Department of Industrial Engineering and Management

Board of Studies Meeting Index Sheet

SL	BoS meeting	Date	Mode	Page
no				Number
1	18th Board of	6 th May 2019	Offline	1
	Studies Meeting			
2	19th Board of	5 th Mar 2020	Offline	7
	Studies Meeting			
3	20th Board of	19 th Dec 2020	Online	13
	Studies Meeting			
4	21st Board of	26 th Mar 2022	Hybrid	21
	Studies Meeting			
5	22 nd Board of	1 st Dec 2022	Online	28
	Studies Meeting			
6	23 rd Board of	8 th Jun 2023	Hybrid	33
	Studies Meeting			
7	24 th Board of	1st Apr 2024	Hybrid	40
	Studies Meeting	_	-	



Institution Affiliated to Visvesvaraya Technological University, Belagavi New Delhi

Phone: 080-68188150 / 8151 e-Mail: hod.im@rvce.edu.in

Department of Industrial Engineering and Management

Department: Industrial Engineering & Management

Programme: B.E. (Industrial Engineering & Management)

The following are the new courses added in the curricula in the respective curricular revisions made in 2018, 2021 and 2022 schemes. Curricular revisions were discussed thoroughly at the respective Board of Studies meetings. The new courses added are reflected in the revised curricula with the course codes.

Sl. No.	Title of the new course added	Course code	Scheme in which the new course is added
1.	Decision Sciences in Deterministic Models	18IM45	2018
2.	Design Thinking lab	18IM47	2018
3.	Mathematical Modelling of Manufacturing Processes	18IM5A1	2018
4.	Decision Support System for Managers	18IM5A2	2018
5.	International Business	18IM5A3	2018
6.	Rapid Manufacturing	18ME5A4	2018
7.	Internship	18IM56	2018
8.	Minor Project	18IM64	2018
9.	Internet of Things	18CS6C1	2018
10.	Multi Criteria Decision Modelling	18IM6C3	2018
11.	Machine Learning	18CS6D1	2018
12.	Digital Manufacturing	18IM6D5	2018
13.	Foundations of Robotics and Automation	18IM73	2018
14.	Smart Manufacturing for Industry 4.0	18IM7F4	2018
15.	Integral Transforms, Optimization and Numerical Techniques	21MA31C	2021
16.	Programming, Data Structures and Algorithms Using Python	21IM4A1	2021
17.	Foundation Course in Managerial Economics	21IM4A2	2021
18.	Mechatronics	21IM4A3	2021
19.	Mechanical Measurement systems	21IM4A4	2021
20.	Mechanics of Machining	21IM4A5	2021
21.	User-centric Computing for Human-Computer Interaction	21IM4A6	2021
22.	Data Base Management System	21IM4A7	2021
23.	Managing change in organizations	21IM4A8	2021
24.	Summer Internship - I	21IMI310	2021

BoS-CHAIRMAN (Industrial Engineering

& Management)

Board of Studies Dept. of Industrial Engineering & Mgm R.V. College of Engineering

Bengaluru - 560 05: Mysore Road, RV Vidyaniketan Post, Bengaluru - 560059, 8111 Karnataka, India

DEAN ACADEMICS DEAN ACADEMICS R.V. College of Engineering Bengaluru - 560 059

PRINCIPAL RV COLLEGE OF ENGINEERING **BENGALURU - 560 059**

principal@rvce.edu.in rvce.edu.in

Go, change the world





R. V. COLLEGE OF ENGINEERING

(Autonomous Institution affiliated to Visveswaraya Technological University, Belagavi).

Department of Industrial Engineering & Management

R. V. Vidyaniketan Post, Mysore Road, Bangalore-560 059

Date: 02 May 2019

MEETING CIRCULAR

18th Board Of Studies - I.E.M Meeting

Dear Sir/Madam,

A meeting of the Board of Studies of BE-IEM (Industrial Engineering and Management) Program is convened on Monday, 6th May 2019 at 03.00 pm in the HoD's chamber of the Department of Industrial Engineering & Management, R. V. College of Engineering, Bengaluru - 560 059 to transact the following agenda:

- 93. Confirmation of the minutes of the 16th Board of Studies meeting held on 16th Feb 2018.
- 94. Approval of 3rd to 8th semester structure of the 2018 scheme of courses.
- 95. Approval of 3rd and 4th semester syllabus of the 2018 scheme.
- 96. Any other subject, with the permission of the chair.

We request you to kindly attend the meeting and share your valuable inputs for the design of the curriculum for the BE IEM program. Kindly confirm your participation.

Thanking You

Dr. C K Nagendra Guptha

Chairman BoS - IEM



R.V. College of Engineering, Bengaluru – 59

(An Autonomous Institution affiliated to VTU, Belagavi)

Department of Industrial Engineering and Management

Date: 10 May 2019

Minutes of Meeting of the 18th Board of Studies Held on

6th May 2019 at 3:00 pm in the Head of Department's chamber

The following members were present:

Faculty members from R V College of Engineering:

- 1. Dr C K Nagendra Guptha, Associate Professor, & HoD, Dept. of IEM, R V College of Engineering, Bengaluru, Chairman
- 2. Dr K N Subramanya, Principal & Professor, Dept. of IEM, R V College of Engineering, Bengaluru, Member
- 3. Dr N S Narahari, Professor & HoD, Dept. Of IEM, R V College of Engineering, Bengaluru, Member
- 4. Dr. Rajeswara Rao K V S, Associate Professor, Dept. Of IEM, R V College of Engineering, Bengaluru, Member
- 5. Mr V Ravishankar, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru, Convener
- 6. Ms Nandini B, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru, Member

Subject experts from other colleges:

- 7. Dr Ashok K Pundir, Professor & Dean (Industrial Engineering & Manufacturing Systems), National Institute of Industrial Engineering, Mumbai, Member
- 8. Dr R Sreedharan, Professor, Mechanical Engineering, NIT Calicut, Member

Special invitees:

- 9. Mr Sanjay Handu, Member-Aerospace & Defense CIG India Electronics & Semiconductor Association
- 10. Mr Narasimha Murthy M A, Head, Quality Management & Delivery Excellence, Infineon Technologies India Pvt Ltd., Bengaluru

Other faculty members from R V College of Engineering:

- 11. Mr Bhaskar MG, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 12. Ms Shobha NS, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 13. Dr M N Vijayakumar, Associate Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 14. Dr Ramaa A, Associate Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 15. Dr Vikram NB, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru

- 16. Ms Varna, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 17. Ms Archana, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru

Leave of Absence:

The following members could not attend the meeting due to prior commitments / non availability at the time & location / other pressing engagements:

- 1. Dr Parasuram Balasubramanian, Founder & CEO, Theme Work Analytics (P) Ltd, Bengaluru, Member
- 2. Mr B R Indushekar, Vice President & General Manager, Volvo Group India Pvt Ltd, Bengaluru, Member
- 3. Ms. Meeta Karanth, Chief Strategy Officer Renalyx Health Systems Pvt Ltd, Bengaluru, Member
- 4. Mr George John, Senior Director, Customer Quality, Cisco Systems (India) Pvt Ltd, Bengaluru, Member
- 5. Dr S. Devarajan, Senior Vice President, Production Engineering, TVS Motor Company Ltd, Hosur, Member

The Chairman, BoS welcomed all the members, and agenda No.93 to 96, were presented to the BoS members for discussion. The discussion inputs were provided by the members from the department and projected as a presentation.

Agenda No. 93. Confirmation of the minutes of the 17th Board of Studies meeting held on 16th Feb 2018.

The BoS chairman appraised the Vision and Mission of the Department of IEM to begin the meeting with.

The summary of the 17th Board of Studies meeting was presented to the members for their information of the new members of the Board.

In addition, brief **summary of feedback** received from all the **stakeholders** including Alumni, Industry, Students through exit survey and faculty members were shared with the BoS members to get started with the discussion.

- 1. The students should be exposed to aspects of environment and sustainability through experiential learning.
- 2. Modernization in teaching equipment's and methods are the need of the day.
- 3. More emphasis on hands-on experience should be encouraged.
- 4. Internships should be part of the curriculum and not something that students do on their own.
- 5. Emphasis on English language should be given more priority to enhance placements and other opportunity.

Agenda No. 94: Approval of 3rd to 8th semester structure of the 2018 scheme of courses

Points for discussion:

- 1. Explore the possibility of teaching programming languages in higher semesters also. Inclusion in syllabus would make it formal and satisfy the students' needs.
- 2. Split all the electives into 2 groups, with First group having important IE courses, and the Second having other electives. Over the semesters V VII, during which the students choose 5 electives, have them pick 3 out of the First group, and 2 from the Second group. This should be ensured for each student.
- 3. Move the course Simulation Modeling and Analysis to a later semester. Courses like Operations Management, Supply Chain Management have to precede Simulation, to enable better analysis of IE problems.
- 4. Consider adding 'Lean and Agile Systems' as an elective.
- 5. Linking / mapping of the courses across all semesters include pre-requisites, and correct the sequencing of courses across semesters.
- 6. Link the courses Design thinking (18IM47) Mini project Major project, to provide a better continuity in the learning experience for the student.
- 7. Facilities Planning and Design should be a core course for IEM students, and not an elective. FPD and Ergonomics can be combined 3+2 units or 2+3 units, if slots not available, but do not leave them out.
- 8. Design course is important for IE students. Include a design course as a core course.
- 9. FOME can be organized as: 2 units for Management, 2 units for Economics, and 1 unit for Finance & Marketing / HR.
- 10. Allow students to opt for global electives from own department also, in order to increase the no. of IEM courses he / she studies.
- 11. Consider the possibility of introducing one common course 'Industrial Engineering & Productivity Management' for ALL the students of the college.
- 12. Include the course Operations Management as core, instead of including its contents spread out in other courses, as it is very important for IE graduates.
- 13. Retain old classic names for traditional IE courses rather than fancy nomenclatures.

Agenda No. 95: Approval of 3rd and 4th semester syllabus of the 2018 scheme.

Points for discussion:

- 1. Remove the overlapping portions in courses FPD, WSD, Ergonomics.
- 2. A new course on "Decision Sciences- Deterministic Models" (18IM45) with emphasis on Deterministic models was introduced. The detailed syllabus was discussed and was found appropriate.
- 3. Design Thinking (18IM47) as a common course was introduced across the institution. The novelty of the course being in the ways of executing it with different themes for various departments and enabling inter-disciplinary approach. The approach was appreciated in the BoS meeting by the members.

- Strength of Materials and Machine design were combined to become one course due to reduction in the overall credit's distribution.
- For the Self-study component, either inform the students about the full requirement in the syllabus itself, or provide the same in handouts / lesson plan, for setting expectation in advance.

The following were the new courses added to IEM program for 2nd year of 2018 scheme.

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Sl.no	Course title	Course code
1	Decision Sciences- Deterministic Models"	18IM45
2	Design Thinking	18IM47

Agenda No. 96: Any other subject, with the permission of the chair.

- Equivalence of courses from 2016 scheme to III and IV semester courses was taken up and was ratified by the members.
- Members suggested that the Department should create a gallery of projects to serve as information and a strong motivation for all the students.
- On importance of English by an external member, it was replied that the language requirements are exhaustively covered in the syllabus of first year through online courses by Pearson.
- 4. Ratification of the PG courses offered from the Department of IEM to all the post graduate students (Research Methodology, Modeling Using Linear Programming, and Project Management) was obtained through emails from the members.

The BoS Chairman and the college Principal thanked the external members profusely for their time and numerous observations and suggestions towards refinement of the draft syllabus and scheme.

Dr C K Nagendra Guptha,

Associate Professor & HoD,

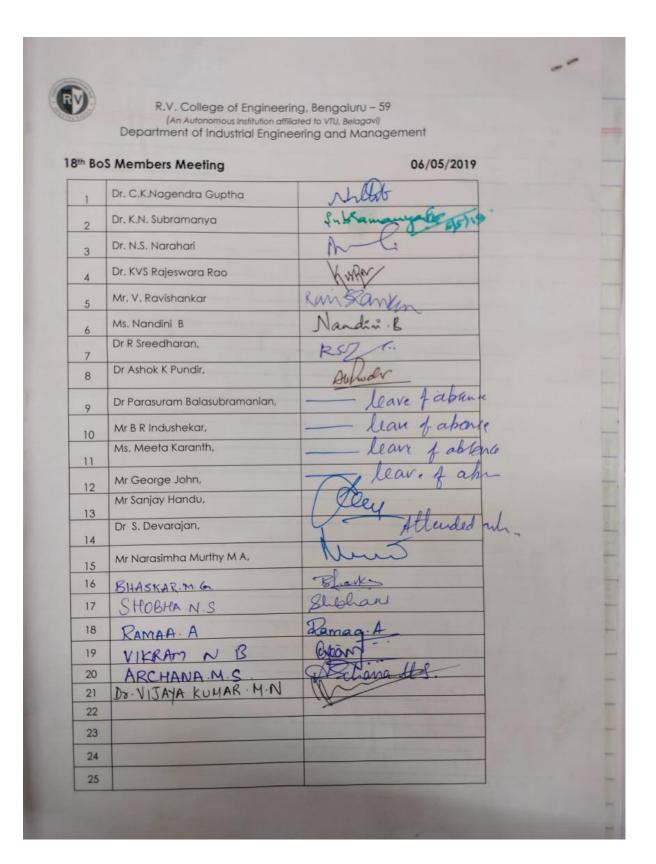
Dept. of IEM, R V College of Engineering, Bengaluru,

Chairman - Board of Studies Chairman

Board of Studies

Dept. of Industrial Engineering & Mgmt., R.V. College of Engineering,

Bengaluru - 560 059.





RV College of Engineering

Autonomous Institution Affiliated to Visvesveraya Technological University, Belagavi Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Ref:

Date: 26 February 2020

MEETING CIRCULAR

19th Board of Studies - I.E.M Meeting

Dear Sir / Madam,

A meeting of the Board of Studies of BE-IEM (Industrial Engineering and Management) Program is convened on Thursday, 5th March 2020 at 02.00 pm in the HoD's chamber of the Department of Industrial Engineering & Management, RV College of Engineering, Bengaluru - 560 059 to transact the following agenda:

- 97. Confirmation of the minutes of the 18th Board of Studies meeting held on 6th May 2019.
- 98. Discussion and approval of 5th to 8th Semester detailed syllabus of 2018 scheme for the BE-IEM Program.
- 99. Any other subject, with the permission of the chair.

We request you to kindly attend the meeting and share your valuable inputs for the design of the curriculum for the BE IEM program. Kindly confirm your participation.

Thanking You

Allultt 26/2/2020 Dr. C K Nagendra Guptha

Chairman BoS - IEM

HEAD OF THE DEPARTMENT
Dept. of Industrial Engineering & Management
R.V. College of Engineering
Bangalore - 560 059



Autonomous Institution Affiliated to Visvesveraya Technological University, Belagavi Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Industrial Engineering and Management

Date: 06 Mar 2020

Minutes of Meeting of the 19th Board of Studies
Held on

5th Mar 2020 at 2:00 pm in the Head of Department's chamber

The following members were present:

Faculty members from R V College of Engineering:

- 1. Dr C K Nagendra Guptha, Associate Professor, & HoD, Dept. of IEM, R V College of Engineering, Bengaluru, Chairman
- 2. Dr K N Subramanya, Principal & Professor, Dept. of IEM, R V College of Engineering, Bengaluru, Member
- 3. Dr. Rajeswara Rao K V S, Associate Professor, Dept. Of IEM, R V College of Engineering, Bengaluru, Member
- 4. Mr V Ravishankar, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru, Convener
- 5. Ms Nandini B, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru, Member

Representatives from Industry / Corporate:

1. Mr Narasimha Murthy M A, Head, Quality Management & Delivery Excellence, Infineon Technologies India Pvt Ltd., Bengaluru

Meritorious alumnus:

1. Mr Sumant Nemmani, Business Analyst, CISCO Systems India Pvt Ltd, Bengaluru

Special invitees:

1. Commander M S Srikant, Indian Institution of Industrial Engineering, Bengaluru

Other faculty members from R V College of Engineering:

- 1. Mr Bhaskar MG, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 2. Ms Shobha NS, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 3. Dr Sunil R Y, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 4. Dr Ramaa A, Associate Professor, Dept. Of IEM, R V College of Engineering, Bengaluru

- 5. Mr Vivekanand S Gogi, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 6. Ms Archana, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru

Leave of Absence:

The following members could not attend the meeting due to prior commitments / non availability at the time & location / other pressing engagements:

- 1. Ms. Meeta Karanth, Chief Strategy Officer Renalyx Health Systems Pvt Ltd, Bengaluru, Member
- 2. Dr S. Devarajan, Senior Vice President, Production Engineering, TVS Motor Company Ltd, Hosur, Member
- 3. Dr N S Narahari, Professor, Dept. Of IEM, R V College of Engineering, Bengaluru, Member
- 4. Dr Ashok K Pundir, Professor & Dean (Industrial Engineering & Manufacturing Systems), National Institute of Industrial Engineering, Mumbai, Member
- 5. Dr R Sreedharan, Professor, Mechanical Engineering, NIT Calicut, Member

The Chairman, BoS welcomed all the members, and agenda No.97 to 99, were presented to the BoS members for discussion. The discussion inputs were provided by the members from the department and projected as a presentation.

Agenda No. 97. Confirmation of the minutes of the 18th Board of Studies meeting held on 6th May 2019.

The BoS chairman appraised the Vision and Mission of the Department of IEM to begin the meeting with.

The summary of the 18th Board of Studies meeting was presented to the members for their information.

In addition, brief **summary of feedback** received from all the **stakeholders** including Alumni, Industry, Students through exit survey and faculty members were shared with the BoS members to get started with the discussion.

The highlights of the feedback received are summarized in bullet points as follows.

- The students should be exposed to aspects of environment and sustainability through experiential learning.
- Modernization in teaching equipment's and methods are the need of the day.
- More emphasis on hands-on experience should be encouraged.
- Internships should be part of the curriculum and not something that students do on their own.
- Emphasis on English language should be given more priority to enhance placements and other opportunity.

Agenda No. 98a: Discussions on 5th to 8th Semester structure of 2018 scheme for the BE-IEM Program.

Points for discussion:

- 1. Position IE with a data science foundation, to take advantage of data availability and analysis; Analytics, thinking, data sciences courses should be made as core.
- 2. Members wanted to know how PEO's are measured. They opined that it is a very difficult task, getting the students' opinions after 2 or 3 years of their graduation.
- 3. Consider moving the course MCDM to VII semester and LMS to VI semester to improve placement prospects for the students.
- 4. Members wanted to know where the balance sheets, P&L statements are covered, and were told about their coverage in a IV semester course and also in a higher semester elective.

Agenda No. 98b. Discussion and approval of 5th to 6th Semester detailed syllabus of 2018 scheme for the BE-IEM Program.

Points for discussion:

- 1. Increase hands-on content in key IE courses; encourage use of R / Python for solving problems
- 2. Add component / course on Graphical interpretation of data, or reframe lab exercises to enable this.
- 3. Look at 'Metrics and Measurement' or 'Performance Measurement Systems' as a component or a capsule course, as this is a very important requirement in the corporate world.
- Consider setting up of an integrated assembly line in a lab like in other institutes
 for integrating Industry 4.0, SPC, data collection & analysis. Take up case studies and involve taking into cloud, for providing a better exposure to students.

Sl.no	Course Title	Course code
1	Mathematical Modelling of Manufacturing Processes	18IM5A1
2	Decision Support System for Managers	18IM5A2
3	International Business	18IM5A3
4	Rapid Manufacturing	18ME5A4
<u>5</u>	Internship	18IM56
6	Minor Project	18IM64
7	Internet of Things	18CS6C1
8	Multi Criteria Decision Modelling	18IM6C3
9	Machine Learning	18CS6D1
<mark>10</mark>	Digital Manufacturing	18IM6D5

List of New courses added for V and VI semesters

- In the course OM, check if there is a flow of sales forecast capacity aggregate planning - MRP.
- consider role play exercises in OM lab customer, demand, procurement, production planning, delivery and customer service functions.
- IPR&E For entrepreneurship content, give an overall view of an enterprise; for next level can use KSFC / MSME formats for data capturing.

Agenda No. 99a: Ratification of Board of Examinations Members list

1. The Board of Examinations list of members was presented, and the same was ratified.

Agenda No. 99b. Any other subject, with the permission of the chair.

- Results analysis in the presentation disaggregate data for better scrutiny lateral, course or domain wise, year wise, etc.
- 2. in the presentation on department activities cluster the events attended into areas; add hours, not no. of programs.
- 3. Research activities, revenue generation activities to be increased in the department.
- 4. Take up organizing an IE HoDs meet for better IE visibility, and then take it up to HR managers and corporate recruiters.

The BoS Chairman and the college Principal thanked the external members profusely for their time and numerous observations and suggestions towards refinement of the draft syllabus and scheme.

Dr C K Nagendra Guptha,

Associate Professor, & HoD,

Dept. of IEM, R V College of Engineering, Bengaluru,

Chairman - Board of Studies

Chairman
Board of Studies

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Bengaluru - 560 00

191	h BoS Members Meeting	05/03/202
1	Dr. C K Nagendra Guptha	Nhl Whot 5/3/2020
2	Dr. K N Subramanya	fullamanya for 5/3
3	Dr. N S Narahari	Leave of Absence
4	Dr. KVS Rajeswara Rao	MARIN
5	Mr. V Ravishankar	Rain Santan
6	Ms. Nandini B	nardeni B OS 05 2020
7	Dr. R Sreedharan	Adlended whine
8	Dr. Ashok K Pundir	Attended onlin
9	Dr. Parasuram Balasubramanian	Attended silin
10	Mr. B R Indushekar	leave of Alolen
11	Ms. Meeta Karanth	Attended online
12	Dr. S Devarajan	Attended ording
13	Mr. Narasimha Murthy M. A.	" Jenus
14	Commander MS Socikant.	05/20
15	Sumant N.	VI
16	Viveleanand & Gogi	Mogi
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Autonomous Institution Affiliated to Visvesveraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Ref:

Date: 11-12-2020

MEETING CIRCULAR

20th Board of Studies- I.E.M Meeting (Webex Platform)

Dear Sir/Madam,

A meeting of the Board of Studies of BE-IEM (Industrial Engineering and Management) program is convened on Saturday, 19th December 2020 at 10:00 am in the HoD's chamber of the Department of Industrial Engineering and Management, R V College of Engineering, Bengaluru- 560059 to transact the following agenda.

- 100. Confirmation of the minutes of the 19th Board of Studies meeting held on 5th March 2020.
- 101. Report on department activities.
- 101a. Ratification of equivalence courses.
- 101b. Ratification of Board of Examiners list.
- 102. Discussion and approval of 7th and 8th semester detailed syllabus of 2018 scheme for the BE-IEM program.
- 103. Discussion on 2021 scheme with focus on National Education Policy (NEP) framework.
- 104. Any other subject, with the permission of the chair.

We request you to kindly attend the meeting and share your valuable inputs for the design of the curriculum for the BE IEM program. Kindly confirm your participation. The link to join the meeting will be shared subsequently.

Thanking you

Dr. C.K Nagendra Guptha

Chairman BoS-IEM



Autonomous Institution Affiliated to Visvesveraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Ph: 080-67178032, 8066 e-mail: hod.im@rvce.edu.in

Department of Industrial Engineering and Management

Ref: Date: 19 Dec 2020

Minutes of Online Meeting of the 20th Board of Studies Held on 19th Dec 2020 at 10:00 AM Via Google Meet

The following members were present:

Faculty members from IEM Department R V College of Engineering:

- 1. Dr C K Nagendra Guptha, Associate Professor, & HoD, Dept. of IEM, R V College of Engineering, Bengaluru, Chairman
- 2. Dr K N Subramanya, Principal & Professor, Dept. of IEM, R V College of Engineering, Bengaluru, Member
- 3. Dr.N S Narahari, Professor, Dept. of IEM, R V College of Engineering, Bengaluru, Member
- 4. Dr. Rajeswara Rao K V S, Associate Professor, Dept. Of IEM, R V College of Engineering, Bengaluru, Member
- 5. Ms Nandini B, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru, Member
- 6. Mr Bhaskar MG, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru, Convener

Experts from Industry / Corporate / Academia:

- 1. Mr. Narasimha Murthy M A, Head, Quality Management & Delivery Excellence, Infineon Technologies India Pvt Ltd., Bengaluru, Member
- 2. Dr. S. Devarajan, Senior Vice President, Production Engineering, TVS Motor Company Ltd, Hosur, Member
- 3. Dr. Ashok K Pundir, Professor & Dean (Industrial Engineering & Manufacturing Systems), National Institute of Industrial Engineering, Mumbai, Member
- 4. Dr. R Sreedharan, Professor, Mechanical Engineering, NIT Calicut, Member

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- 5. Dr. P Balasubramanian, Professor, School of Industrial Engineering, Purdue University, Member
- 6. Ms. Meeta Karanth, Chief Strategy Officer Renalyx Health Systems Pvt Ltd, Bengaluru, Alumni of IEM, Member

Other faculty members from R V College of Engineering:

- 1. Dr Ramaa A, Associate Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 2. Dr Vijaykumar M N, Associate Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 3. Dr Vikram N B, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 4. Dr Shobha NS, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 5. Mr Vivekanand S Gogi, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru



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Department of Industrial Engineering and Management

Ref: Date: 19 Dec 2020

Minutes of the Meeting

Dr Narahari N S welcomed all the members, and introduced all the board members to the forum.

Dr. C K Nagendra Guptha, presented agenda No.100 to 104 to the BoS members for discussion. The discussion inputs were provided by the members from the department and projected as a presentation.

Agenda No.100. Confirmation of the minutes of the 19th Board of Studies meeting held on 5th March 2020.

The summary of the 19th Board of studies meeting was presented to the members for their information. The BoS chairman appraised the Vision and Mission of the Department of IEM to begin the meeting with.

The Chairman, BoS presented the feedback received from various stakeholders such as students, alumni and employers to the BoS Members. The highlights of the feedback received are summarized in bullet points as follows.

- Design courses around projects that incorporate theoretical concepts and practical applications.
- Integrate subjects from different disciplines to promote holistic learning and application.
- Incorporation of tools and software relevant to the engineering field into the curriculum.

Online pedagogical tools should be used to create personalized learnings from student point of view.

Agenda No.101: Report on department activities

The summary of department activities during the period was showcased and Board of members appreciated the effort.

Agenda No.101a: Ratification of equivalence courses.

The circular on equivalence courses was presented, and the same was ratified.

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Agenda No.101b: Ratification of Board of Examiners list

The Board of Examinations list of members was presented, and the same was ratified.

Agenda No.102: Discussion and approval of 7th and 8th semester detailed syllabus of 2018 scheme for the BE-IEM program.

Points for discussion:



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Department of Industrial Engineering and Management

Ref: Date: 19 Dec 2020

- 1. On logic behind arranging groups in electives by Dr R Sreedharan, it was replied that electives are grouped as per streams (For eg: Manufacturing, Management etc) and students are provided with inputs on how to make the best selection at multiple levels of engagement.
- 2. Ms. Meeta Karanth shared inputs on several courses such as project planning and control, Systems engineering and lean manufacturing systems have manufacturing as base which should be extended to other sectors of economy such as banking and healthcare etc. It was replied that several courses in the current 2016 scheme have aspects on service sector including an elective course for VI semester on "Service Operations Management- 16IM6C2" and also several final year major projects have been taken in this area. Companies like Kuliza pvt ltd and Searce pvt ltd, which work on customer journey mapping, Customer touch points have offered internships and Full time employment to IEM students.
- 3. Mr Narasimha Murthy M A, provided a suggestion to the previous point over naming courses such as "Lean Manufacturing Systems" as "Lean Systems".
- 4. Mr Narasimha Murthy M A, stressed the department to bring together the colleges where IEM is taught to discuss and debate regarding the roadmap for future Industrial Engineers. Prof Pundir suggested RVCE should consider doing this to get a better visibility and footprint from Northern part of the country.
- 5. Dr S. Devarajan opined that department should consider taking Healthcare related projects.
- 6. Prof Pundir emphasized on keeping pace with development and more focus is required on "Data Science" and "Patenting". Also the department to have more product orientation rather than Process orientation.
- 7. Ms. Meeta Karanth emphasized on bringing in more concepts covering Human angles. In response to this it was replied that the 2018 scheme which is also concurrently running has courses on "Design Thinking" and several exercises on service blueprint have been added in to lab curriculum of "Product Design and Development" course.
- 8. Dr. R Sreedharan asked whether concepts of Manufacturability, Availability etc are part of any units in Product design and development. He also suggested to add sustainability aspects and suggested a relevant book on "Service System Engineering".

Sl.no	Course Title	Course code
1	Foundations of Robotics and Automation	18IM73
2	Smart Manufacturing for Industry 4.0	18IM7F4

The board approved the 7^{th} and 8^{th} semester detailed syllabus of 2018 scheme for the BE-IEM program.

Agenda No.103: Discussion on 2021 scheme with focus on National Education Policy (NEP) framework.



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Department of Industrial Engineering and Management

Date: 19 Dec 2020

Dr K N Subramanya, Principal & Professor gave a brief on "National Education policy" to the BoS members and the efforts, trainings, awareness programs and involvement by RVCE.

Inputs from BoS Members:

Dr S. Devarajan emphasized on focusing on novel areas such as Electric vehicles, Sustainability and India Centric curriculum development.

Mr Narasimha Murthy M A emphasized on providing special focus on 4E's. Education, Experience, Exposure and Environment in visualizing curriculum development.

Prof. P Balasubramanian provided impetus for RVCE to be flag the bearers in implementing/ mentoring other institutions. He also opined mentoring should not be limited to engineering institutions but also to be extended to polytechnic institutions.

Dr Ashok K Pundir provided inputs on challenges and new opportunities in NEP. With various entry and exit points in NEP, Prof Pundir, asked the institution to look at migration of students from other institutions willing to study at RVCE.

Dr R Sreedharan, Professor, stressed on the aspect of skill-based labs and also introducing labs for elective courses.

Agenda No.103: Any other subject, with the permission of the chair.

The BoS convener thanked the external members profusely for their time and numerous observations and suggestions towards refinement of the draft syllabus and scheme.

lot 19/12/20

Dr. C K Nagendra Guptha,

Chairman - Board of Studies, IEM

Associate Professor, & Head,

Department of Industrial Engineering and Management,

R V College of Engineering,

Bengalure of Studies Dept. of Industrial Engineering 8 >

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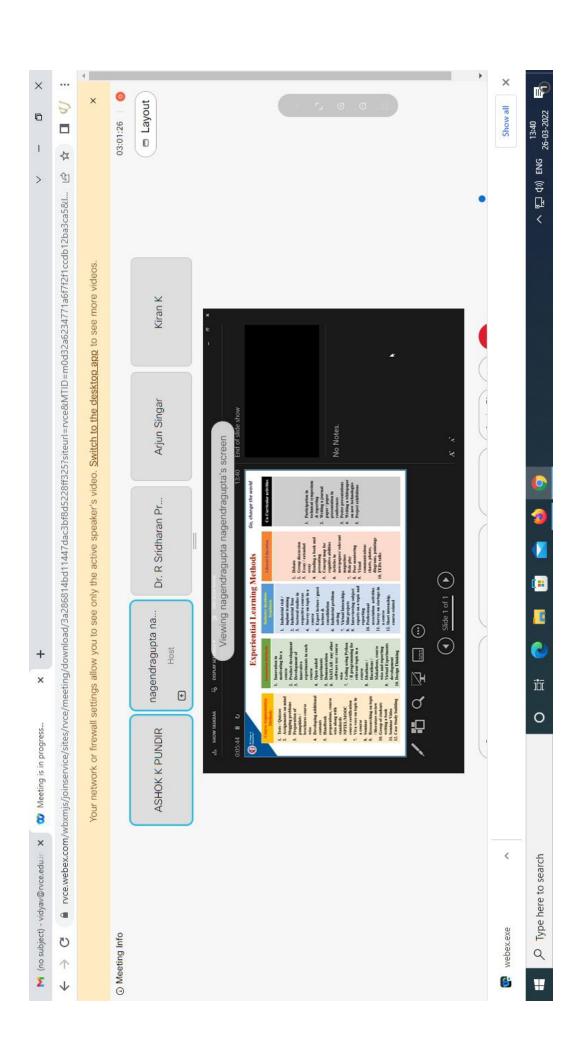
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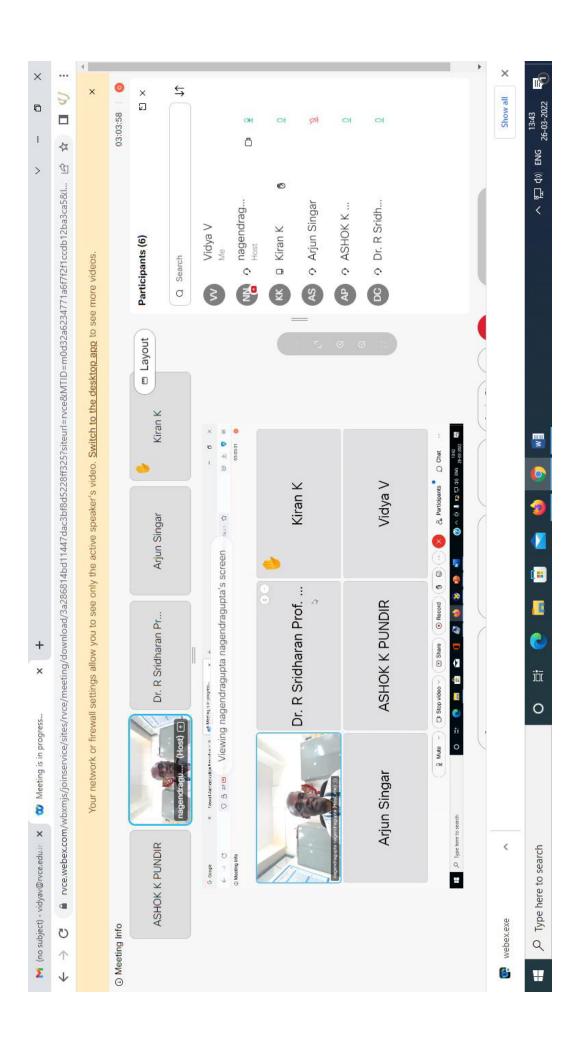
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RV COLLEGE OF ENGINEERING BANGALORE - 560 059 (Autonomous Institution affiliated to VTU, Belagavi) DEPARTMENT OF INDUSTRIAL ENGG., & MANAGEMENT 20th BoS Meeting 19-12-2020 Name of the staff Sign SINO Dr. C.K. Nagendra Guptha Dr. K.N Subramanya 2 Dr. N.S.Narahari 3. Dr. KVS Rajeswara Rao 4 Mrs. Nandini. B Mr. Bhaskar, M.G 6 Dr. S Devarajan Dr. R Sreedharan 8 Mr. Narasimha Murthy M A 9 P.Balasubramaniam 10 Dr. Ashok Pundir 11 Ms Meeta Karanth 12 Dr. M.N. Vijaya Kumar 13 Dr. Ramaa. A 14 Mrs. Shobha.N.S 15 Mr. Vivekanand S Gogi 16 Mr. Sunil R Yalamalle 17 Mr. Vikram N Bahadurdesai 18 19 Ms. Chitra B T Mrs. Shruthi, M.N.







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Ref:

Date: 20-03-2022

MEETING CIRCULAR

21st Board of Studies- I.E.M Meeting (Webex Platform)

Dear Sir/Madam,

A meeting of the Board of Studies of BE-IEM (Industrial Engineering and Management) program is convened on Saturday, **26th Mar 2022** at 11:00 am in the HoD's chamber **(Hybrid mode)** of the Department of Industrial Engineering and Management, R V College of Engineering, Bengaluru-560059 to transact the following agenda.

- 105. Confirmation of the minutes of the 20th Board of Studies meeting held on 19th Dec-2020.
- 106. Report on department activities.
- 107. Ratification of Board of Examiners list.
- 108. Discussion on 2021 scheme structure BE-IEM program & approval.
- 109. Discussion and approval of 3rd and 4th semester detailed syllabus of 2021 scheme for the BE-IEM program.
- 110. Any other subject, with the permission of the chair.

We request you to kindly attend the meeting and share your valuable inputs for the design of the curriculum for the BE IEM program. Kindly confirm your participation. The link to join the meeting will be shared subsequently.

Thanking you

Dr. C.K Nagendra Guptha

Chairman BoS-IEM



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Department of Industrial Engineering and Management

Ref: Date: 29 Mar 2022

Minutes of Meeting of the 21st Board of Studies Held on

26th Mar 2022 at 11:00 AM in the Head of Department's Chamber (Hybrid mode)

The following members were present:

Faculty members from R V College of Engineering:

- 1. Dr C K Nagendra Guptha, Associate Professor, & HoD, Dept. of IEM, R V College of Engineering, Bengaluru, Chairman
- 2. Dr K N Subramanya, Principal & Professor, Dept. of IEM, R V College of Engineering, Bengaluru, Member
- 3. Dr N S Narahari, Professor, Dept. Of IEM, R V College of Engineering, Bengaluru, Member
- 4. Dr. Rajeswara Rao K V S, Associate Professor, Dept. Of IEM, R V College of Engineering, Bengaluru, Member
- 5. Mr Bhaskar.M.G, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru, Convener

Representatives from Industry / Corporate:

- 1. Dr Narasimha Murthy M A, Head, Quality Management & Delivery Excellence, Infineon Technologies India Pvt Ltd., Bengaluru
- 2. Dr S. Devarajan, Senior Vice President, Production Engineering, TVS Motor Company Ltd, Hosur, Member

Faculty from other institutions:

- 1. Dr Ashok K Pundir, Professor & Dean (Industrial Engineering & Manufacturing Systems), National Institute of Industrial Engineering, Mumbai, Member (Joined online through Webex)
- 2. Dr R Sreedharan, Professor, Mechanical Engineering, NIT Calicut, Member (Joined online through Webex)
- 3. Dr.Kiran.K.Bhat, Assistant Professor, GIM, Information Technology & Operations Management, Goa. (Joined online through Webex)

Other faculty members from R V College of Engineering:

- 1. Dr Ramaa A, Associate Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 2. Dr Vijaya Kumar.M.N, Associate Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 3. Dr. Shobha NS, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 4. Dr.Vikram.N.B, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru. (Joined online through Webex)



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Department of Industrial Engineering and Management

Ref: Date: 29 Mar 2022

- 5. Mrs Shruthi.M.N, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru,
- 6. Mrs Nandini B, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru,
- 7. Mr Arjun.V.Singar, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru, (Joined online through Webex)

Leave of Absence:

The following members could not attend the meeting due to prior commitments / non availability at the time & location / other pressing engagements:

- 1. Mr.B.Indushekar, Vice president and GM-Operations, Volvo construction Equipment, India.
- 2. Ms. Meeta Karanth, Chief Strategy Officer Renalyx Health Systems Pvt Ltd, Bengaluru, Member

The Chairman, BoS welcomed all the members, and agenda No.105 to 110, were presented to the BoS members for discussion. The discussion inputs were provided by the members from the department and projected as a presentation. The BoS chairman appraised the Vision and Mission of the Department of IEM to begin the meeting with.

The Chairman, BoS presented the feedback received from various stakeholders such as students, alumni and employers to the BoS Members. The highlights of the feedback received are summarized in bullet points as follows.

- Emphasis on internship is good, but students are finding it difficult to get good quality industry internships.
- Exploring innovative teaching methods to keep students engaged and motivated.
- Sessions on industry updates focused on tech usage- talks on the latest technology usage updates, and followed by Labs to teach the same.
- For higher semester courses, Course material should be provided.

Agenda No.105. Confirmation of the minutes of the 20th Board of Studies meeting held on 19th Dec 2021.

The summary of the 20th Board of Studies meeting was presented to the members for their information.

Agenda No.106: Report on department activities.

The Chairman, BoS shared information regarding activities conducted by the department and faculty contribution to the members.

Agenda No.107: Ratification of Board of Examiners list.

1. The Board of Examinations list of members was presented, and the same was ratified.

Agenda No.108: Discussion on 2021 scheme structure BE-IEM program & approval.



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Department of Industrial Engineering and Management

Ref: Date: 29 Mar 2022

Points for discussion:

- 1. Dr.Pundir suggested that IE curriculum should include topics related to Blockchain, IoT, Analytics and other digital layers.
- 2. Dr.Sreedharan suggested IE curriculum should enable students to become proficient in coding.
- 3. Dr.M.A.N Murthy opined that the next 4-5 years, India will see a lot of transformation in digital front and domains such as Mechanical, IEM will have to plan strategies to sustain during this period past which India will see manufacturing set up in large scale.
- 4. Dr.M.A.N Murthy also insisted that applications like flow diagrams should be made mandatory for all the students.
- 5. Dr.S.Devarajan emphasized on making basics very strong in engineering curriculum.
- 6. Dr.M.A.N Murthy raised a point on adding aspects of cyber security in curriculum for which Dr.K.N.Subramanya replied that cyber security is offered as an "ability enhancement course".
- 7. Dr.Sreedharan suggested avoiding redundancy in courses offered in syllabus and NPTEL.
- 8. Dr.M.A.N Murthy shared his concerns to see that quality concepts are not finding place in the syllabus and further suggested to rename the course "Metrology and Quality control" as "Metrology and Quality assurance" with inclusion of process capability topics such as Cp, Cpk, Gauge R&R.
- 9. Dr K.N.Subramanya, broadly suggested that due to shrinkage in the number of credits, it has become a challenge to offer syllabus in depth. Dr K.N.Subramanya hinted at visualizing broad topics to be covered for a particular course and accordingly distributing them as part of Theory, Experiential learning and lab.
- 10. Dr.S.Devarajan suggested renaming the course "Supply chain management" as "Global Supply chain management".
- 11. Dr.Sreedharan suggested renaming the course "Managerial Finance" as ""Accounting and Finance".
- 12. Dr.Pundir felt the need to bring "Product design and development" course to VI sem if possible.
- 13. Dr K.N.Subramanya highlighted that students sometimes tend to take the path of least resistance and avoid taking quantitative courses in electives. Hence it was decided to club the elective courses in such a way that students have to opt for quantitative courses also.
- 14. Dr.S.Devarajan & Dr.M.A.N Murthy concepts of finance management and project management have to be mandated for IEM students.
- 15. Dr K.N.Subramanya shared 50 methods of carrying out experiential learning.
- 16. Dr.Kiran K enquired whether the faculties have been trained in evaluating experiential learning in those many ways for which Dr K.N.Subramanya replied the emphasis should be on looking at the innovation component in the student work and related rubric for evaluation also to be looked into.
- 17. Dr.M.A.N Murthy suggested RVCE as an institute to opt for Linked-in account, 14,000 capsules from Linked-in, for better variety of topics and learning opportunity for students as well as faculty members.



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Department of Industrial Engineering and Management

Date: 29 Mar 2022

Agenda No.109. Discussion and approval of 3rd and 4th semester detailed syllabus of 2021 scheme for the BE-IEM program.

Points for discussion:

- Dr.S.Devarajan, Dr.M.A.N Murthy & Dr.K.N.Subramanya jointly opined that course on "Probability and statistics" should be taught prior to the course on "Operations research".
- Software tools for calculating IRR, ROR to be part of Engineering Economy course and the interpretation of the meaning is important for IE students.
- The members also pointed that some topics of Operations research is over lapping in Mathematics III also for which Dr K.N.Subramanya replied that LPP is done with Mathematics perspective and
- 4. Dr.Sreedharan asked to look into the sequence of units in the course "Operations management".

Dr.Sree	edharan asked to look into the sequence of units in the	Course code
SI.no	Course Title Techniques	21MA31C
1	Integral Transforms, Optimization and Numerical Techniques	21IM4A1
2	Programming, Data Structures and Algorithms Using Python	21IM4A2
3	Foundation Course in Managerial Economics	21IM4A3
4	Mechatronics	21IM4A4
5	Mechanical Measurement systems	21IM4A5
6	Mechanics of Machining	21IM4A6
7	User-centric Computing for Human-Computer Interaction	21IM4A7
8	Data Base Management System	21IM4A8
9	Managing change in organizations Managing change in organizations MOOCS approved for 2nd year of	
in aluding MOOCS approved for 2021 sen		

List of new courses including MOOCS approved for 2nd year of 2021 scheme

Agenda No. 110. Any other subject, with the permission of the chair.

- 1. Dr.M.A.N Murthy wanted to know whether aspects of "Society/Community and safety" were covered in Vision of the department. BoS chairman responded that it is covered under the term
- 2. Dr.S.Devarajan suggested broadly to look into aspects of 7M., (Man, Machine, Material, Money, Management, Motive Power and Market)

The BoS Chairman and the college Principal thanked the external members profusely for their time and numerous observations and suggestions towards refinement of the draft syllabus and scheme.

Lholy 29/3/22 Dr. C K Nagendra Guptha,

Associate Professor, & HoD,

Dept. of IEM, R V College of Engineering, Bengaluru,

Chairman - Board of Studi

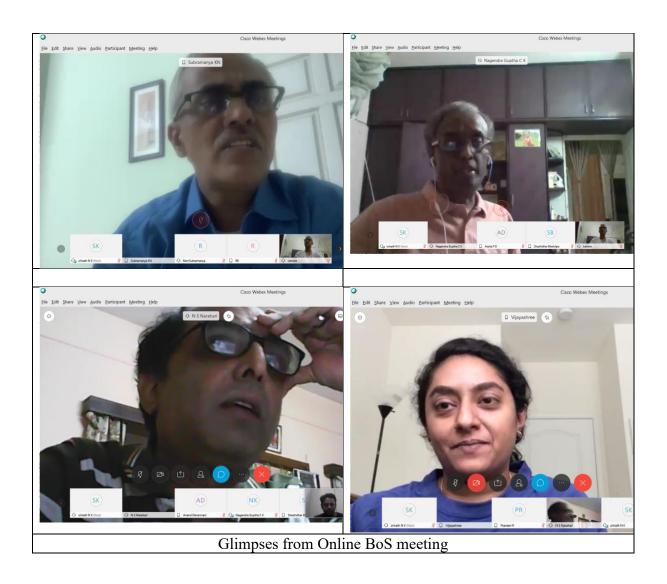
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10	RV	RV College of Engineer (An Autonomous Institution a) Department of Industrial Eng	ffiliated to VTO, Belagavi)
1	21st BoS Members Meeting		26/03/2022
{[1.	Dr. C K Nagendra Guptha	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	2.	Dr. K N Subramanya	2 mb amanya ko
3	3.	Dr. N S Narahari	method white
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6.		Dr. Ramaa. A	Para
7.	.	Dr. Shobha.N.S	Shiphans 26/3/22
8.	1	Mr. Vivekanand S Gogi	Mosi
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	_	r. S Devarajan	Bhark
6	-	. Narasimha Murthy M. A.	Dove
7		. R Sreedharan	Cum
8		Ashok K Pundir	Attended online
9		Kiran K	Attended on line
0.	Mr.	. B R Indushekar	Attended on line Leave of Absence.





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Ref:

Date: 20-11-2022

MEETING CIRCULAR

22nd Board of Studies- I.E.M Meeting (Webex Platform)

Dear Sir/Madam,

A meeting of the Board of Studies of BE-IEM (Industrial Engineering and Management) program is convened on Saturday, 1st Dec 2022 at 7:00 pm via Google Meet to transact the following agenda.

- 111. Confirmation of the minutes of the 21st Board of Studies meeting held on 26th Mar-2022.
- 112. Showcasing new BoS constitution to all the members.
- 113. Showcasing first year VTU syllabus.
- 114. Discussion on the "Human factors in Engineering" syllabus & approval.
- 115. Ratification of Engineering materials and strength of materials combined syllabus.
- 116. Ratification of NPTEL syllabus.
- 117. Ratification of Board of Examiners list.
- 118. Any other topics with the permission of the chair.

We request you to kindly attend the meeting and share your valuable inputs for the design of the curriculum for the BE IEM program. Kindly confirm your participation. The link to join the meeting will be shared subsequently.

Thanking you

Dr. C.K Nagendra Gupth Chairman BoS-IEM



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Department of Industrial Engineering and Management

Ref: Date: 01-Dec- 2022

Minutes of Meeting of the 22nd Board of Studies Held on 1st Dec 2022 at 7:00 PM in the Via Google Meet

The following members were present:

Faculty members from R V College of Engineering:

- 1. Dr C K Nagendra Guptha, Associate Professor, & HoD, Dept. of IEM, R V College of Engineering, Bengaluru, Chairman
- 2. Dr N S Narahari, Professor, Dept. Of IEM, R V College of Engineering, Bengaluru, Member
- 3. Dr. Rajeswara Rao K V S, Associate Professor, Dept. Of IEM, R V College of Engineering, Bengaluru, Member
- 4. Prof. Bhaskar.M.G, Assistant Professor, BoS Convenor, Dept. Of IEM, R V College of Engineering, Bengaluru, Convener
- 5. Dr. Shobha NS, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru

Representatives from Industry / Corporate:

- 1. Dr Narasimha Murthy M A, Head, Quality Management & Delivery Excellence, Infineon Technologies India Pvt Ltd., Bengaluru
- 2. Mr Sunder Madakshira, CEO, Rezolve limited

Faculty from other institutions:

- 1. Dr P. Balachandra, Professor, Department of Management Studies, IISc, Bangalore
- 2. Dr Rajmohan, Professor, Department of Industrial Engineering, College of Engineering, Anna University, Chennai, TamilNadu

Other faculty members from R V College of Engineering:

- 1. Dr Ramaa A, Associate Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 2. Dr. VijayaKumar.M.N, Associate Professor, Dept. Of IEM, R V College of Engineering, Bengaluru
- 3. Prof. Vivekanand S Gogi, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru.
- 4. Dr. Vikram.N.B, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru.
- 5. Prof Shruthi.M.N, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru,
- 6. Prof Nandini B, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru,

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7. Dr Arjun.V.Singar, Assistant Professor, Dept. Of IEM, R V College of Engineering, Bengaluru,



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Department of Industrial Engineering and Management

Ref: Date: 01-Dec- 2022

Leave of Absence:

The following members could not attend the meeting due to prior commitments / non availability at the time & location / other pressing engagements:

1. Mr.B.Indushekar, Vice president and GM-Operations, Volvo construction Equipment, India.

The Chairman, BoS welcomed all the members, and agenda No.111 to 118, were presented to the BoS members for discussion. The discussion inputs were provided by the members from the department and projected as a presentation. The BoS chairman appraised the Vision and Mission of the Department of IEM to begin the meeting with.

Agenda No.111: Confirmation of the minutes of the 21st Board of Studies meeting held on 26th Mar 2021.

The summary of the minutes of the meeting was presented to the members for their information. The Chairman, BoS presented the feedback received from various stakeholders such as students, alumni and employers to the BoS Members. The highlights of the feedback received are summarized in bullet points as follows.

- Provide options for students to choose specialized subjects and minor specializations, allowing them to tailor their education to their interests.
- More attention needed to encourage Research.
- Industry oriented courses should be added which solve employability concerns.
- Encourage students to tackle real time applications.

Agenda No.112: Showcasing new BoS constitution to all the members.

The Chairman, BoS shared approved document containing information regarding new BoS constitution to all the members.

Agenda No.113: Showcasing first year VTU syllabus.

The VTU syllabus for 1st year was showcased to all the members.

- 1. Dr. M.A.N Murthy shared concern over making Electrical and Electronics as optional course.
- 2. Dr.P.Balachandra opined since RVCE conducts autonomous exams, why can't we think of making Electrical and Electronics as mandatory course.
- 3. Mr Sunder expressed the need for industry experience at the first year itself for which BoS Chairman responded by sharing information about mandatory 3 week internships.
- 4. Dr. NN added information about mandatory AICTE points which every student has to earn by working as volunteers towards community service which will help in overall development of the student.

Agenda No.114: Discussion on the "Human factors in Engineering" syllabus & approval.

1. Dr.RR briefed the contents of the course and process that is followed to make the course relevant and attractive for students from other programs also. Dr.RR also mentioned about reference book chosen for the course.



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Department of Industrial Engineering and Management

Date: 01-Dec- 2022

Ref:

- 2. Dr.M.A.N Murthy enquired whether it would be a good idea to teach Ergonomics in Manufacturing, Ergonomics in office space etc.
- 3. Dr NN mentioned about leveraging 40 marks EL where all these can be explored.
- 4. Dr.M.A.N Murthy also expressed concerns over calling Human Factors as Emerging
- 5. Dr CKN informed about nomenclature used by VTU is different from industry perspective.
- 6. Dr Rajmohan shared his viewpoint and suggested the syllabus seems to cover only physical ergonomics and should concentrate on cognitive ergonomics also.
- 7. Mr Sunder mentioned UI & UX should be part of the course at an elementary level with aspects regarding creation of frictionless experiences in digital transformations.
- 8. All the viewpoints were noted and the course was approved.

Agenda No.115: Ratification of Engineering materials and strength of materials combined syllabus.

- 1. Dr. MNVK briefed about the course Mechanics of Materials where he mentioned about the challenges in the current curriculum revision and how this course as originated being an amalgamation of three courses such as strength of materials, Engineering Materials and
- 2. Several BoS members raised questions regarding the title of the course for which Dr CKN mentioned about the reasons of naming the course. The BoS members agreed and the ratification was approved.

Agenda No.116: Ratification of NPTEL syllabus.

1. The updated list of new courses added was presented, and the same was ratified.

Agenda No.117: Ratification of Board of Examiners list.

1. The Board of Examinations list of members was presented, and the same was ratified.

Agenda No.118: Any other topics with the permission of the chair.

No questions were raised.

Dr.N.S.Narahari proposed the vote of thanks and thanked each member of BoS for their valuable inputs and also thanked his fellow colleagues for their participation.

NAMED 1/12/22

Dr. C K Nagendra Guptha,

Associate Professor, & HoD

Dept. of IEM, R V College of Engineering, Bengaluru,

Chairman - Board of Studies

Board of Studies Dept. of Industrial Engineering & Manual, R.V. College of Engineer Bengaluru - 560 059.

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RV COLLEGE OF ENGINEERING BANGALORE - 560 059 (Autonomous Institution affiliated to VTU, Belagavi) DEPARTMENT OF INDUSTRIAL ENGG., & MANAGEMENT 20th BoS Meeting 19-12-2020 Name of the staff Sign SINO Dr. C.K. Nagendra Guptha Dr. K.N Subramanya 2 Dr. N.S.Narahari 3. Dr. KVS Rajeswara Rao 4 Mrs. Nandini. B Mr. Bhaskar, M.G 6 Dr. S Devarajan Dr. R Sreedharan 8 Mr. Narasimha Murthy M A 9 P.Balasubramaniam 10 Dr. Ashok Pundir 11 Ms Meeta Karanth 12 Dr. M.N. Vijaya Kumar 13 Dr. Ramaa. A 14 Mrs. Shobha.N.S 15 Mr. Vivekanand S Gogi 16 Mr. Sunil R Yalamalle 17 Mr. Vikram N Bahadurdesai 18 19 Ms. Chitra B T Mrs. Shruthi, M.N.



RV College of Engineering[®], Bengaluru – 59 (Autonomous Institution affiliated to VTU, Belagavi) Department of Industrial Engineering and Management

MEETING CIRCULAR

23rd Board of Studies- IEM Meeting

Dear Sir,

A meeting of the Board of Studies of BE-IEM (Industrial Engineering and Management) program is convened on Thursday, 8th June 2023 at 2PM through hybrid mode to transact the following agenda.

- 119. Confirmation of the minutes of the 22nd Board of Studies meeting held on 1st Dec 2022.
- 120. Discussion & approval of 2021 scheme detailed syllabus for 5th & 6th Sem BE-IEM program.
- 121. Discussion & approval of 2022 scheme detailed syllabus for 3rd & 4th Sem BE-IEM program & approval.
- 122. Ratification of NPTEL courses
 - a. Newly added courses for V sem 2018 scheme
 - b. NPTEL course list for 4th sem 2021 scheme
- 123. Ratification of Board of Examiners list.
- 124. Report on department activities.
- 125. Any other topic with the permission of the chair.

We request you to kindly attend the meeting and share your valuable inputs for the design of the curriculum for the BE IEM program. Kindly confirm your participation. The link to join the meeting is https://meet.google.com/uyo-ckce-atf

Otherwise, to join by phone, dial +1 575-394-8495 and enter this PIN: 844 674 211#

The BoS members are requested to join for Lunch.

Thanking you

Prof. Bhaskar.M.G BoS Convenor

Phs 2/6/23

HEAD OF THE DEPARTMENT

Dept. of Industrial Engineering & Management

R.V. College of Engineering

Bangalore - 560 059

allt 2/6/23



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Department of Industrial Engineering and Management

Ref:

Minutes of Meeting of the 23rdBoard of Studies Held on 8th June 2023 at 2:00 PM in the Hybrid mode

The following members were present:

Faculty members from R V College of Engineering:

- 1. Dr C K Nagendra Guptha, Associate Professor, & HoD, Dept. of IEM, RV College of Engineering, Bengaluru, Chairman
- 2. Dr.K.N.Subramanya, Principal & Professor, RVCE
- 3. Dr N S Narahari, Professor, Dept. of IEM, RV College of Engineering, Bengaluru, Member
- 3. Dr. Rajeswara Rao K V S, Associate Professor, Dept. of IEM, RV College of Engineering, Bengaluru, Member
- 4. Prof. Bhaskar.M.G, Assistant Professor, BoS Convenor, Dept. of IEM, RV College of Engineering, Bengaluru, Convener

Representatives from Industry / Corporate:

1. DrNarasimha Murthy M A, Head, Quality Management & Delivery Excellence, Infineon Technologies India Pvt Ltd., Bengaluru (Via Online)

Faculty from other institutions:

1. Dr Rajmohan, Professor, Department of Industrial Engineering, College of Engineering, Anna University, Chennai, TamilNadu(Via Online)

Special Invitee from other university and Industry:

- 1. Dr. R Sridharan, Professor, Mechanical Engineering, NIT Calicut
- 2. Mr.Kashinath.M Patnasetty, Head ,Group CNC Application Support, ACE designers, Bengaluru

Alumni Invitee

Deeraj. D.S, Founder, Proprietor: Deeraj Property Management (2022 batch-IEM Alumnus) Sanjana Hemaraju, Imagineer at Fractal. (2021 batch-IEM Alumnus)

Other faculty members from R V College of Engineering:

- 1. Dr. Ramaa A, Associate Professor, Dept. of IEM, RV College of Engineering, Bengaluru
- 2. Dr. VijayaKumar.M.N, Associate Professor, Dept. of IEM, RV College of Engineering, Bengaluru
- 3. Prof. Vivekanand S Gogi, Assistant Professor, Dept. of IEM, RV College of Engineering, Bengaluru.



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Department of Industrial Engineering and Management

Ref:

- 4. Dr. Vikram. N.B, Assistant Professor, Dept. of IEM, RV College of Engineering, Bengaluru.
- 5. Prof. Shruthi.M.N, Assistant Professor, Dept. of IEM, RV College of Engineering, Bengaluru,
- 6. Prof. Nandini B, Assistant Professor, Dept. of IEM, RV College of Engineering, Bengaluru,

Leave of Absence:

The following members could not attend the meeting due to prior commitments / non availability at the time & location / other pressing engagements:

- 1. Mr Sunder Madakshira, CEO, Rezolve limited
- 2. Mr.B.Indushekar, Vice president and GM-Operations, Volvo construction Equipment, India.
- 3. Dr P.Balachandra, Professor, Department of Management Studies, IISc, Bangalore

The Chairman, BoS welcomed all the members, and agenda No.119 to 125, were presented to the BoS members for discussion. The discussion inputs were provided by the members from the department and projected as a presentation. The Chairman, BoS also briefed the BoS members about the challenges that lie ahead in catering to curriculum revision for various schemes that are running parallel for B.E IEM program.

The Chairman, BoS presented the feedback received from various stakeholders such as students, alumni and employers to the BoS Members. The highlights of the feedback received are summarized in bullet points as follows.

- Emphasis on internship is good, but students are finding it difficult to get good quality industry internships.
- Exploring innovative teaching methods to keep students engaged and motivated.
- Sessions on industry updates focused on tech usage- talks on the latest technology usage updates, and followed by Labs to teach the same.
- For higher semester courses, Course material should be provided.

Agenda No.119: Confirmation of the minutes of the 22ndBoard of Studies meeting held on 1st Dec2022.

The summary of the minutes of the meeting was presented to the members for their information.

Agenda No.120: Discussion & approval of 2021 scheme detailed syllabus for 5th & 6th Sem BE-IEM program.

The scheme & syllabus for 2021 scheme detailed syllabus for 5th & 6th Sem BE-IEM program was showcased to all the members.

Dr. M.A.N Murthy enquired about courses which cover concepts of KPI, KPI deployment at process and organization level which was a point well taken.

Dr. M.A.N Murthy queried about systems engineering as a course.



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Department of Industrial Engineering and Management

Ref:

Dr.K N Subramanya responded with concepts dealt in the system engineering course through holistic approach in addition to utilizing project management aspects for solving large and complex systems.

Dr Rajmohan asked whether value engineering is offered as elective or core course and also shared inputs on including it as part of product design course.

Dr.Narahari.N.S replied that the course value engineering is offered in 6thsem and product design as a core course in 7th sem.

Mr.Deeraj, opined that gamification can be explored in courses such as Introduction to management & Economics for which the response from chairman being new methods are being applied and many more are being explored.

Dr.M.A.N Murthy expressed that a topic on "Sustainable Operations" to be included in the first unit of "Operations Management" course which all the members appreciated and agreed.

Ms Sanjana Hemaraju insisted that there should be more exercises on Excel as opposed to either proprietary or Opensource tools.

Dr.M.A.N Murthy suggested that the course "Multi criteria Decision Making" be changed to "Advanced Decision Modelling" based on the content.

In addition to the same, Dr. Sreedharan suggested Goal Programming to be a unit and utility programming can also be included.

Dr. Sridharan Suggested new reference books for Engineering Economy and Costing.

Mr. Deeraj opined, Engineering Economy & costing to be a core course.

Dr.M.A.N Murthy insisted that FAST and VAMP methods to be part of Value Engineering & Overview of Industry 4.0, Cyber physical system to be part of Smart manufacturing.

Dr.M.A.N Murthy opined that supply chain risk, mitigation strategies should be part of global supply chain management for the title to be appropriate.

Ms Sanjana appreciated the lab part of Global Supply chain management.

The BoS members felt the course on Metrology should start with an industrial tour for students to get an understanding of industry before teaching it in classroom. Also, Swarm robots as a topic to be included in the course "Industrial Robotics'.

Dr.Sridharan suggested to look into the sequencing of units in the course "Discrete event simulation" and also to rename the course "Lean Systems".



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Ref:

In addition to these, Dr Srisharan suggested few reference books for some of the courses and the details are as follows.

R. A. Sarker, and C. S. Newton, Optimization Modelling: A Practical Approach, CRC Press, 2008.

For the course 21IMB5XX Multi Criteria Decision making, please include the following in Unit II Concept of Pareto Optimality, Basics of Goal Programming.

Include the following Reference Book:

Kalyanmoy Deb, Multiobjective optimization using evolutionary algorithms, Wiley, 2010.

Include the following in List of Reference Books for 21IMXX Engineering Economy and Costing:

M. Y. Khan and P. K. Jain, Management Accounting: Text, Problems and Cases, 7th ed. McGraw-Hill Educatin (India) Private Limited, 2018.

S. M. Datar, and M. V. Rajan, Horngren's Cost Accounting: A Managerial Emphasis, 17th ed. Pearson India Education Services Pvt. Ltd., 2021.

Include the following in List of Reference Books for 21IM62 Global Supply Chain Management:

John J. Coyle, Jr. C. John Langley, Robert A. Novack, and Brian J. Gibson, Supply Chain Management: A Logistics Perspective, 10th ed., CENGAGE Learning, 2019.

Jennath Shah, Supply Chain Management: Text and Cases, Pearson India Education Services Pvt. Ltd., 2016.

Sl.no	Course Title	Course Code
1	Data Science for Engineers	21IM56C1
2	Design, Technology and Innovation	21ME56C2
3	Introduction To Machine Learning	21EE56C3
4	Manufacturing Guidelines for Product Design	21IM56C4
5	Foundation Course in Managerial Economics	21IM56C5

Tentative list of MOOCS courses offered and approved.

Agenda No.121: Discussion & approval of 2022 scheme detailed syllabus for 3rd & 4th Sem BE-IEM program & approval.

The scheme & syllabus for 2022 scheme detailed syllabus for 3rd&4th Sem BE-IEM program was showcased to all the members.

No changes were mentioned as the same courses were refined in the previous year itself.

Agenda No.122: Ratification of NPTEL courses



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Ref:

The updated list of new courses added was presented, and the same was ratified.

Agenda No.123: Ratification of Board of Examiners list.

The Board of Examinations list of members was presented, and the same was ratified.

Agenda No.124: Any other topics with the permission of the chair. No questions were raised.

Dr.N.S.Narahari proposed the vote of thanks and thanked each member of BoS for their valuable inputs and also thanked his fellow colleagues for their participation.

Nhall 8/6/23

Dr. C K Nagendra Guptha, Associate Professor, & HoD

Dept. of IEM, R V College of Engineering, Bengaluru,

Chairman - Board of Studies

Chairman

Board of Studies

Dept. of Industrial Engineering & Mamil

R.V. College of Engineer

Bengaluru - 560 059.



10	RV	RV College of Engineer (An Autonomous Institution a) Department of Industrial Eng	ffiliated to VTO, Belagavi)
1	21:	BoS Members Meeting	26/03/2022
{[1.	Dr. C K Nagendra Guptha	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	2.	Dr. K N Subramanya	2 mb amanya ko
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	_	r. S Devarajan	Bhark
6	-	. Narasimha Murthy M. A.	Dove
7		. R Sreedharan	Cum
8		Ashok K Pundir	Attended online
9		Kiran K	Attended on line
0.	Mr.	. B R Indushekar	Attended on line Leave of Absence.



RV College of Engineering[®], Bengaluru – 59 (Autonomous Institution affiliated to VTU, Belagavi) Department of Industrial Engineering and Management

MEETING CIRCULAR

24th Board of Studies- IEM Meeting

Dear Sir.

A meeting of the Board of Studies of BE-IEM (Industrial Engineering and Management) program is convened Workday, 1st April 2024 at 10AM at the Department of IEM-RVCE to transact the following agenda.

- 126. Confirmation of the minutes of the 23rd Board of Studies meeting held on 8th June 2023.
- Discussion & approval of 2021 scheme detailed syllabus for 7th & 8th Sem BE-IEM program.
- Discussion & approval of 2022 scheme detailed syllabus for 5th & 6th Sem BE-IEM program & approval.
- 129 Ratification of NPTEL courses
 - a. Newly added courses for V sem 2021 scheme
- 130 Ratification of Board of Examiners list.
- 131 Report on department activities.
- 132 Any other topic with the permission of the chair.

We request you to kindly attend the meeting and share your valuable inputs for the design of the curriculum for the BE IEM program. Kindly confirm your participation.

The BoS members are requested to join for Lunch.

Thanking you

Prof. Bhaskar.M.G

BoS Convenor

HEAD OF THE DEPARTMENT
Dept. of Industrial Engineering & Management
R.V. College of Engineering
Bangalore - 560 059

11 HAT 18/3/24





RVCE / IQAC/DA /

/ 2023-24

Monday, 3 April 2024

MINUTES OF MEETING

(Meeting with IEM BoS members)

Meeting # 1

DATE: 1-04-2024

TIME:2 PM MODE: Hybrid

VENUE: IEM HoD cabin, RVCE

Agenda:

- 126. Confirmation of the minutes of the 23rd Board of Studies meeting held on 8th June 2023.
- Discussion & approval of 2021 scheme detailed syllabus for 7th & 8th Sem BE-IEM program.
- Discussion & approval of 2022 scheme detailed syllabus for 5th & 6th Sem BE-IEM program & approval.
- 129 Ratification of NPTEL courses
 - a. Newly added courses for IV sem 2021 scheme
- 130 Ratification of Board of Examiners list.
- Report on department activities.
- Any other topic with the permission of the chair.

The Chairman, BoS welcomed all the members, and agenda No.126 to 132, were presented to the BoS members for discussion. The Chairman, BoS also briefed the BoS members about the challenges that lie ahead in catering to curriculum revision for various schemes that are running parallel for B.E IEM program. The inputs were gathered during Academic advisory committee meeting was briefed by the BoS convenor Prof Bhaskar to all the BoS members present.

Subject No.	126
Agenda	Confirmation of the minutes of the 23rd Board of Studies meeting held on 8th June 2023.
	Discussions & Resolutions
The summary of	the minutes of the meeting was presented to the members for their information.

Subject No.	127	
Agenda	Discussion & approval of 2021 scheme detailed syllabus for 7th & 8th Sem BE-IEM program.	
Discussions & Resolutions		

Dr.N.S.Narahari and Prof Bhaskar Provided inputs on the course **Product Design and Development.**

Dr K.N.S suggested to create the PDD lab in similar lines to hoe Volvo labs have been created with more emphasis on product/ prototype development. Also urged to keep the existing lab portions to 50% and make changes to remaining 50%.





Dr. P.Balachandra and Dr KNS also opined that for courses such as PDD, You can have hackathons as one of the CIE's and plan to make the course as open ended as possible. In addition, Dr. P.Balachandra suggested that concepts of circular economy and circular product development with more emphasis on sustainability to be looked into.

Dr P.Balachandra suggested to look towards more engineering than towards managerial. Dr. M.A.N Murthy suggested usage of project management tools to be used effectively like Jira etc.

Another suggestion from Dr.KNS being to make this PDD course as a 2 credit theory, 1 credit Project and 1 credit lab (2+1+1).

Data mining and Predictive analysis:

Dr. P.Balachandra highlighted that forecasting part is missing in the syllabus for the above course to which Dr Narahari pointed out that these concepts have been covered previously in Operations Management lab in V semester.

Dr KNS suggested to make the EL component more Coding based and Exam algorithm based.

Dr Vijayakumar gave inputs on E-Commerce course.

Dr MAN Murthy enquired whether retail and supply chain related info is part of the syllabus and urged to add service-based concepts.

Dr.P Balachandra suggested to rename to title as "Digital Commerce"

Dr NN highlighted that analytics part is missing.

Dr Vivekanand S Gogi provided inputs on Facilities planning and Design.

Dr K.N.S opined that ALDEP, CRAFT are too traditional and don't find much applications in current scenario.

Dr.P.Balachandra suggested to add AR/VR, digital twinning and reconfigurable layouts.

For the course on **Engineering Economy**, Dr. M.A.N Murthy volunteered to provide caselets which could be useful.

BoS members felt that "**Digital Supply chain**" could be renamed as "**Smart Supply Chain Technologies**". It was suggested to add Modelling aspects to the course.

Dr. KNS suggested to give more real time projects as part of "**Project Management**" and also to remove the Professional core elective "**Project Planning and Control**".

For the **"Supply chain"** course which is offered as Institutional elective, Dr. KNS suggested to make the entire first unit about processes and use book by author **"Sunil chopra"** for Unit I syllabus.

Action Plan & Deadlines:

(For whom the task has been assigned and expected date of completion of the task/assignment) The faculty members of the program are expected to discuss, debate and deliberate further to fine tune the syllabus and incorporate the changes on or before 10th April 2024 so as to present in front of Academic Council scheduled on 15th April 2024.

Subject No.	128
Agenda	Discussion & approval of 2022 scheme detailed syllabus for 5th & 6th Sem BE-IEM program & approval.
	Discussions & Resolutions





Dr KNS suggested to focus more on modelling as part of **HRM** course and also to remove "Systems Engineering" and add "Operations Research" as Institutional Elective.

Dr KNS suggested to add international accounting aspects as part of "FAC" course in addition to software and service costing, dynamic costing/Pricing in hospitality and other sectors.

For "Advanced Decision Modelling" course, Unit IV and V to be removed and MCDM concepts to be added.

SCM- "Supply chain management" to be renamed as SCLM- "Supply chain & Logistics management".

New books to be identified for the course on "TQM" and Dr KNS suggested to add New QC tools and relevant topics which are not covered in "QA" course.

For the institutional elective course offered from IEM which is "Elements of Financial Management", It was suggested that Asset Insurance can be added in Unit III.

Action Plan & Deadlines:

(For whom the task has been assigned and expected date of completion of the task/assignment) The faculty members of the program are expected to discuss, debate and deliberate further to fine tune the syllabus and incorporate the changes on or before 10th April 2024 so as to present in front of Academic Council scheduled on 15th April 2024.

Subject No.	129
Agenda	Ratification of NPTEL courses
	Discussions & Resolutions

The updated list of new courses added was presented, and the same was ratified.

Action Plan & Deadlines:

(For whom the task has been assigned and expected date of completion of the task/assignment) NA

Subject No.	130
Agenda	Ratification of Board of Examiners list.
	Discussions & Resolutions
The Board of Ex	aminations list of members was presented, and the same was ratified.

Action Plan & Deadlines:

(For whom the task has been assigned and expected date of completion of the task/assignment) NA

Subject No.	131
Agenda	Report on department activities.
	Discussions & Resolutions
Dr C.K.Nagendr	a Guptha, BoS Chairman shared the activities conducted during the academic year.





Action Plan & Deadlines:

(For whom the task has been assigned and expected date of completion of the task/assignment) NA

Subject No.	132
Agenda	Any other topics with the permission of the chair.
	Discussions & Desclutions

Discussions & Resolutions

Dr. M.A.N Murthy urged to create a common course combining process management, project management, lean management, KPI's, Metrics, ESG (Environment, Societal & Governance) which form some of the assorted topics.

Dr K.N.Subramanya suggested that this course could be part of institutional elective in turn asking Dr M.A.N Murthy to provide some catchy titles for the same.

Dr K.N.Subramanya enquired whether a course on standards be created involving standards from ASME, IEEE, IEC, innovation standards keeping in line with BIS and also suggested that the title could be "**Benchmarking and Compliance**".

Dr M.A.N Murthy pointed out a unique observation which he had named it as "POP to PIP" meaning the gap between "Policy on paper" to "Policy implementation in Practice"

The Chairman, BoS presented the feedback received from various stakeholders such as students, alumni and employers to the BoS Members. The highlights of the feedback received are summarised in bullet points as follows.

- Provide options for students to choose specialized subjects and minor specializations, allowing them to tailor their education to their interests.
- More attention needed to encourage Research.
- Industry oriented courses should be added which solve employability concerns.
- Encourage students to tackle real time applications.

Action Plan & Deadlines:

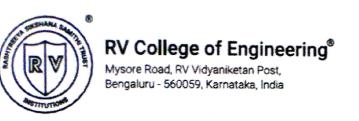
(For whom the task has been assigned and expected date of completion of the task/assignment) The faculty members of the program are expected to discuss, debate and deliberate further to fine tune the syllabus and incorporate the changes on or before 10th April 2024 so as to present in front of Academic Council scheduled on 15th April 2024.

Meeting concluded with thanks to the chair.

The following members were present:

Faculty members from R V College of Engineering:

- 1. Dr C K Nagendra Guptha, Associate Professor, &HoD, Dept. of IEM, RV College of Engineering, Bengaluru, Chairman
- 2. Dr.K.N.Subramanya, Principal & Professor, RVCE
- 3. Dr N S Narahari, Professor, Dept. of IEM, RV College of Engineering, Bengaluru, Member
- 3. Dr. Rajeswara Rao K V S, Associate Professor, Dept. of IEM, RV College of Engineering, Bengaluru, Member





4. Prof. Bhaskar.M.G, Assistant Professor, BoS Convenor, Dept. of IEM, RV College of Engineering, Bengaluru, Convener

Representatives from Industry / Corporate:

1. Dr Narasimha Murthy M A, Head, Quality Management & Delivery Excellence, Infineon Technologies India Pvt Ltd., Bengaluru (Via Online)

Representatives from Higher Education Institution:

1. Dr P.Balachandra, Professor, Department of Management Studies, IISc, Bangalore

Other faculty members from R V College of Engineering:

- 1. Dr. Ramaa A, Associate Professor, Dept. of IEM, RV College of Engineering, Bengaluru
- 2. Dr. VijayaKumar.M.N, Associate Professor, Dept. of IEM, RV College of Engineering, Bengaluru
- 3. Prof. Vivekanand S Gogi, Assistant Professor, Dept. of IEM, RV College of Engineering, Bengaluru.
- 4. Dr. Vikram. N.B, Assistant Professor, Dept. of IEM, RV College of Engineering, Bengaluru.
- 5. Prof. Shruthi.M.N, Assistant Professor, Dept. of IEM, RV College of Engineering, Bengaluru,
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2. Mr.B.Indushekar, Vice president and GM-Operations, Volvo construction Equipment, India.

 Dr Rajmohan, Professor, Department of Industrial Engineering, College of Engineering, Anna University, Chennai, TamilNadu

Document Drafted by

Bhaskar M G

Assistant Professor

Dept. of IEM, R V College of Engineering,

Bengaluru,

Convenor - Board of Studies

Dr. C K Nagendra Guptha,

Associate Professor, &HoD

Dept. of IEM, R V College of Engineering,

allle 4/4/2024

Bengaluru,

Chairman - Board of Studies



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Department of Industrial Engineering and Management
01-04-2024

24th Board of Studies Meeting (Hybrid mode)

Structure	SI No	Name, Designation	Signature
Chairperson	1	Dr C K Nagendra Guptha, Associate Professor, & HoD	Inkamenter !
Faculty members at different levels covering different specialization - nominated by	2	Dr K N Subramanya, Principal & Professor	In Kamangaler
Academic council (5)	3	Dr N S Narahari, Professor	Phot 1/4/2009
	4	Dr. Rajeswara Rao K V S, Associate Professor	Kry 114/24
	5	Mr Bhaskar.M.G, Assistant Professor & BoS convenor	Flor 14/21
	6	Dr Shobha.N.S, Assistant Professor	Shebbar 14/2
Subject experts from outside the college - nominated by Academic	7	Dr P.Balachandra, Professor, IISc, Bangalore	Dlunt, 14/2
council (2)	8	Dr Rajmohan, Professor, Anna University, Chennai	Attended
Subject experts from outside the college - nominated by VTU (1)	9	Mr B R Indushekar, Vice President & General Manager	Absence.
Representatives from Industry / Corporate / Allied areas relating	10	Dr Narasimha Murthy M A, Head, Quality Management & Delivery Excellence	Attended online.
o Placement, nominated by Academic council (1)P	11	Mr Sunder Madakshira, CEO Rezolve Limited	Attended online
aculty Members from the epartment	12	Dr. Vijayakumar M N	many
	13	Dr. Ramaa A	Damag A
	14	Dr. Vivekanand S Gogi	Wrige:
	15	Dr. Vikram N B	Grand 1/4/2
	16	Prof. Shruthi M N	Heusti'n
	17	Prof. Nandini B	hardink

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