

Department of Mechanical Engineering

KPR Institute of Engineering and Technology



Seventh Board of Studies Meeting

Venue: Mechanical board room (Online)

Date: 07.05.2022

Meeting ID: <https://meet.google.com/sjx-ndsh-rzz>

Time: 10.30 am

Agenda:

To discuss and pass

1. Action taken on the minutes of the 6th BOS meeting
2. Syllabi for semester III and IV of UG Programme under Regulations 2021
3. Open Elective Courses
4. Industry inputs on Curriculum Design
5. Industrial training / Internship
6. Industry oriented One Credit courses
7. Online Courses and Value added courses
8. Any other matter brought by the Chair

Members Present:

S.No	Name of the member with Designation	Category	Signature
1.	Dr. S.Ramesh Babu , Professor and Head Mechanical Engineering, KPRIET	Chairman	
2.	Dr. M.Om Kumar Professor, Mechanical Engineering, Anna University, Chennai.	University Nominee	Online
3.	Dr.M.Duraiselvam Professor, Production Engineering, NIT Tiruchirappalli.	Academic Expert-1	Online
4.	Dr. K.Rameshkumar Professor, Mechanical Engineering, Amrita Vishwa Vidyapeetham, Coimbatore	Academic Expert-2	Online
5.	Dr. V.S.Saravanan , Jr. Vice President (Foundry) Indo Shell Cast Private Limited Coimbatore	Industry Expert (Special Invitee - 1)	Online
6.	Dr. M.Suresh Associate Professor, Robotics and Automation Engineering, PSG Tech, Coimbatore	Academic Expert (Special Invitee - 2)	Online
7.	Mr Mani Sankar Chakraborty Lead SME, Mechanical, L&T-EduTech, Chennai.	Industry Expert (Special Invitee - 3)	Online

Department of Mechanical Engineering

KPR Institute of Engineering and Technology



8.	Mr. K.Vinoth Kumar Engineer, Craftsman Autmation, Coimbatore	Industry Expert (Special Invitee - 4)	Online
9.	Dr. K.Ramkumar Post Doctoral Fellow, Pohang University of Science & Technology, Republic of Korea	Alumnus	Online
10.	Dr. K.Ravikumar Professor MECH, KPRIET	Faculty Member	<i>K. Ravikumar</i>
11.	Dr.M.Shanmugaraja Professor MECH, KPRIET	Faculty Member	<i>Shanmugaraja</i>
12.	Dr. S.Ravishankar Associate Professor, MECH, KPRIET	Faculty Member	<i>S. Ravishankar</i>
13.	Mr.V.SatishChandran Associate Professor, MECH, KPRIET	Faculty Member	<i>Satish.V</i>
14.	Dr. M Kumar Associate Professor, MECH, KPRIET	Faculty Member	<i>M. Kumar</i>
15.	Dr. B.Arulmurugan Associate Professor, MECH, KPRIET,MECH, KPRIET	Faculty Member	<i>B. Arulmurugan</i>
16.	Dr. P.Ganesan Associate Professor, MECH, KPRIET,MECH, KPRIET	Faculty Member	<i>P. Ganesan</i>
17.	Dr. L.Rajeshkumar Associate Professor (Sl.G.) MECH, KPRIET	Faculty Member	<i>L. Rajeshkumar</i>
18.	Dr.D.Balaji Assistant Professor (Sl.G), MECH, KPRIET	Faculty Member	<i>D. Balaji</i>
19.	Dr.L.Prabhu Assistant Professor (Sl.G), MECH, KPRIET	Faculty Member	<i>L. Prabhu</i>
20.	Dr.P.ManojKumar Assistant Professor (Sl.G), MECH, KPRIET	Faculty Member	<i>P. Manoj Kumar</i>
21.	Dr.M.Makeshkumar Assistant Professor (Sl.G), MECH, KPRIET	Faculty Member	<i>M. Makeshkumar</i>
22.	Dr.S.Sathish Assistant Professor (Sl.G), MECH, KPRIET	Faculty Member	<i>S. Sathish</i>
23.	Dr.S.Dharani Kumar Assistant Professor (Sl.G), MECH, KPRIET	Faculty Member	<i>S. Dharani Kumar</i>
24.	Dr.R.Anandkumar Assistant Professor (SR.G), MECH, KPRIET	Faculty Member	<i>R. Anandkumar</i>

Department of Mechanical Engineering

KPR Institute of Engineering and Technology



25.	Mrs.V.Bhuvanewari Assistant Professor (SR.G), MECH, KPRIET	Faculty Member	
26.	Mr. N.Udhayakumar Assistant Professor (SR.G), MECH, KPRIET	Faculty Member	
27.	Mr. S.Vasanthaseelan Assistant Professor (SR.G), MECH, KPRIET	Faculty Member	
28.	Mr. C.Senthilkumar Assistant Professor (SR.G), MECH, KPRIET	Faculty Member	
29.	Mr. N.Vigneshkumar Assistant Professor (SR.G), MECH, KPRIET	Faculty Member	
30.	Mr. P.Boobalakrishnan (SR.G) Assistant Professor, MECH, KPRIET	Faculty Member	
31.	Mr. T.Kannan (SR.G) Assistant Professor, MECH, KPRIET	Faculty Member	
32.	Mr. N.Karthi (SR.G) Assistant Professor, MECH, KPRIET	Faculty Member	
33.	Mr. S.Deepan Assistant Professor, MECH, KPRIET	Faculty Member	
34.	Mr. S.Gokulkumar Assistant Professor, MECH, KPRIET	Faculty Member	
35.	Mr. S.N.Dinesh Assistant Professor, MECH, KPRIET	Faculty Member	
36.	Mr. E.Joel Assistant Professor, MECH, KPRIET	Faculty Member	
37.	Mr. D.Mohankumar Assistant Professor, MECH, KPRIET	Faculty Member	
38.	Mr. B.K.Saravanan Assistant Professor, MECH, KPRIET	Faculty Member	
39.	Mr. R.Vishnuvardhan Assistant Professor, MECH, KPRIET	Faculty Member	
40.	Mr. P.Arunkumar Assistant Professor, MECH, KPRIET	Faculty Member	
41.	Mr.V.U.Dhanoop MECH, KPRIET	Final Year student	

42.	Mr.B.Elambharathi MECH, KPRIET	Final Year student	<i>P. Elambk</i>
-----	--	--------------------	------------------

Minutes of the 7th Meeting of The Board of Studies:

The meeting started with the Chairman, Dr.S.Ramesh Babu, 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 III and IV 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 6th BOS meeting:

The minutes of the 6th BoS meeting and the action taken thereon are approved

2. The Curriculum and syllabi for III and IV 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 III and IV Semesters of UG Programme under Regulations 2021 be passed with the following suggestions.

- (i) Dr M. Omkumar, University Nominee, reviewed the entire syllabus of III and IV semester. He recommended for further proceedings.
- (ii) Dr. M. Duraiselvam, Subject Expert, insisted to added Introduction to moulding software can be added in "Manufacturing Technology – I" course. He also suggested to add Robotic welding in "Manufacturing Technology – I" course. He also suggested added Unconventional machine process as separate elective course
- (iii) Dr. M. Suresh, Special Invitee, suggested to add robot and gripper mechanisms in "Kinematics of Machinery" course.
- (iv) Mr Mani Sankar Chakraborty, Industry Expert, suggested to added Industry 4.0 and application of IOT as part of course. He also insisted to include the courses like engineering economics and project management in the syllabus.
- (v) Dr. K. Rameshkumar, Subject Expert, reviewed the syllabus of III and IV Semester. The following points are given to enrich the Syllabus for III and IV semester regulation 2021.

- Biomaterials can be included in the Engineering Materials and Metallurgy course.
- Internet of Things course can be made as compulsory course.
- Insisted to added limits, fits and tolerances topics in the Computer Aided Modelling and Assembly Laboratory.
- He also suggested to add introduction to ADAMS in “Kinematic of machinery” course.
- Controls topics such as steady state characteristic, transient response and frequency domain analysis can be added any part of the syllabus.
- He also suggested to added Operational research course to higher semester.

3. Open Elective Courses offered to other departments

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

- (i) Dr. M. Duraiselvam, Subject Expert, insisted to add applications part in the “Additive Manufacturing and 3D printing course”.
- (ii) Mr. Mani Sankar Chakraborty, Industry Expert, suggested to include application Applications of Reverse Engineering in the “Additive Manufacturing and 3D printing course”.
- (iii) Dr. M. Suresh, Special Invitee, suggested to added KV mapping instead of mapping methods – step counter method - compound circuit design – combination circuit design in UNIT III of Low cost automation course. He also insisted to add vibration bowl feeder topic in UNIT IV of Low cost automation course.
- (iv) Dr. M. Omkumar, University Nominee, insisted to add sustainable manufacturing, design for environment, sustainable manufacturing practices and hazards management topics in the open elective syllabus.

4. Industry inputs on Curriculum Design

Following are the suggestions given by industry members:

CAD software can be added to “Machine drawing” course.

Additive manufacturing and Internet of things can be added as part of syllabus.

CNC Programming course can be included in the lab courses.

5. Industrial training / Internship

Following are the suggestions given by BoS members regarding Industrial Training / Internship which shall be presented to the standing committee of the Academic Council for discussions:

- (i) Dr. M. Duraiselvam, Subject Expert, insisted utilizing the opportunities provided by IITs and NITs regarding student internships.
- (ii) Mr. K.Vinoth Kumar, Engineer, insisted to take Industrial Training / Internship in the IOT and automation based industries.

6. Industry oriented One Credit courses

Board recommended the following One Credit Courses to the standing committee of the Academic Council for discussions:

S. NO.	COURSE TITLE
1	Advanced 3D Printing
2	Advanced welding processes
3	Electronics for industrial automation
4	IoT using raspberry Pi
5	Material Characterization
6	Measurement of vibration and sound
7	Practical CFD

- (i) Dr. K. Rameshkumar, Subject Expert, insisted to introduce size tolerancing and the industry practices prior to form tolerancing and GD&T.

7. Online Courses and Value added courses

Board recommended the following Online Courses and Value Added Courses to the standing committee of the Academic Council for discussions:

- (i) Dr. K. Rameshkumar, Subject Expert, discussed the method of evaluation and prescription of MOOC courses and recommended the inclusion of MOOC courses in the curriculum.

Board recommended the following Value Added Courses to the standing committee of the Academic Council for discussions:

SINO	TITLE
1.	Geometric Dimensioning and Tolerance
2.	Applied IOT
3.	Heating Ventilating and Air Conditioning
4.	Python Programming
5.	ANSYS
6.	Fusion 360

7.	MATLAB Simulink
8.	Solidworks
9.	Hands on training Four wheeler and transmission systems

8. 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.

(i) Dr. M. Duraiselvam, Subject Expert, insisted to purchase robot welding machine. He appreciated the efforts taken by the Department for preparing R2021 syllabus.

(ii) Mr. K.Vinoth Kumar, Engineer, insisted to create the product reliability testing facilities inside the college.

(iii) Dr. K. Rameshkumar, Subject Expert, appreciated the curriculum and syllabus of R2021 that has been prepared is aligned with GATE 2022 syllabus.

The minutes of Programme Advisory Committee (PAC) meeting is submitted and discussed.



Chairman – BoS/MECH

100
100
100

C

C

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100