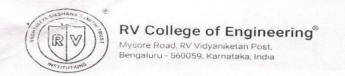


RV College of Engineering, Bangalore

BoS CONTENT SHEET – Mechanical Engineering

DEPARTMENT OF MECHANICAL ENGINEERING			
Sl. No.	Details of BoS Meeting	Date	Page No.
1	2018 Scheme-18 th Board of Studies Meeting	06 July 2018	1-8
2	2018 Scheme-19 th Board of Studies Meeting	30 May 2019	9-19
3	2018 Scheme 20 th Board of Studies Meeting	06 March 2020	20-28
4	2021 Scheme-21st Board of Studies Meeting	15 September 2022	29-35
5	2021 Scheme-22 nd Board of Studies Meeting	10 June 2023	36-42



Department of Mechanical Engineering

22.06.2024

Department: Mechanical Engineering

New Courses Added in Curricular Revisions (2018, 2021, and 2022)

The following new courses were added to the curricula during the curricular revisions made in 2018, 2021, and 2022. These revisions were thoroughly discussed in the respective Board of Studies meetings. The new courses, along with their course codes, are reflected in the revised curricula.

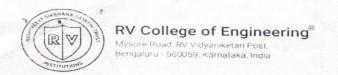
SI. No.	Title of the new course added	Course code	Scheme in which the new course is added
	Program: BE Mechanical l	Engineering	added
1.	Concept of Metrology & Machine Drawing	18ME34	2018
2.	Design thinking Lab	18ME47	2018
3.	Financial Accounting	18ME5A1	2018
4.	Decision Support System for Managers	18IM5A2	2018
5.	Managerial Economics	18ME5A3	2018
6.	Rapid Manufacturing	18ME5A4	2018
7.	Minor Project	18ME64	2018
8.	Advanced Mechanism Design	18ME6C4	2018
9.	Foundation of Mechatronics	18ME6C3	2018
10.	Internet of Things	18CS6C1	2018
11.	Machine Learning	18CS6D1	2018
12.	Vibration and Control Systems	18ME72	2018
13.	Internship	18ME74	2018
14.	Industry 4.0	18ME7F1	2018
15.	Metrology and Quality Control	18ME7F2	2018
16.	Micro and Nano Manufacturing	18ME7F3	2018
17.	Fundamentals of Aerodynamics	18ME7F4	2018
18.	Reliability and Maintainability Engineering	18ME7F5	2018
19.	Integral Transforms, Optimization and Numerical Techniques	21MA31C	2021
20.	Solid Mechanics	21ME33	2021
21.	Python for Mechanical Engineers	21ME36	2021
22.	Mechanical Measurement Systems	21ME4A1	2021
23.	Design Practice	21ME4A2	2021
24.	Manufacturing Guidelines for Product Design	21ME4A3	2021
25.	Electronic Packaging and Manufacturing	21ME4A4	2021
26.	Waste to Energy Conversion	21ME4A5	2021



Department of Mechanical Engineering

27.	Theory and Practice of Non-Destructive Testing	21ME4A6	2021
28.	Solar Photovoltaics: Principles, Technologies & Materials	21ME4A7	2021
29.	Surface Engineering of Nanomaterials	21ME4A8	2021

Product Design for Quality		M.Tech (Product Desing and	Manufacturing	制体的图形设置
Product Data Management	30.			2018
2. Design for Manufacture and Assembly 18MPD2C2 2018 3. Surface Engineering 18MPD3E2 2018 4. Systems Engineering 18MPD2D3 2018 5. Sheet Metal Forming and Plastic Moulding 18MPD3E1 2018 6. Surface Engineering 18MPD3E2 2018 6. Product Design for Quality 18MPD1A1 2018 8. Tribology 18MPD3E2 2018 9. Surface Engineering 18MPD3E2 2018 10. Creative Engineering 18MPD3E2 2018 20. Creative Engineering 18MPD3E2 2018 3. Creative Engineering 18MPD3E2 2018 4. Advanced Finite Element Analysis 18MMD2D3 2018 3. Digital Manufacturing 22MPD13TL 2022 4. Machine Learning Lab 22MMD14L 2022 4. Machine Learning for Mechanical Engineers 22MPD1A1T 2022 4. Advanced Manufacturing Practices 22MPD2C3T	31.			
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0. Computer Control of Manufacturing Systems 18MCM12	58.	Robotics and Automation	18MCM2D2	2018
Computer Control of Manufacturing Systems	59.	Intelligent Systems	18MCE1B2	2018
	50.	Computer Control of Manufacturing Systems	18MCM12	2018



Department of Mechanical Engineering				
61.	Intelligent Systems	18MCE1B2	2018	
62.	Tooling for Manufacturing in Automation	18MCM22	2018	
63.	Advanced Metrology	18MCM2D1	2018	
64.	Supply Chain Management	18 IEM 2D3	2018	
65.	Industry 4.0	18ME2G06	2018	
66.	Digital Manufacturing	18MCM31	2018	-
67.	Additive Manufacturing	18MCM3E1	2018	

BoS-CHAIRMAN (Mechanical Engineering)

Professor & Head
Department of Mechanical Engineering
R.V.College of Engineering
Bangalore - 560 059

DEAN ACADEMICS

PRINCIPAL

PRINCIPAL RV COLLEGE OF ENGINEERING BENGALIKU 560 059

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Ref: RVE/ME/021/18-19

Dated: 01.07.2018

To Dr. K. A. Balaji Subject Expert (VTU Nominee) Belagavi

Respected Sir,

Sub: Invitation for BOS Meeting on 06 July 2018

The Board of Studies (BOS) meeting of the Department of Mechanical Engineering is scheduled for 06 July 2018 at 10 AM. The agenda for the meeting is as follows:

- 1. Review of the First Year BE syllabus for Basics of Mechanical Engineering and Computer-Aided Engineering Drawing for the 2018 revised scheme.
- 2. Development of Course Outcomes (COs) for BME and CAED and CO-PO Mapping.
- 3. Discussion on Program Educational Objectives (PEOs), Program Outcomes (POs), and Program Specific Outcomes (PSOs) for BE (Mechanical), M.Tech in PDM, CIM, and Machine Design.
- 4. Review and placement of courses for the 2018 revised scheme for M.Tech in PDM, CIM, and Machine Design.
- 5. Discussion on the Ready Engineer Programme.
- 6. Any other points.

I would be grateful if you could kindly make it convenient to attend the BOS meeting and provide your valuable suggestions for curriculum changes. Thank you.

Yours sincerely,

M Krishna

Professor and Head

Department of Mechanical Engineering, RV College of Engineering

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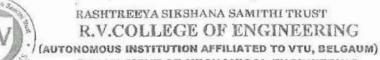
Phone: 080-6717 034

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Ref: RVE/ME/021/18-19 Dated: 01.07.2018

Agenda:

- 1. Review of the First Year BE syllabus for Basics of Mechanical Engineering and Computer-Aided Engineering Drawing for the 2018 revised scheme.
- 2. Development of Course Outcomes (COs) for BME and CAED and CO-PO Mapping.
- 3. Approval of new courses for III and IV semesters.
- 4. Discussion on Program Educational Objectives (PEOs), Program Outcomes (POs), and Program Specific Outcomes (PSOs) for BE (Mechanical), M.Tech in PDM, CIM, and Machine Design.
- 5. Review and placement of courses for the 2018 revised scheme for M.Tech in PDM, CIM, and Machine Design.
- 6. Discussion on the Ready Engineer Programme



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Following members attended 18th BoS meeting of Mechanical Engineering Board on 06 July 2018

S1.	Name of the members	Designation	Institution
No.	Name of the members	Designation	institution
1.	Dr. Jagadish	Subject Expert	Dept of Mechanical Engineering, BIT,Bengaluru
2.	Dr KVAbalaji	Subject Expert, VTU Nominee	Dept of Mechanical Engineering, SJCE,Mysuru
3.	Dr H N Narasimha Murthy- Chairman	Professor & HOD	Dept of Mechanical Engineering, RVCE
4.	Dr B Anand-Member	Professor	Dept of Mechanical Engineering, RVCE
5.	Dr M S Krupashankar- Member	Professor	Dept of Mechanical Engineering, RVCE
6.	Dr N Shanmukha-Member	Professor	Dept of Mechanical Engineering, RVCE
7.	Dr Krishna M-Member	Professor	Dept of Mechanical Engineering, RVCE
8.	Dr H D Gopalakrishna- Member	Professor	Dept of Mechanical Engineering, RVCE
9.	Dr Ramachandra K -Member	Professor	Dept of Mechanical Engineering, RVCE
10.	Dr Nanjundaradhya N V - Member	Professor	Dept of Mechanical Engineering, RVCE
11.	Dr P V Srihari-Member	Associate Professor	Dept of Mechanical Engineering, RVCE
12.	Dr Ramesh S Sharma- Member	Associate Professor	Dept of Mechanical Engineering, RVCE
13.	Dr S K Harisha-Member	Associate Professor	Dept of Mechanical Engineering, RVCE
14.	Dr Rajkumar G R -Member	Associate Professor	Dept of Mechanical Engineering, RVCE
15.	Dr Nagesh S -Member	Assistant Professor	Dept of Mechanical Engineering, RVCE
16.	Dr Bharathish A -Member	Assistant Professor	Dept of Mechanical Engineering, RVCE
17.	Dr B W Shivaraj-Member	Assistant Professor	Dept of Mechanical Engineering, RVCE
18.	V l Jagannatha Guptha- Member	Assistant Professor	Dept of Mechanical Engineering, RVCE
19.	Mamtha V-Member	Assistant Professor	Dept of Mechanical Engineering, RVCE
20.	Suhas Patil-Member	Alumni	Dept of Mechanical Engineering, RVCE
21.	Harish D Y N-Member	Alumni	Dept of Mechanical Engineering, RVCE
22.	Prakash HodimaniMember	Alumni	Dept of Mechanical Engineering, RVCE



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Dr. H N Narasimha Murthy, Chairman greeted all BoS members and special invitees. The following points were discussed:

Agenda #	Discussions and Resolutions		
_	Review of the First Year BE syllabus for Basics of Mechanical Engineering and Computer-Aided Engineering Drawing for the 2018 revised scheme.		
Scheme and	syllabus for Computer Aided Engineering Drawing was discussed. The		
members su	members suggested revision of course, learning objectives. Dr Jagadish suggested		
to remove the topic on lettering from Unit I. the external members suggested to			
cover projection of points in brief and to concentrate projection of straight lines and			
planes. Dr KVA Balaji suggested to include projection of Mid points and application			
problems.			

Agenda #	Discussions and Resolutions		
2	Development of Course Outcomes (COs) for BME and CAED and CO-		
	PO Mapping.		

The committee members suggested to formulate Course Outcomes (COs) for BME and CAED and establish CO-PO mapping. The members suggested to emphasize real-world applications and problem-solving by integrating practical examples and case studies into the curriculum. Encourage students to engage in hands-on projects that address real engineering challenges, fostering critical thinking and innovation.



AUTONOMOUS INSTITUTION AFFILIATED TO VTU, BELGAUM) DEPARTMENT OF MECHANICAL ENGINEERING

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Phone: 080-67178034 080-67178108 Fax:080-28600337 Email:narasimhamurthyhn@rvce.edu.ir Website; www.rvce.edu,in R.V. Vidvaniketan Post. Mysuru Road, Bangaluru 560059

Agenda #	Discussions and Resolutions
3	Approval of new courses for III and IV semester

BoS Chairman presented the scheme for second year, after an exclusive discussion the following courses were suggested by the members to be included in the scheme.

- Concept of Metrology & Machine Drawing-18ME34
- Design thinking Lab-18ME47

Agenda #	Discussions and Resolutions		
4	Discussion on Program Educational Objectives (PEOs), Program		
	Outcomes (POs), and Program Specific Outcomes (PSOs) for BE		
	(Mechanical), M.Tech in PDM, CIM, and Machine Design.		

The members suggested to align PEOs, POs, and PSOs with industry needs and emerging technologies. Incorporate sustainability, advanced manufacturing, and automation for BE (Mechanical). Emphasize research skills and innovation for M.Tech in PDM, CIM, and Machine Design. Regularly update outcomes to reflect technological advancements and industry standards.

Agenda #	Discussions and Resolutions		
	Review and placement of courses for the 2018 revised scheme for		
5	M.Tech in PDM, CIM, and Machine Design.		

The members suggested to review and update courses to align with current industry ng be

trends in Product Data Management (PDM	I), Computer Integrated Manufacturin				
(CIM), and Machine Design. The following new courses were suggested to b					
included in the scheme and syllabus for					
M.Tech(Product Design and Manufacturing)	M.Tech (Compute Integrated				
Product Design for Quality-18MPD1A1	Manufacturing)				
Product Data Management-18MPD1B1	Robotics and Automation-				
Design for Manufacture and Assembly-	18MCM2D2				
18MPD2C2	Intelligent Systems -18MCE1B2				
Surface Engineering-18MPD3E2	Computer Control of Manufacturing				
Systems Engineering-18MPD2D3	Systems-18MCM12				
Sheet Metal Forming and Plastic Molding -	Intelligent Systems -18MCE1B2				
(18MPD3E1)	Tacling for Manufacturing in				
Surface Engineering -18MPD3E2	Tooling for Manufacturing in Automation-18MCM22				
Product Design for Quality-18MPD1A1	Advanced Metrology-18MCM2D1				
Tribology-18MMD1A2	Supply Chain Management -18 IEM				
Surface Engineering-18MPD3E2	2D3				
Creative Engineering -18MPD2C1	Industry 4.0-18ME2G06				
Advanced Finite Element Analysis-18MMD2D3	Digital Manufacturing-18MCM31				
Mechatronics System Design-18MMD3E1	Additive Manufacturing-18MCM3E1				
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Agenda #	Discussions and Resolutions
6	Discussion on the Ready Engineer Programme

The Chairman provided an overview of the Ready Engineer Programme, highlighting its objectives, structure, and benefits for students. Attendees discussed the feasibility of integrating the programme, considering logistical aspects, curriculum adjustments, and resource requirements. Concerns and suggestions were raised regarding implementation timelines, faculty involvement, and student participation.

The Chairman concluded the meeting by thanking the members present.

Dr. Jagadish (Subject Expert)

Dr K V A Balaji (Subject Expert, VTU Nominee)

Dr H N Narasimha Murthy Professor & HOD

Dr B Anand. Professor

Dr M S Krupashankar. Professor

Dr N Shanmukha. Professor

Dr Krishna M. Professor

Dr H D Gopalakrishna. Professor

Dr Ramachandra K . Professor

Dr Nanjundaradhya N V . Professor

Dr P V Srihari. Associate Professor

Dr Ramesh S Sharma. Associate Professor Monararah Manararah Manarah Manararah Manararah Manararah Manarah Manararah Manararah Manararah Manarah Manararah Manarah Manarah

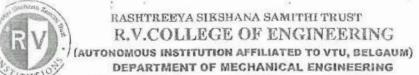
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Dr S K Harisha. Associate professor Dr Rajkumar G R Associate Professor Dr Nagesh S Assistant professor Dr bharathish A Assistant professor Dr B W Shivaraj. Assistant professor. Jagannatha Guptha. Assistant professor Mamtha V . Assistant Professor Suhas Patil. Alumni Harish D Y N. Alumni Prakash Hodimani. Alumni



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18th Board of Studies Meeting Action Taken on 17th Board of Studies Meeting

The HoD discussed the incorporation of the suggestions provided by the Board of Studies members during the meeting held on 21 March 2017

Studies members during the meeting hel	d on 21 March 2017.
Suggestion	Action Taken
Update First Year BE Syllabus: Revise the syllabus for Basics of Mechanical Engineering and Computer-Aided Engineering Drawing to align with industry standards.	The syllabus for Basics of Mechanical Engineering and Computer-Aided Engineering Drawing has been revised and updated to meet current industry standards. The updated syllabus was implemented from the 2018 academic year.
Develop COs and CO-PO Mapping:	Course Outcomes (COs) for BME and
Formulate Course Outcomes (COs) for	CAED have been developed. CO-PO
BME and CAED and establish CO-PO	mapping was completed and
mapping.	incorporated into the curriculum.
Review PEOs, POs, and PSOs: Discuss and update Program Educational Objectives (PEOs), Program Outcomes (POs), and Program Specific Outcomes (PSOs) for BE (Mechanical), M.Tech in PDM, CIM, and Machine Design.	Program Educational Objectives (PEOs), Program Outcomes (POs), and Program Specific Outcomes (PSOs) for BE (Mechanical), M.Tech in PDM, CIM, and Machine Design were reviewed and updated based on the suggestions.
Revise M.Tech Schemes: Review and	The 2018 scheme for M.Tech in PDM,
revise the 2018 scheme for M.Tech in PDM, CIM, and Machine Design, including course placements.	CIM, and Machine Design was reviewed and revised. Course placements were adjusted as per the BoS recommendations.
Introduce Ready Engineer	The Ready Engineer Programme has
Programme: Discuss the integration of the Ready Engineer Programme into the	been introduced and integrated into the curriculum to enhance practical skills
curriculum.	and industry readiness.



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Dated: 22.04.2019

Ref: RVE/ME/032/19-20

To Dr. K. A. Balaji Subject Expert (VTU Nominee) Belagavi

Respected Sir,

Sub: Invitation for BOS Meeting on 30 May 2019

The Board of Studies (BOS) meeting of the Department of Mechanical Engineering is scheduled for 30 May 2019 at 10 AM. The agenda for the meeting is as follows:

- 1. Result analysis of 4th and 8th Semester of BE Mechanical Engineering
- 2. To consider and approve the scheme for UG 2018 scheme from 3 to 8 semesters
- 3. To consider and approve the curriculum for 3rd and 4th semesters for BE
- 4. To consider and approve the curriculum for 7th and 8th semesters for BE Program
- 5. To consider and approve the curriculum for 3rd and 4th semesters for M.Tech in Machine Design, Product Design and Manufacturing and Computer Integrated Manufacturing
- 6. Others

I would be grateful if you could kindly make it convenient to attend the BOS meeting and provide your valuable suggestions for curriculum changes.

Yours sincerely,

M Krishna

Professor and Head

Department of Mechanical Engineering

RV College of Engineering

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Mysuru Road, Bangaluru - 560059

Dated: 22.04.2019

Ref: RVE/ME/032/19-20

Agenda:

1. Result analysis of 4th and 8th Semester of BE Mechanical Engineering

- 2. To consider and approve the scheme for UG 2018 scheme from 3 to 8 semesters
- 3. To consider and approve the curriculum for 3rd and 4th semesters for BE
- 4. To consider and approve the curriculum for 7th and 8th semesters for BE Program
- 5. To consider and approve the curriculum for 3rd and 4th semesters for M.Tech in Machine Design, Product Design and Manufacturing and Computer Integrated Manufacturing
- 6. Others

Following members attended 19^{th} BoS meeting of Mechanical Engineering Board on 30 May 2019

S1.	Name of the	Designation	Institution
No.	members		
1.	Dr Krishna M	Professor & HOD	Dept of Mechanical Engineering,
	Chairman		RVCE
2.	Dr H N Narasimha	Subject Expert	Dept of Mechanical Engineering,
	Murthy Member	VTU Nominee	RVCE
3.	Dr N Shanmukha	Subject Expert	Dept of Mechanical Engineering,
	Member	Professor	RVCE
4.	Dr H D Gopalakrishna	Professor	Dept of Mechanical Engineering,
	Member		RVCE
5.	Dr Ramesh S Sharma	Professor	Dept of Mechanical Engineering,
	Member		RVCE
6.	Prof M R Srinivas	Professor	Dept of Mechanical Engineering,
	Member		RVCE
7.	Dr P R Venkatesh	Professor	Dept of Mechanical Engineering,
	Member		RVCE
8.	Dr S Mahendra Kumar	Professor	Dept of Mechanical Engineering,
	Member		RVCE
9.	Dr Anjaneya G	Professor	Dept of Mechanical Engineering,
	Member		RVCE
10.	Prof Rakesh Kumar	Professor	Dept of Mechanical Engineering,
	Member		RVCE

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Dr. M Krishna, Chairman greeted all BoS members and special invitees. The following points were discussed:

Agenda #	Discussions and Resolutions
19.2	Result Analysis of 4th & 8th Semester BE Mechanical Engineering

The Chairman displayed 4th and 8th Semester Results to all the BOS Members. The members pointed out that in 4th Semester Thermal Engineering II and Kinematics of Machines have failure i.e. 19 and 10 out of 135 Students. They suggested to address this issue by teaching different techniques using ICT Tools.

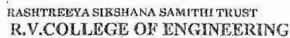
Committee strongly suggested to give three open assignments (Report OR Physical model) in their respective subjects other than the three CIE which will hamper the creativity of the students. They also recommended to conduct only midterm during 8th Week and Second term in 13th week with respective portions covered. This creates more visionaries rather than performers.

Too many CIE conductions will reduce the effectiveness of faculty in research and innovation. Intend they can use M.Tech and Ph. D students for the evaluation of the booklets

Agenda #	Discussions and Resolutions
19.2	Presentation by BoS Chairman

BoS chairman appraised on following points.

- 1. Vision and Mission of department of Civil Engineering.
- 2. Welcomed new BoS members to the committee



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Agenda #	Discussions and Resolutions
	To consider and approve the Scheme for UG 2018 Scheme from 3 to 8 Semesters

The Chairman informed the house that the department bearers have been working on the revision of scheme for 2018 scheme, in this direction one brain stores was conducted on 2019 wherein experts from academics were invited to discuss the proposed scheme based on the new AICTE format. The members considered the revised scheme and discussed different issues. It was pointed out that total number of credits prescribed by RVCE in 175 for four years.

Committee members suggested the following views

- Include concepts of Metrology and Machine Drawing in Third Semester, which will enhance the imaginations and creativity of the students.
- Production Technology I can be merged with the Engineering Materials in Third Semester and manufacturing Technology in 4th Semester.
- Theory of Machines should be split into Kinematics of Machines in III Sem and Dynamics of Machines in 4th semester.
- CAD/CAM should be shifted from 4 to 5 Semester.
- All Students should be encouraged to do Design Thinking Lab only in IIOT.
- Introduce theory of Elasticity in 5th Semester and Theory of Plasticity in 6th semester.
- A Course of Design of Ergonomics should be introduced instead of Minor Projects
 OR Make students to compulsorily to do their minor projects in Design of
 Ergonomics. Design of Safety, IIOT, Design of Manufacturing Dynamics,
 Robotics and Control and Combustion and energy system which are not studies
 in their curriculum.
- Internship evaluation can be shifted from 5th Semester to 8th Semester. Internship evaluation can be evaluated based on not only industrial internship but also GATE, Indian Engineering Services and other competitive examination.
- Internship evaluation can be shifted from 5th Semester to 8th Semester. Internship evaluation can be evaluated based on not only industrial internship but also GATE, Indian Engineering Services and other competitive examination.
- Provide vacation for all the students to do innovative thinking.
- The matter regarding implementation of the scheme for the academic year 2019-20 was also discussed and it was decided that the new scheme is implemented from BE III Sem and M.Tech III Sem.

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Agenda #	Discussions and Resolutions
19.4	To consider and approve the Curriculum for the BE III and IV Semester.

The Chairman informed the committee members that the department faculty have been working on the revision of curriculum for 3rd and 4th Semester BE (2018 Scheme). The members considered the revised curriculars and discussed different issues and pointed out that the number of credits for each subject should be added in the detailed syllabus of every course. The committee gave some suggestions to delete some portions in few subjects as it burdens the students.

Agenda #	Discussions and Resolutions	
19.5	To consider and approve the Curriculum for the 7th and 8th Sem BE	
	Programs	

The Chairman informed the committee members that the department faculty have been working on the curriculum on 7th and 8th Sem BE programs (2016 Scheme). The members approved the revised curriculars and agreed to implement from 2019-20 for 7th Semester.

Agenda #	Discussions and Resolutions	
19.6	To consider and approve the Curriculum for the 3rd and 4th Sem	
	M.Tech Machine design, product Design & Manufacturing and	
	Computer Integrated Manufacturing.	

The Chairman informed the committee members that the PG Faculty have been working on revision of curriculum for 3rd and 4th semester M.Tech Machine Design, M.Tech in Product Design & Manufacturing and M,Tech in Computer Integrated Manufacturing. The committee suggested to introduce the Mini Projects for Marks instead of assignments in all the subjects with respective topics. The members approved the revised curricula and agreed to implement from the academic year 2019-20 for 3rd semester.

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Agenda #	Discussions and Resolutions	
19.7	To consider and approve the panel of examiner for Theory and	
	practical examination for the academic year 2019-20 for UG.	

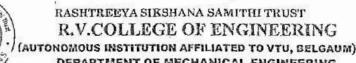
The members have approved the list of examiners for Theory and practical for the UG courses for the academic year 2019-20. Further the members authorized the Chairman, BOS to modify the examiners as per the needs.

Agenda #	Discussions and Resolutions	
19.8	To consider and approve the panel of examiner for Theory and practical	
	examination for the academic year 2019-20 for PG.	

The members approved the proposed list of examiners for Theory and practical Examinations PG courses for the academic year 2019-20. Further the members authorized the Chairman BOS to modify the examiners as per the needs.

Agenda #	Discussions and Resolutions	
19.9	To consider and approve the panel of M.Tech Thesis evaluation for the	
	Batch 2019-20	

The members approved the proposed list of M. Tech for the Thesis evaluation of the Batch 2018-19 and 2019-20. Further the members authorized the Chairman BOS to modify the examiners as per the needs.



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Agenda #	Discussions and Resolutions
19.10	NPTEL Toppers list during 2019

Department of Students opted enthusiastically all disciplines of engineering subjects. Out of 50 students and faculty of the department, 25 students got all India Ranks (13 gold and 11 Silver and 1 Elite Medal). It was observed by the members that in order to improve the quality of the student at Undergraduate and postgraduate level, the department needs to encourage more number of students to take MOOC Studies. One of the Committee members suggested not to give any credits to NPTEL courses, as they are only learning materials and their quality is questionable. Instead of that credit should be given for GATE and IES Examination results which encourage students to join research organizations like DRDO, ISRO, CSIR Lab etc.,

Agenda #	Discussions and Resolutions
19.11	Any other discussion

The evaluation should be done by the faculty who is handling the subject in their particular semester which will help to do the fair evaluation. Similarly, bring the external evaluators to evaluate subject, who is handling the same subject in the respective college.

Evaluation System of Project work should be modified to guide evaluate three times and two external evaluation



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Member

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The meeting was concluded by the chairman with thanks to all members present

Internal Members

External BoS Member

Dr Krishna M - Chairman	0100	Dr Pramod Kumar	5
Dr H N Narasimha Murthy Member	Unavarely	Dr Ramesh M R	2 miles
Dr N Shanmukha- Member	8 Pm	Prof C V Venkatesh	(Galetan)
Dr H D Gopalakrishna- Member	robert	Dr C K Panda	gade
Dr Ramesh S Sharma- Member	Redande	Mr J Prabhakar	Quality
Prof M R Srinivas-Member	Absent	Dr Vinod Dravid	Daniel Board
Dr P R Venkatesh-Member Dr S Mahendra Kumar- Member	Absent		
Dr Anjaneya G-Member	Control		
Prof Rakesh Kumar- Member	Absent		

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19th Board of Studies Meeting Action Taken on 18th Board of Studies Meeting

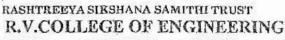
The HoD discussed the incorpo	oration of the suggestions provided by the
Board of Studies members during the meeting held on 30 May 2019.	
Suggestion	Action Taken
Elaborate the content in the topic Renewable and Non-Renewable, and allotted time is not enough	✓ Content Expansion: Enhance the syllabus to include detailed subtopics under Renewable and Non-Renewable energy sources Include: Types of renewable resources (solar, wind, geothermal, hydroelectric, biomass), benefits, and challenges Include: Types of non-renewable resources (coal, oil, natural gas, nuclear), environmental impact, and sustainability issues. ✓ Additional Time Allocation: Propose an increase in the number of lectures or extend the duration of existing ones to cover the expanded content adequately. ✓ Resources and Materials: Develop comprehensive lecture notes, presentations, and supplementary reading materials. ✓ Guest Lectures and Workshops: Organize guest lectures by industry experts and conduct workshops to provide practical insights. Implementation Timeline: To be incorporated in the upcoming academic year.
In manufacturing stream,	✓ Syllabus Update : Revise the
include computer numerical	manufacturing stream syllabus to
control (CNC) type and	incorporate detailed topics on CNC
classification	types and classifications.
	✓ Content to Include: Classification of
	CNC machines (based on control

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	✓	system, type of motion, number of axes), types of CNC machines (milling, lathe, router, grinder, etc.), advantages and disadvantages, and industrial applications. Instructional Materials: Prepare detailed lecture notes, slides, and video tutorials. Faculty Training: Conduct workshops for faculty to get acquainted with the new content.
		Implementation Timeline : To be implemented in the next semester.
Include CNC various operations in the Lab	\[\lambda \] \[\lambda \] \[\lambda \]	Lab Syllabus Update: Modify the lab syllabus to include practical sessions on various CNC operations. Operations to Cover: Basic operations (milling, turning, drilling), advanced operations (threading, grooving, contouring), and CNC programming basics. Equipment and Software: Ensure availability of necessary CNC machines and software for programming and simulations. Lab Manuals and Guides: Develop detailed lab manuals and guides for students to follow during practical sessions. Faculty and Technician Training: Provide training sessions for lab faculty and technicians. Implementation Timeline: Effective from the next lab cycle.
Remove letter writing from Unit-1 and start from projection of points and lines	✓	Syllabus Revision: Amend the Unit-1 syllabus to remove the topic of letter writing. New Starting Point: Begin the unit
		with the topic "Projection of Points and



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	Lines". Content Development : Prepare
	comprehensive lecture notes, diagrams,
	and practice problems on projection
	techniques.
/	Resources and Materials: Update
	textbooks, workbooks, and other
	teaching materials to reflect the change.
✓	Faculty Briefing: Inform faculty
	members about the change and provide
	necessary training if required.
/	Implementation Timeline: Immediate
	implementation from the next academic
	term.



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Dated: 01.03.2020

To Dr. C V Venkatesh Subject Expert (VTU Nominee) Belagavi

Respected Sir,

Sub: Invitation for BOS Meeting on 06 March 2020

The Board of Studies (BOS) meeting of the Department of Mechanical Engineering is scheduled for 06 March 2020 at 10 AM. The agenda for the meeting is as follows:

- 1. Result analysis UG and PG of Mechanical Engineering
- 2. To consider and approve the syllabus for UG 2018 scheme from 5^{th} and 6^{th} semesters
- 3. To approval of the panel of examiners for theory and practical examination for 2020-21 academic year
- 4. To approval of the panel of examination question paper setter list for 2020-21 academic year
- 5. Any other discussion

I would be grateful if you could kindly make it convenient to attend the BOS meeting and provide your valuable suggestions for curriculum changes.

Thank you.

Yours sincerely,

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Professor and Head

Department of Mechanical Engineering

RV College of Engineering

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Ref: RVE/ME/072/19-20 Dated: 01.03.2020

Agenda:

- 1. Result analysis UG and PG of Mechanical Engineering
- 2. To consider and approve the syllabus for UG 2018 scheme from 5th and 6th semesters
- 3. To approve the panel of examiners for theory and practical examination for 2020-21 academic year
- 4. To approve the panel of examination question paper setter list for 2020-21 academic year
- 5. Any other discussion

Following members attended 20th BoS meeting of Mechanical Engineering Board on 06 March 2020

S1. No.	Name of the members	Designation	Institution
1.	Dr M Krishna - Chairman	Professor & HOD	Dept of Mechanical Engineering, RVCE
2.	Dr H N Narasimha Murthy - Member	Subject Expert VTU Nominee	Dept of Mechanical Engineering, RVCE
3.	Dr N Shanmukha N - Members	Subject Expert Professor	Dept of Mechanical Engineering, RVCE
4.	Dr H D Gopalkrishna - Member	Professor	Dept of Mechanical Engineering, RVCE
5.	Dr Ramesh S Sharma - Member	Professor	Dept of Mechanical Engineering, RVCE
6.	M R Srinivas - Member	Professor	Dept of Mechanical Engineering, RVCE
7.	Dr P R Venkatesh - Member	Associate Professor	Dept of Mechanical Engineering, RVCE
8.	Dr S Mahendr Kumar - Member	Associate Professor	Dept of Mechanical Engineering, RVCE
9.	Dr. Anjaneya. G - Member	Assistant Professor	Dept of Mechanical Engineering, RVCE

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DEPARTMENT OF MECHANICAL ENGINEERING



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10.	Prof. Jinka	Assistant Professor	Dont of Machanical Engineering
10.		Assistant Fiblesson	Dept of Mechanical Engineering,
	Ranganayakalu –		RVCE
	Member		
11.	Prof Rakesh Kumar –	Assistant Professor	Dept of Mechanical Engineering,
	Member		RVCE
12.	Dr C V Venkatesh-	Professor and Head	Dept of Mechanical Engineering,
	Academic		Malnad College of Engineering
13.	Dr. P K Panda-Industry	Chief Scientist	Material Science Division, CSIR-
			NAL, Bangalore
14.	Mr J Prabhakar-	General Manager	Machining Solutions Group,
	Industry	_	Kennametal India, Bengaluru
15.	Dr Vineet Dravi-	Managing Director	COMSOL Multiphysics Pvt Ltd,
	Industry		Bengaluru
16.	Dr Pramod Kumar-	Associate Professor	Dept of Mechanical Engineering,
	Academic		IISc, Bengaluru
17.	Dr Ramesh M R-	Associate Professor	Dept of Mechanical Engineering,
	Academic		National Institute of Technology,
			Karnataka

Dr. M Krishna, Chairman greeted all BoS members and special invitees. The following points were discussed:

Agenda #	Discussions and Resolutions
20.2	Result Analysis of UG and OG – Mechanical Engineering

The Chairman displayed 3rd Semester (2018 Scheme) 5th and 7th semester (2016 Scheme) results of UG and 23rd Semester of M.Tech (CIM, PDM, MD) to all the BOS members. The members pointed out the number of F Grades in CIE is Zero but "F" grade in SEE has appeared and they suggested to remove the F Grade collision in CIE. They raised the question that the PG students in the Major Project phase I acquired lower grade (no S grade and more B grade) and also suggested to invite outside researchers to give motivation for PG Students in the major project more systematically.

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Agenda #	Discussions and Resolutions
20.3	To consider and approve the syllabus for UG 2015 for 5 th & 6 th semester

The Chairman informed the house that the department teams have been working on the merits of scheme for 2018 and in this direction brain storming session was conducted on 17th February 2020 based on New AICTE Format. The members considered the revised scheme and discussed different issues. It was pointed out that total number of credits prescribed by RVCE for 175 for Four Years.

Paper mentoring needed for UG & PG project work orientation.

The following courses were suggested to be introduced

Financial Accounting-18ME5A1

Decision Support System for Managers-18IM5A2

Managerial Economics-18ME5A3

Rapid Manufacturing-18ME5A4

Minor Project-18ME64

Advanced Mechanism Design-18ME6C4

Foundation of Mechatronics-18ME6C3

Internet of Things-18CS6C1

Machine Learning -18CS6D1

Vibration and Control Systems-18ME72

Internship-18ME74

Industry 4.0 -18ME7F1

Metrology and Quality Control-18ME7F2

Micro and Nano Manufacturing -18ME7F3

Fundamentals of Aerodynamics-18ME7F4

Reliability and Maintainability Engineering -18ME7F5

To introduce more Management courses is curriculum especially related to business

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The CAD/CAM Direct numerical can be introduced.

3D Printing a part of CAM can be introduced in the CAD/CAM syllabus.

Centre of Unit: 5 of CAD/CAM can be changed fully.

For CAD/CAM lab open ended experiments can be introduced. But should not be even for the examinations.

In design of Machine Elements – I a topic on High and low fatigue life cycle can be introduced without saving any problems.

In Turbo Machinery lab on experiment on VANE Pump can be introduced.

.In the professional elective group -C for VI Semester.

In advanced Solid Mechanics, contents of Units V to be changed and to introduce Theory on Plasticity OR Advanced Fatigue Concepts. For reference, a book on Advanced Solid Mechanics by professor Young to be put

- In Foundations of Mechatronics a topic on Digital Signal processing to be introduced. The contents of unit III can be reduced as lot of portions are included.
- In Vehicle Dynamics course, concerns are to be reformulated.

In the Professional Ethics of Group-D for 6^{th} semester

- In Hydraulics and pneumatics, an assignment carrying 20 Marks based on H&L Lab component to be incorporated.
- In Advanced Manufacturing process, reformulate the syllabus and simplify the contents.

Agenda #	Discussions and Resolutions
29.4	To consider and approve the Panel of Examiners for Theory & Practical Examination for 2020-21 Academic Year for UG.

The Members approved the proposed list of Examiners for Theory and practical examination for UG courses for Academic session 2020-2021. Further, the members authorized be Chairman, BOS to modify the examiners as per needs.



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Agenda #	Discussions and Resolutions
29.5	To consider and approve the Panel of Examination question paper Setters list for 2020-21 Academic Year.

The member approved the proposal list of examiners for Theory and Practical Examination of PG course for Academic session 2020-2021. Further, the members authorized the Chairman, Bos to modify the examiners as per needs.

Agenda #	Discussions and Resolutions
29.6	Any other discussion

They suggested more electives list other than Mechanical Engineering courses to the Students. They can take elective from the list of choices available as course elective. In 2018 Scheme, for 5^{th} and 6^{th} Semester, the following new additions are incorporated

- > CAC/CAM Hardware details and details and CNC simulators are added along with DNC.
- ➤ 3-D Printing for CAM Design is included CAD/CAM lab.
- ➤ In Turbo Machinery, performance test on VANE PUMP can be included as on experiment. In NPTEL, 3 courses are added related to Industrial Business (e-business, international business and work system design).
- > Enriched design of Machine elements with more assembly drawing.
- > TATA Technologies sponsored Industrial Elective Fundamentals of Automotive Design is included.
- Machine Learning is introduced as One of the Elective Courses.

RVCE-BENZ sponsored AUTOMOTIVE MECHATRONICS as a Global Elective for 5th Semester students.

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The meeting was concluded by the chairman with thanks to all members present

Internal Membe	ers	External BoS Member	
Dr Krishna M - Chairman	60/00	Prof C V Venkatesh	Constant
Dr H N Narasimha Murthy Member	Unavarely	Dr C K Panda	godo
Dr N Shanmukha- Member	& Print	Mr J Prabhakar	Power
Dr H D Gopalakrishna- Member	*object	Dr Vinod Dravid	Absort
Dr Ramesh S Sharma- Member	Radiana	Dr Pramod Kumar	Absont
Prof M R Srinivas-Member	Absont	Dr Ramesh M R	Absort
Dr P R Venkatesh-Member	PRILL 12		
Dr S Mahendra Kumar- Member	Absent		
Dr Anjaneya G-Member	Cathani		
Jinka Ranganayakulu- Member	109z		
Prof Rakesh Kumar- Member	Absont		

RASHTREEYA SIKSHANA SAMITHI TRUST R.V.COLLEGE OF ENGINEERING (AUTONOMOUS INSTITUTION AFFILIATED TO VTU, BELGAUM)

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20th Board of Studies Meeting Action Taken on 19th Board of Studies Meeting

The HoD discussed the incorporation of the suggestions provided by the Boar			
Studies members during the meetin	g held on 06 March 2020.		
Suggestion	Action Taken		
Include Concepts of Metrology and Machine Drawing in Third Semester	 ✓ Review and update third-semester syllabus to integrate Metrology and Machine Drawing concepts. ✓ Develop detailed course content and learning outcomes. ✓ Update syllabus and obtain approvals. ✓ Prepare study materials and lab manuals. ✓ Train faculty members. Timeline: By next academic year 		
Merge Production Technology I	✓ Analyze existing syllabus for overlap.		
with Engineering Materials in Third Semester and Manufacturing Process in Fourth Semester	 ✓ Create combined course outline for third semester and revised Manufacturing Process course for fourth semester. ✓ Submit changes for academic committee review and approval. ✓ Revise teaching plans and materials. ✓ Inform students and faculty. Timeline: Implementation from next academic year. 		
Split Theory of Machine into	✓ Develop separate course outlines for		
Kinematics of Machines in Third Semester and Dynamics of Machines in Fourth Semester	Kinematics of Machines (III semester) and Dynamics of Machines (IV semester). ✓ Update curriculum and course catalog. ✓ Adjust faculty teaching assignments. ✓ Communicate changes to students and advisors. Timeline: To be completed before the next academic year.		
Shift CAD/CAM from Fourth to Fifth Semester	 ✓ Amend academic calendar to shift CAD/CAM to fifth semester. ✓ Reallocate other courses to fill fourth-semester slot. ✓ Update syllabus and course schedules. ✓ Notify students and faculty. 		

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	Timeline: Effective from next academic year.
Encourage All Students to Do Design Thinking Lab Only in IIoT	 ✓ Develop comprehensive Design Thinking Lab course focused on IIoT. ✓ Integrate lab into curriculum as mandatory. ✓ Provide resources and faculty training. ✓ Promote benefits to students. ✓ Monitor and evaluate effectiveness. Timeline: Initiate in upcoming semester.
Introduce Theory of Elasticity in Fifth Semester and Theory of Plasticity in Sixth Semester	 ✓ Draft detailed course outlines for Theory of Elasticity and Theory of Plasticity. ✓ Update curriculum to include these courses. ✓ Prepare teaching materials. ✓ Train faculty members. ✓ Ensure laboratory support. Timeline: Courses to be introduced in next academic year.
Introduce a Course on Design of Ergonomics Instead of Minor Project or Make Students Compulsorily Do a Minor Project in "Design for Ergonomics"	 ✓ Evaluate feasibility of replacing minor project with Design of Ergonomics course. ✓ Develop syllabus for Design of Ergonomics course. ✓ Alternatively, design structured minor project on Design for Ergonomics. ✓ Update academic program. ✓ Prepare teaching and project guidance materials. ✓ Communicate changes. Timeline: To be rolled out in next academic year.





Ref: RVE/ME/034/22-23 Dated: 19.09.2022

To Dr. Samual G L Subject Expert (VTU Nominee) Belagavi

Respected Sir,

Sub: Invitation for BoS Meeting on 15 September 2022

The Board of Studies (BoS) meeting of the Department of Mechanical Engineering is scheduled for 15 September 2022 at 10 AM. The agenda for the meeting is as follows:

- 1. Welcome New BoS Members
- 2. To consider and approve the syllabus for UG 2021 scheme from 3rd and 4th semesters
- 3. To approval of the panel of examiners for theory and practical examination for 2022-23 academic year
- 4. To approval of the panel of examiners for theory and practical examination for 2022-23 academic year for PG
- 5. To consider and approve the panel of M.Tech Thesis Evaluation for the batch 2022-23 academic year.
- 6. Any other discussion

I would be grateful if you could kindly make it convenient to attend the BOS meeting and provide your valuable suggestions for curriculum changes.

Thank you.

Yours sincerely,

M Krishna

Professor and Head Department of Mechanical Engineering

RV College of Engineering

Ref: RVE/ME/034/22-23 Dated: 19.09.2022

Agenda:

- 1. Welcome New BoS Members
- 2. To consider and approve the syllabus for UG 2021 scheme from 3rd and 4th semesters
- 3. To approval of the panel of examiners for theory and practical examination for 2022-23 academic year
- 4. To approval of the panel of examiners for theory and practical examination for 2022-23 academic year for PG
- 5. To consider and approve the panel of M.Tech Thesis Evaluation for the batch 2022-23 academic year.
- 6. Any other discussion

Following members attended 20th BoS meeting of Mechanical Engineering Board on 15 September 2022

S1. No.	Name of the members	Designation	Institution
1.	Dr M Krishna- Chairman	Professor & HOD	Dept of Mechanical Engineering, RVCE
2.	Dr H N Narasimha Murthy- Member	Subject Expert, VTU Nominee	Dept of Mechanical Engineering, RVCE
3.	Dr N Shanmukha N- Member	Subject Expert Professor	Dept of Mechanical Engineering, RVCE
4.	Dr H D Gopalkrishna- Member	Professor	Dept of Mechanical Engineering, RVCE
5.	Dr Ramesh S Sharma- Member	Professor	Dept of Mechanical Engineering, RVCE
6.	Dr P V Srihari- Member	Professor	Dept of Mechanical Engineering, RVCE
7.	Dr G R Rajkumar- Member	Professor	Dept of Mechanical Engineering, RVCE
8.	Dr. Bharatish. A Member	Professor	Dept of Mechanical Engineering, RVCE
9.	Dr Samuel-Academic	Professor	Dept of Mechanical Engineering,IIT Madras
10.	Dr. P K Panda-Academic	Chief Scientist	Material Science Division , CSIR-NAL, Bangalore
11.	Mr J Prabhakar-Industry	General Manager	Machining Solutions Group, Kennametal India, Bengaluru
12.	Mr Vineeth Dravid-Industry	Managing Director	COMSOL Multiphysics Pvt Ltd, Bengaluru



Dr. M Krishna, Chairman greeted all BoS members and special invitees. The following points were discussed:

Agenda #	Discussions and Resolutions
21.1	Welcome BOS members and about the department

At the outset, the Chairman introduced and welcomed the members to the meeting of BoS and placed agenda deliberations before the members. The following deliberations were made as per the agenda.

Agenda #	Discussions and Resolutions
21.2	To consider and approve the Scheme for UG 2021 Scheme for III and IV Semester

The chairman informed the hours that the department teams have been working on the revision of scheme 2021 and in this directions Academic Advisory committee meeting was conducted on 12th June 2022 where experts from academic were invited to discuss the proposed scheme based on the new AICTE format. The members considered the revised scheme and discussed the different issues.

The committee suggested the following changes and approved the introduction of new courses in 2021 Scheme

Integral Transforms, Optimization and Numerical Techniques 21MA31C

Solid Mechanics 21ME33

Python for Mechanical Engineers 21ME36

Mechanical Measurement Systems 21ME4A1

Design Practice 21ME4A2

Manufacturing Guidelines for Product Design 21ME4A3

Electronic Packaging and Manufacturing 21ME4A4

Waste to Energy Conversion 21ME4A5

Theory and Practice of Non-Destructive Testing 21ME4A6

Solar Photovoltaics: Principles, Technologies & Materials 21ME4A7

Surface Engineering of Nanomaterials 21ME4A8

Agenda #	Discussions and Resolutions
	To consider and approve the Panel of Examiners for Theory and practical Examination for 2023-24 Academic UG.

The members have approved the proposed list of examiners of Theory and practical examinations of UG course for the year 2022-23. Further the members authorized the Chairman, BOS to authorize as per the needs.

Agenda #	Discussions and Resolutions		
21.4	To consider and approve the Panel of Examiners for Theory and		
	practical Examination for 2022-23 Academic PG.		

The members have approved the proposed list of examiners of Theory and practical examinations of PG course for the year 2022-23. Further the members authorised the Chairman, BOS to authorise as per the needs.

Agenda #	Discussions and Resolutions		
21.0	To consider and approve the M.Tech Thesis Evaluation for the batch		
	2022-23		

The members approved the proposed list of Examiners for M.Tech Thesis evaluation of the batch and 2021-22 and 2022-23. Further, the member authorised the Chairman, BoS to change the examiners as per the needs.

The meeting was concluded by the chairman with thanks to all members present

Internal Membe	rs	External BoS Member	
Dr Krishna M - Chairman	60/60	Prof C V Venkatesh	Constant
Dr H N Narasimha Murthy Member	Gnavorely	Dr C K Panda	gade
Dr N Shanmukha- Member	Eghin	Mr J Prabhakar	Powder
Dr H D Gopalakrishna- Member	robart	Dr Vinod Dravid	Absort
Dr Ramesh S Sharma- Member	Regional	Dr Pramod Kumar	Absort
Prof M R Srinivas-Member	Absent	Dr Ramesh M R	Absent
Dr P R Venkatesh-Member	PRILL 12		
Dr S Mahendra Kumar- Member	Absent		
Dr Anjaneya G-Member	Charles		
Jinka Ranganayakulu- Member	TIPZ		
Prof Rakesh Kumar- Member	Absont		



21st Board of Studies Meeting

Action Taken on 20th Board of Studies Meeting

The HoD discussed the incorporation of the suggestions provided by the Board of Studies members during the meeting held on 15 September 2022. Suggestion Action Taken Proper mention is needed for UG and PG Develop clear guidelines and objectives project work orientation for UG and PG project work orientation. ✓ Include these guidelines in the academic handbook. ✓ Conduct orientation sessions for students and faculty. ✓ Ensure regular monitoring and evaluation. **Timeline:** Immediate implementation. Identify potential management Introduce More Management Courses in Curriculum, Especially Related to Business business-related courses relevant engineering students. ✓ Develop course outlines and get approvals. Integrate selected courses into the curriculum. ✓ Train faculty and prepare materials. Timeline: Implementation from academic year. ✓ Develop course content focusing on Introduce CAD/CAM Direct Numerical Direct Numerical Control (DNC) within Control the CAD/CAM curriculum. ✓ Update syllabus to include this topic. ✓ Prepare instructional materials and lab setups. ✓ Train faculty members. **Timeline:** Effective from next semester. Introduce 3D Printing as Part of CAM in the Review and revise the entire content of Unit CAD/CAM Syllabus 5 in the CAD/CAM syllabus. Develop new course material aligned with current industry standards. Get approvals from the academic committee. Prepare faculty to deliver the updated content. **Timeline:** To be implemented in the next academic cycle. ✓ Design open-ended experiments Open-ended Experiments Introduce in CAD/CAM Lab (Not for Examination) CAD/CAM lab sessions. ✓ Ensure these experiments creativity and practical problem-solving. Communicate the non-examinable nature of these experiments.

	✓ Monitor and adjust based on student
	feedback.
	Timeline: Immediate implementation.
Introduce Topic on High and Low Fatigue	✓ Develop instructional content covering
Life Cycle in Design of Machine Element-I	high and low fatigue life cycles.
(Without Solving Problems)	✓ Integrate this topic into the Design of
,	Machine Element-I syllabus.
	✓ Focus on theoretical understanding
	without problem-solving.
	Timeline: To be implemented in the next
	semester.
Introduce Experiment of Vane Pump in	✓ Develop an experimental setup for Vane
Turbomachinery Lab	pump in the Turbomachinery Lab.
	✓ Update lab manuals to include this new
	experiment.
	✓ Train lab instructors and assistants.
	✓ Ensure availability of required
	equipment.
	Timeline: Effective from the next lab session
	cycle.





Ref: RVE/ME/064/23-24 Dated: 1.06.2023

To Dr. Samuel G L Subject Expert (VTU Nominee) Belagavi

Respected Sir,

Sub: Invitation for BOS Meeting on 10 June 2023

The Board of Studies (BOS) meeting of the Department of Mechanical Engineering is scheduled for 10 June 2023 at 10 AM. The agenda for the meeting is as follows:

- 1. To consider and approve the scheme for UG 2021 scheme from $5^{\rm nd}$ and $6^{\rm th}$ semesters
- 2. To consider and approve the scheme for UG 2022 scheme $3^{\rm rd}$ and $4^{\rm th}$ semesters
- 3. To approval of the panel of examiners for theory and practical examination for 2023-24 academic year
- 4. To approval of the panel of examiners for theory and practical examination for 2023-24 academic year for PG
- 5. Any other discussion

I would be grateful if you could kindly make it convenient to attend the BOS meeting and provide your valuable suggestions for curriculum changes. Thank you.

Yours sincerely,

M Krishna

Professor and Head

Department of Mechanical Engineering

RV College of Engineering

Ref: RVE/ME/064/23-24 Dated: 1.06.2023

Agenda:

- 1. To consider and approve the scheme for UG 2021 scheme from $5^{\rm nd}$ and $6^{\rm th}$ semesters
- 2. To consider and approve the scheme for PG 2022 scheme
- 3. To approval of the panel of examiners for theory and practical examination for 2023-24 academic year
- 4. To approval of the panel of examiners for theory and practical examination for 2023-24 academic year for PG
- 5. Any other discussion

Following members attended 21st BoS meeting of Mechanical Engineering Board on 10 June 2023.

S1. No.	Name of the members	Designation	Institution
1.	Dr M Krishna- Chairman	Professor & HOD	Dept of Mechanical
			Engineering, RVCE
2.	Dr H N Narasimha Murthy-	Subject Expert,	Dept of Mechanical
	Member	VTU Nominee	Engineering, RVCE
3.	Dr N Shanmukha N-	Subject Expert	Dept of Mechanical
	Member	Professor	Engineering, RVCE
4.	Dr H D Gopalkrishna-	Professor	Dept of Mechanical
	Member		Engineering, RVCE
5.	Dr Ramesh S Sharma-	Professor	Dept of Mechanical
	Member		Engineering, RVCE
6.	Dr P V Srihari- Member	Professor	Dept of Mechanical
			Engineering, RVCE
7.	Dr. Bharatish. A Member	Assistant	Dept of Mechanical
		Professor	Engineering, RVCE
8.	Dr Anjaneya G-Member	Assistant	Dept of Mechanical
		Professor	Engineering, RVCE
9.	Dr G L Samuel- Subject	Professor	Dept of Mechanical
	Expert (VTU Nominee)		Engineering, IIT-Madras
10.	Dr. P KPanda-Academic	Chief Scientist	Material Science Division,
			CSIR- NAL, Bangalore
11.	Mr J Prabhakar-Industry	General Manager	Machining Solutions Group,
			Kennametal India, Bengaluru
12.	Mr Vineeth Dravid-Industry	Managing	COMSOL Multiphysics Pvt Ltd,
		Director	Bengaluru



Dr. M Krishna, Chairman greeted all BoS members and special invitees. The following points were discussed:

Agenda #	Discussions and Resolutions
22.1	Welcome New BOS members and about the Development

At the outset, the Chairman introduced and Welcomed the members to BOS of meeting and placed the agenda for the deliberations before the members. The following members were made as per the Agenda

Agenda #	Discussions and Resolutions
22.2	To consider and approve the scheme for PG 2022 scheme

The Chairman presented the 2022 scheme-PG programme. The members discussed the various courses and suggested the following new courses to be introduced.

M.Tech (Product Desing and Manufacturing)

Digital Manufacturing 22MPD13TL

Machine learning Lab 22MMD14L

Machine Learning for Mechanical Engineers 22MPD1A1T

Design For Sustainability and Safety 22MPD1A2T

Advanced Manufacturing Practices 22MPD1A3T

Industrial Ergonomics and Biomechanics 22MPD22TL

Machine Learning for Mechanical Engineers 22MPD1A1T

GD&T and Digital Metrology 22MPD2C3T

Computational Mathematics 22MAT11AT

Machine Learning Lab 22MMD14L

ElectricVehicle 22MPD2C5T

Sustainable and Smart Design 22MMD1A3T

M.Tech (Machine Design)

Design of Pressure Vessels 22MMD2C3T

Computational Mathematics 22MAT11AT

Design for Tribology 22MMD2C1T

Agenda #	Discussions and Resolutions		
22.3	To consider and approve the Panel of Examiners for Theory and		
	practical Examination for 2023-24 Academic UG		

The members have approved the proposed list of examiners of Theory and practical examinations of UG course for the Academic year 2022-23. Further the members authorized the Chairman BOS to modify the examiners as per the needs.

Agenda#	Discussions and Resolutions		
22.4	To consider and approve the Panel of Examiners for Theory and		
	practical Examination for 2023-24 Academic PG		

The members approved the proposal list of examiners for Theory and practical examination of PG Courses for the academic year 2023-24. Further, the members authorized the Chairman BOS to modify the examiners as per the list



Member

The meeting was concluded by the chairman with thanks to all members present

Internal Members		External BoS Member		
	Dr Krishna M - Chairman	69/8/2	Prof C V Venkatesh	(College M)
	Dr H N Narasimha Murthy Member	Unavarelyo	Dr C K Panda	gade
	Dr N Shanmukha- Member	& Pri	Mr J Prabhakar	Proper
	Dr H D Gopalakrishna- Member	robat	Dr Vinod Dravid	Absent
	Dr Ramesh S Sharma- Member	Rutamer	Dr Pramod Kumar	Absort
	Dr P R Venkatesh-Member	P.R.O 10	Dr Ramesh M R	Absont
	Dr Anjaneya G-Member	Charme		
	Prof Rakesh Kumar-	Absent		



22nd Board of Studies Meeting

Action Taken on 21st Board of Studies Meeting

The HoD discussed the incorporation of the suggestions provided by the Board of Studies members during the meeting held on 10 June 2023. **Suggestion Action Taken** Engineering Materials syllabus to be Syllabus Reduction: Review the current reduced as per 2 credits syllabus and identify less critical topics that can be removed or merged. ✓ Essential Topics: Focus on essential topics such as material properties, classifications, and basic applications. ✓ Approval Process: Get the revised syllabus approved by the academic committee. Implementation Timeline: Implement in the next academic year. Curriculum Introduce Python EL components for **Update**: Integrate Python Solid Mechanics programming components into the Solid Mechanics course. ✓ Content Development: Develop modules and exercises that utilize Python for solving solid mechanics problems. ✓ Training: Provide training for faculty on incorporating Python into their teaching. ✓ **Resources**: Prepare instructional materials, including tutorials, example problems, and projects. Implementation Timeline: Implement from the next semester. Since Engineering Thermodynamics Syllabus Redistribution: Identify topics in Engineering Thermodynamics that can be syllabus was very vast, certain portion were suggested to implement in shifted to Engineering Physics. ✓ Coordination: Work with the Engineering **Engineering Physics** Physics faculty to integrate these topics seamlessly. ✓ **Syllabus Adjustment**: Update both Engineering Thermodynamics and Engineering Physics syllabi accordingly. Implementation Timeline: Implement in the next academic year. Manufacturing Technology-I and II Course Merger: Combine the content of advice to be merged to Manufacturing Manufacturing Technology-I and II into a single Technology comprehensive course. ✓ Syllabus Development: Create a cohesive syllabus that covers all necessary topics

efficiently.

Approval Process: Seek approval from the academic committee for the merged course.

	Implementation Timeline: Implement in the next semester.	
Reintroduced Theory of Machines	 ✓ Course Reintroduction: Reinstate Theory of Machines as a core course in the curriculum. ✓ Syllabus Development: Develop an updated syllabus that includes both Kinematics and Dynamics of Machines. ✓ Faculty Assignment: Assign qualified faculty to teach the reintroduced course. Implementation Timeline: Effective from the next academic year. 	
MOOC elective must be introduced in IV semester	 ✓ MOOC Integration: Identify suitable MOOCs from reputable platforms (Coursera, edX, etc.) that align with the curriculum. ✓ Elective Options: Provide a list of approved MOOCs that students can choose from. ✓ Credit Allocation: Determine the credit equivalency for completed MOOCs. ✓ Guidelines: Develop guidelines for students to enroll and complete MOOC electives. Implementation Timeline: Available from the next IV semester. 	
Universal Human Values (UHV) course suggest to be introduced in IV semester	 ✓ Course Introduction: Develop and introduce a Universal Human Values (UHV) course. ✓ Syllabus Development: Create a syllabus that covers essential topics in human values, ethics, and professional conduct. ✓ Approval Process: Get the course approved by the academic committee. ✓ Faculty Training: Train faculty members to effectively teach the UHV course. Implementation Timeline: Implement in the next IV semester. 	