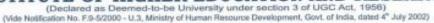


## INSTITUTE OF HIGHER EDUCATION AND RESEARCH



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## SCHOOL OF MECHANICAL ENGINEERING **BOARD OF STUDIES - MINUTES OF MEETING**





The minutes of Meeting of the board of studies for the Department of Mechanical Engineering was held on 11.08.2022 at 10.00 AM. Venue- Board Room - First Floor

### The following Members were present

|        | PANEL OF MEMBERS    |  |                               |  |  |
|--------|---------------------|--|-------------------------------|--|--|
| Sl. No | Member              | per Role   |                               |  |  |
| 1      | Dr. M.Senthil Kumar | Dean School of Mechanical -<br>BOS Chairman  | Industry/Alumini BOS Chairman |  |  |
| 2      | Dr .V.Balambica     | Professor and Head<br>(Mechanical Engineering)   | BIST                          |  |  |
| 3      | Dr .D. Raguraman    | Professor and Head( Automobile Engineering)  | BIST                          |  |  |
| 4      | Dr N S Senthur      | Associate Professor ( Mechatronics Engineering )   | BIST                          |  |  |
| 5      | Dr M P Natarajan    | Professor  | BIST                          |  |  |
| 6      | Dr R Hariharan      | Associate Professor  | BIST                          |  |  |
| 7      | Dr Annamalai        | Professor, Department of<br>Automobile Engineering, MIT                                      | Anna University<br>Nominee    |  |  |
| 8      | Dr J Kuberan        | Prof. & Head Mechanical-<br>SKP Engg. College  | Subject Expert                |  |  |
| 9      | Dr Papitha          | Professor –Department Of<br>Instrumentation –MIT<br>Chrompet                                 | Special Invitee               |  |  |
| 10     | Dr G Manikandan     | Assistant Professor- Hawassa University-Ethiopia Subject Exp                                 |                               |  |  |
| 11     | Mr Abdul Kareem     | Assistant Professor Mechanical<br>Engineering-Salalah Institute<br>of Science and Technology | Subject Expert                |  |  |

| 12 | Dr Vijay Ananth<br>Suyamburajan | Assistant Prof Vels Institute of Science And Technology | Subject Expert-<br>Mechanical                   |
|----|---------------------------------|---|---|
| 13 | Dr Anantha Padmanaban           | Professor Mech. – SSN<br>College Of Engineering         | Subject Expert-<br>Mechanical and<br>Automobile |
| 14 | Mr Ranjeev                      | Valve design and Automation<br>Engineer                 | Alumini-<br>Automobile<br>Member                |
| 15 | Mr Selvin Blacius               | Senior Analyst- Ford Motor<br>Company                   | Alumini –<br>Mechanical<br>Member               |
| 16 | Mr P Sharan                     | Project Lead Manager-<br>Accenture                      | Alumini-<br>Mechatronics<br>member              |
| 17 | Mr.Arivukkarasan Raja,          | Delivery Lead Manager-<br>Accenture                     | Industry Expert                                 |
| 18 | Mr R Santosh Kumar              | Super Auto Forge Limited                                | Industry Expert                                 |

## **The following Points were discussed:**

- > Vision, Mission, PEOs, POs and PSOs
- > Action taken for the Previous BOS Meeting
- > Introduction of New three Credit Courses, Programme Electives and Open Electives,
- > Innovative Teaching and Best Practices, Learning and Assessment Methods
- > Targets for CO / PO for Academic Year 2023-24
- > Approval of Panel of Examiners for QP Setting and Lab Exams for AY 2022-23,

#### S.NO DESCRIPTION DISCUSSION POINTS

- The Chairman welcomed the panel members and presented the agenda for the day.
   Dr.N.SSenthur proposed the welcome address and introduced the Panel Members.
  - **Dr. K Venkatesan** produced the action taken from the previous BOS meeting to the panel.
  - Vision, mission and PSO of the department have been shared with the panel members
- 2. The panel members approved the list of QP setters nominated by the D epartment and suggested to include Associate Professors also in the mix.
  - **CO-PO attainment** of the R 20 curriculum presented and suggestions for improvement is fixing the target was discussed.
  - Overview of finalized R20 curriculum was presented and an addition of 3 credit elective course for 2024 curriculam update on MICROCONTROLLER AND EMBEDDED C PROGRAMMING was proposed to the panel members and they approved the same.

#### 3. Best Practices Followed was discussed by Dr M.P. Natarajan:

- Students were encouraged to do Mini Projects of their interest and participate in competitions, during the final year project evaluation the activity will be considered for credits. Encourage interdisciplinary project.
- Students can collaborate with MBA and also Medical Sciences and other Majors as well.
- FAB LAB 24 x 7 facility for fabrication projects, Incubation Cell Takes on Alumni based projects as live projects.

#### Dr K.Venkatesan

• Students can take elective at any level and the only thing is they should have completed the prerequisite. For example, a second-year student can choose and 3<sup>rd</sup> year elective so there will be a mixture of students. Only thing is they should complete the number of credits as mentioned by BIHER and additional credits also can be taken for value addition.

## 4. Dr.M.P. Natarajan

• The QP should not be set in a manner the students can readily find the answers in the internet, the questions can be of correlation, compare, analyzing a real time problem etc.

#### Dr. K. Venkatesan

• The assessments are conducted using CODETANDRA where the QP will be set in 3 levels and the questions will be shuffled for each student and each question will be timed so that they cannot come back to the previous question the students are proctored like 20 students will have a proctor and 5 proctors will be under one super proctor and all the student's movements are recorded.

For analytical papers more time will be allocated.

| 5 | <b>Mr Selvin Blacius</b> Alumni added that the students can be encouraged to do more online certification courses as a value addition and to motivate them recognition can be given. |
|---|--|
| 6 | The meeting concluded with all the above-mentioned thoughts and the vote of thanks was   |
|   | proposed by <b>Dr V.Balambica</b> .  |

| PANEL OF MEMBERS |                              |  |           |
|------------------|------------------------------|--|-----------|
| Sl. No           | Member                       | Role   | Signature |
| 1                | Dr. M.Senthil Kumar          | Dean School of Mechanical -<br>BOS Chairman  |           |
| 2                | Dr .V.Balambica              | Professor and Head<br>(Mechanical Engineering)   |           |
| 3                | Dr .D. Raguraman             | Professor and<br>Head( Automobile<br>Engineering)  |           |
| 4                | Dr .N.S Senthur              | Associate Professor (Mechatronics Engineering)   |           |
| 5                | Dr M. P Natarajan            | Professor  |           |
| 6                | Dr R Hariharan               | Associate Professor  |           |
| 7                | Dr Annamalai                 | Professor-MIT  |           |
| 8                | Dr J Kuberan                 | Prof. & Head Mechanical-<br>SKP Engg. College  |           |
| 9                | Dr Papitha                   | Professor –Department Of<br>Instrumentation –MIT<br>Chrompet                                 |           |
| 10               | Dr G Manikandan              | Assistant Professor- Hawassa<br>University-Ethiopia  |           |
| 11               | Mr Abdul Kareem              | Assistant Professor Mechanical<br>Engineering-Salalah Institute<br>of Science And Technology |           |
| 12               | Dr Vijay Ananth Suyamburajan | Assistant Prof Vels Institute of Science And Technology                                      |           |
| 13               | Dr Anantha Padmanaban        | Professor Mech. – SSN<br>College Of Engineering  |           |
| 14               | Mr Ranjeev                   | Valve design and Automation<br>Engineer  |           |
| 15               | Mr Selvin Blacius            | Senior Analyst- Ford Motor<br>Company  |           |
| 16               | Mr P Sharan                  | Project Lead Manager-<br>Accenture   |           |
| 17               | Mr.Arivukkarasan Raja,       | Delivery Lead Manager-<br>Accenture  |           |
| 18               | Mr R Santosh Kumar           | Super Auto Forge Limited   |           |



## institute of higher education and research



(Declared as Deemed-to-be University under section 3 of UGC Act, 1958) (Vide Notification No. F.9-5/2000 - U.3, Ministry of Human Resource Development, Govt. of India, dated 4" July 2002)

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# SCHOOL OF MECHANICAL ENGINEERING BOARD OF STUDIES – MINUTES OF MEETING





The minutes of Meeting of the Board of Studies for the Department of Mechanical Engineering was held on 14.03.2023 at 11.00 AM .

Venue-Board room – First Floor

The following members were present.

|                                 | PANEL OF            |                       |  |
|---------------------------------|---------------------|-----------------------|--|
| Sl. No                          | Member              | Role                  | College/ University/<br>Industry/Alumini |
|                                 |                     | Dean School of        | BOS Chairman                             |
| 1                               | Dr. M.Senthil Kumar | Mechanical -BOS       |  |
|                                 |                     | Chairman              |  |
|                                 |                     | Professor and Head    | BIST                                     |
| 2                               | Dr .V.Balambica     | (Mechanical           |  |
|                                 |                     | Engineering)          |  |
|                                 |                     | Professor and         | BIST                                     |
| 3                               | Dr .D. Raguraman    | Head( Automobile      |  |
|                                 |                     | Engineering)          |  |
|                                 |                     | Associate Professor   | BIST                                     |
| 4                               | Dr N S Senthur      | ( Mechatronics        |  |
|                                 |                     | Engineering)          |  |
| 5                               | Dr M P Natarajan    | Professor             | BIST                                     |
| 6                               | Dr R Hariharan      | Associate Professor   | BIST                                     |
|                                 |                     | Professor, Department | Anna University                          |
| 7                               | Dr Annamalai        | of Automobile         | Nominee                                  |
|                                 |                     | Engineering, MIT      |  |
|                                 |                     | Prof. & Head          | Subject Expert                           |
| 8                               | Dr J Kuberan        | Mechanical- SKP       |  |
|                                 |                     | Engg. College         |  |
|                                 |                     | Professor –Department | Special Invitee                          |
| 9                               | Dr Papitha          | Of Instrumentation –  |  |
| 2<br>3<br>4<br>5<br>6<br>7<br>8 |                     | MIT Chrompet          |  |

| 10 | Dr G Manikandan                 | Assistant Professor-<br>Hawassa University-<br>Ethiopia                                | Subject Expert-<br>Mechanical                   |
|----|---------------------------------|--|---|
| 11 | Mr Abdul Kareem                 | Assistant Professor Mechanical Engineering-Salalah Institute of Science And Technology | Subject Expert-<br>Mechanical and<br>Automobile |
| 12 | Dr Vijay Ananth<br>Suyamburajan | Assistant Prof Vels Institute of Science And Technology                                | Alumini- Automobile<br>Member                   |
| 13 | Dr Anantha Padmanaban           | Professor Mech. – SSN<br>College Of Engineering  | Alumini –Mechanical<br>Member                   |
| 14 | Mr Ranjeev                      | Valve design and<br>Automation Engineer  | Alumini- Mechatronics member                    |
| 15 | Mr Selvin Blacius               | Senior Analyst- Ford<br>Motor Company  | Industry Expert                                 |
| 16 | Mr P Sharan                     | Project Lead Manager-<br>Accenture   | Industry Expert                                 |

### The following Points were discussed:

- > Vision, Mission, PEOs, POs and PSOs
- > Action taken for the Previous BOS Meeting
- > Members recommendations for implementing NEP 2020.
- > Members deliberation on perceived gaps in existing curriculum and syllabus & suggestions for new curriculum & syllabi for Regulations 2024 (R2024)
- > Members inputs towards upgradation of infrastructure /teaching aids to aid content delivery.
- > Best Practices followed in (External) Members' Institutions

| S.NO | DESCRIPTION& DISCUSSION POINTS  |
|------|---|
| 1.   | The Chairman welcomed the panel members and presented the agenda for the day.                                 |
|      | <b>Dr.RHariharan</b> proposed the welcome address and introduced the panel members.                           |
|      | ✓ Department BOS Coordinator started the meeting with the objective of the BOS meeting.                       |
|      | BOS Coordinator discussed about the previous BOS meeting minutes and  |
|      | the action taken regarding the subjects was discussed.  |
| 2.   | ✓ The panel members approved the list of QP setters nominated by the  |
|      | Department and suggested to include Associate professors also in the mix.                                     |
|      | ✓ CO-PO attainment of the R 24 curriculum presented and suggestions for                                       |
|      | improvement is fixing the target was discussed.   |
|      | ✓ Curriculam was proposed to the panel members and they approved the same.                                    |
|      | ✓ Three Credit Course to be introduced and to decide by: bringing in expertise from Industry, and Institution |
| 3.   | Best Practices Followed was discussed by Dr. M.P. Natarajan:  |
|      | ✓ Students were encouraged to do Mini Projects of their interest and participate in                           |
|      | competitions, during the final year project evaluation the activity will be considered                        |
|      | for credits. Encourage interdisciplinary project.   |
|      | ✓ Students can be left free in 7 <sup>th</sup> OR 8 <sup>th</sup> semester so that they can go for projects   |
|      | Students can collaborate other majors as well/  |
|      | ✓ Industry based projects were projected.   |
|      | Dr.M.P. Natarajan proposed  |
|      | ✓ Students can take elective at any level and the only thing is they should have                              |
|      | completed the prerequisite. For example, a second-year student can choose and 3 <sup>rd</sup>                 |
|      | year elective so there will be a mixture of students. Only thing is they should                               |
|      | complete the number of credits as mentioned by BIHER and additional credits also                              |
|      | can be taken for value addition.  |
| 4.   | The meeting minutes was about the vision, Mission, PSOs and PEOs statement                                    |
|      | changes for the R24 were discussed.   |
|      |   |
|      |   |

| 5  | Mr Selvin Blacius Alumni added that the students can be encouraged to do more online certification courses as Coursera.   |
|----|---|
| 6  | In electronics devices and circuit in 1 <sup>st</sup> Unit title should be DC circuit Analysis and 2 <sup>nd</sup> Unit title is Semiconductor devices. Reference books editions are recommended to be updated. In lab, open-source tools to be used.  In fluid mechanics, Bernoulli's theorem application content need to be included.   |
|    | In sensor and signal conditioning, Course outcome CO 4 and 5 has same objective and can be merged to one. Signal conditioning of some transducers to be given in the 5th unit. In 4 <sup>th</sup> Unit, Bio signals can be added  |
| 7  | Members suggested to give Automotive Electronics as a compulsory elective.  In Maintenance Engineering subject, Smart Maintenance topic can be added.  In Medical electronics more bio signal instruments can be included.  MEMS subject title can be MEMS dynamic and control which can be related to Mechatronics.  In open elective Magic and Mechanics, the hours allocated should be evenly done.  Members suggested to have Arial robotics as one of the professional elective. |
| 8  | Constitution of India course is moved to 6 <sup>th</sup> Semester for the benefit of the lateral entry students and the subject code  |
| 9  | Improve students research and product development funded by BIHER.  |
| 10 | The meeting concluded with all the above-mentioned thoughts and the Vote of thanks was proposed by <b>Dr M.P.Natarajan.</b>   |

| BOS PA | NEL OF MEMBERS               |  |           |
|--------|------------------------------|--|-----------|
| Sl. No | Member                       | Role   | Signature |
| 1      | Dr. M.Senthil Kumar          | Dean School of Mechanical -<br>BOS Chairman  |           |
| 2      | Dr .V.Balambica              | Professor and Head<br>(Mechanical Engineering)   |           |
| 3      | Dr .D. Raguraman             | Professor and<br>Head(Automobile Engineering)  |           |
| 4      | Dr N S Senthur               | Associate Professor (Mechatronics Engineering)   |           |
| 5      | Dr M P Natarajan             | Professor  |           |
| 6      | Dr R Hariharan               | Associate Professor  |           |
| 7      | Dr Annamalai                 | Professor, Department of<br>Automobile Engineering, MIT                                      |           |
| 8      | Dr J Kuberan                 | Prof. & Head Mechanical- SKP<br>Engg. College  |           |
| 9      | Dr Papitha                   | Professor –Department Of<br>Instrumentation –MIT<br>Chrompet                                 |           |
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| 12     | Dr Vijay Ananth Suyamburajan | Assistant Prof Vels Institute of Science And Technology                                      |           |
| 13     | Dr Anantha Padmanaban        | Professor Mech. – SSN College<br>Of Engineering  |           |
| 14     | Mr Ranjeev                   | Valve design and Automation<br>Engineer  |           |
| 15     | Mr Selvin Blacius            | Senior Analyst- Ford Motor<br>Company  |           |
| 16     | Mr P Sharan                  | Project Lead Manager-<br>Accenture   |           |

| PANEL  | OF MEMBERS                   |  |                                     |
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| SI. No | Member                       | Role   | Signature                           |
| 1      | Dr. M.Senthil Kumar          | Dean School of Mechanical -<br>BOS Chairman  | m. L                                |
| 2      | Dr .V.Balambica              | Professor and Head<br>(Mechanical Engineering)   | Ar .                                |
| 3      | Dr .D. Raguraman             | Professor and Head( Automobile Engineering)  | Degreen.                            |
| 4      | Dr .N.S Senthur              | Associate Professor<br>(Mechatronics Engineering)  | N55L_7                              |
| 5      | Dr M. P Natarajan            | Professor  | We work Ja                          |
| 6      | Dr R Hariharan               | Associate Professor  | Mary Jan                            |
| 7      | Dr Annamalai                 | Professor-MIT  | Annamalai                           |
| 8      | Dr J Kuberan                 | Prof. & Head Mechanical-<br>SKP Engg. College  | Knubrolan                           |
| 9      | Dr Papitha                   | Professor –Department Of<br>Instrumentation –MIT<br>Chrompet                                 | Parm                                |
| 10     | Dr G Manikandan              | Assistant Professor- Hawassa<br>University-Ethiopia  | Manikanton                          |
| 11     | Mr Abdul Kareem              | Assistant Professor Mechanical<br>Engineering-Salalah Institute<br>of Science And Technology | Marikanton<br>Ahdul Komus           |
| 12     | Dr Vijay Ananth Suyamburajan | Assistant Prof Vels Institute of Science And Technology                                      | Vijnje                              |
| 13     | Dr Anantha Padmanaban        | Professor Mech. – SSN<br>College Of Engineering  |                                     |
| 14     | Mr Ranjeev                   | Valve design and Automation<br>Engineer  | Dergeenter                          |
| 15     | Mr Selvin Blacius            | Senior Analyst- Ford Motor<br>Company  | SalvinB                             |
| 16     | Mr P Sharan                  | Project Lead Manager-<br>Accenture   | Psharm                              |
| 17     | Mr.Arivukkarasan Raja,       | Delivery Lead Manager-<br>Accenture  | Psharm<br>Anim Raja<br>R. Santhosho |
| 18     | Mr R Santosh Kumar           | Super Auto Forge Limited   | R. Santasho                         |

| BOS PANEL OF MEMBERS |                              |  |                                     |
|----------------------|------------------------------|--|-------------------------------------|
| Sl. No               | Member                       | Role   | Signature                           |
| 1                    | Dr. M.Senthil Kumar          | Dean School of Mechanical -<br>BOS Chairman  | m. L-                               |
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| 5                    | Dr M P Natarajan             | Professor  | Mi wityge                           |
| 6                    | Dr R Hariharan               | Associate Professor  | Kilal                               |
| 7                    | Dr Annamalai                 | Professor, Department of<br>Automobile Engineering, MIT                                      | Amanalai                            |
| 8                    | Dr J Kuberan                 | Prof. & Head Mechanical- SKP Engg. College   | Kuniberm<br>Pany                    |
| 9                    | Dr Papitha                   | Professor –Department Of Instrumentation –MIT Chrompet                                       | Parm                                |
| ,                    |                              |  |                                     |
| 10                   | Dr G Manikandan              | Assistant Professor- Hawassa<br>University-Ethiopia  | Mani Kandan                         |
| 11                   | Mr Abdul Kareem              | Assistant Professor Mechanical<br>Engineering-Salalah Institute of<br>Science And Technology | And V Kreize                        |
| 12                   | Dr Vijay Ananth Suyamburajan | Assistant Prof Vels Institute of Science And Technology                                      | Vijey                               |
| 13                   | Dr Anantha Padmanaban        | Professor Mech. – SSN College<br>Of Engineering  |                                     |
| 14                   | Mr Ranjeev                   | Valve design and Automation<br>Engineer  | Verjeelle                           |
| 15                   | Mr Selvin Blacius            | Senior Analyst- Ford Motor<br>Company  | Refeelle<br>Selvin B<br>R. Santhosh |
| 16                   | Mr P Sharan                  | Project Lead Manager-<br>Accenture   | R. Santhosh.                        |

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