special Invitee 1), appreciated the entire professional elective courses.

(v) Dr. A. Udayakumar, a Professional Society Member, insisted on adding topics such as smart manufacturing and smart factory automation to the professional elective courses.

(vi) Mr. V. Krishnamoorthy, an Industry Expert, appreciated the entire professional elective courses.

(vii) Mr. E. T. Dineshraj, an Alumni, appreciated the entire professional elective courses.

4. Open electives offered to other branches under Regulations 2021

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.

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

Board approved and recommended the listed 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 recommended to proceed with MOOC/ Online Courses, Industry oriented courses, Value added courses and Industrial Training / Internship.

6. Stakeholders inputs on PG Curriculum Design

- Non-linear analysis topic can be added in Advance Finite element method course.
- Temperature and stepper motor control in course of mechatronics system design.
- Order of CAD course syllabus can be changed.
- Few topics such as heat transfer and fluid analysis can be added in Advance Finite element method course.

7. Curriculum and syllabi for I to IV semesters of PG programme under Regulations 2023

Resolved to approve the following recommendation may be passed to the standing committee of the Academic Council. The curriculum and syllabi for I to IV semesters of PG programme under Regulations 2023

(i) Dr. S. Ayyappan, the University Nominee, reviewed the complete syllabus of I and IV semesters and suggested adding the latest reference books to the syllabus.

(ii) Dr. Santhakumar Mohan (Subject Expert) and Dr. Ramu Murugan (Subject Expert) appreciated the entire curriculum and syllabi of the PG Regulation 2023.

(iii) Dr. A. Udayakumar, a Professional Society Member, insisted on utilizing the student internship opportunities provided by IITs and NITs.

(iv) Mr. Vinu Sargunan, an Industry Expert (Special Invitee 1), insisted on taking industrial training/internship in automation-based industries.

8. Common electives for Minor degree- Entrepreneurship, Innovation and venture development course under Regulations 2021

Board recommended the Minor degree- Entrepreneurship, Innovation and venture development course to the standing committee of the Academic Council for discussions.

9. Any other matter brought by the Chair

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



3/5/23
Chairman – BoS/MECH

9th Board of Studies Meeting Photos

