



# SRI RAMAKRISHNA ENGINEERING COLLEGE

[Educational Service : SNR Sons Charitable Trust]  
Vattamalaipalayam, N.G.G.O. Colony Post,  
Coimbatore – 641022.

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## MINUTES OF THE 23<sup>rd</sup> BOARD OF STUDIES MEETING FOR THE UG MECHANICAL ENGINEERING PROGRAMME HELD ON 13.03.2026 AT 03.30 P.M (ONLINE) IN THE DEPARTMENT OF MECHANICAL ENGINEERING.

The following members attended the above meeting.

| S.No | MEMBER                                                                                                                                             | CATEGORY                                                |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| 1.   | Dr.P. Karuppuswamy, Professor & Head,<br>Mechanical Engineering/SREC                                                                               | Chairman                                                |
| 2.   | Dr.P.R.Thyla<br>Professor, Department of Mechanical Engineering,<br>PSG College of Technology, Peelamedu,<br>Coimbatore – 641004.                  | University Nominee                                      |
| 3.   | Dr.R.Senthil raja<br>Professor and Head,<br>Department of Automobile Engineering,<br>Government College of Engineering, (IRTT),<br>Erode – 638316. | University Nominee                                      |
| 4.   | Dr.Jayabal Kaliappan<br>Professor, Department of Mechanical Engineering,<br>IIITDM, Kanchipuram.                                                   | Subject expert from Central<br>University               |
| 5.   | Dr. G.Murali<br>Professor, Department of Mechanical Engineering<br>K L E F Deemed to be University,<br>Guntur Dt., Andra Pradesh.                  | Subject expert from<br>outside the parent<br>University |
| 6.   | Mr.N.C.Shashidhar<br>CEO & Director,<br>Advance Mechanical Services Private Limited,<br>Bangalore.                                                 | Industry Expert                                         |
| 7.   | Mr.V.Karthikeyan<br>Sr. Assistant General Manager, Product<br>Development,                                                                         | Meritorious Alumni                                      |

|     |                                                                                                                                                                                                          |                            |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
|     | PAI Machines, Coimbatore.                                                                                                                                                                                |                            |
| 8.  | Dr.T.P.D.Rajan<br>Chief Scientist,<br>CSIR-National Institute for Interdisciplinary Science<br>and Technology (NIIST),<br>Ministry of Science & Technology,<br>Government of India, Trivandrum – 695019. | Special Invitee            |
| 9.  | Dr.T.R.Sathish Kumar, AP/ Mech.Engg., SREC                                                                                                                                                               | Department BoS coordinator |
| 10. | Dr.C.Bhagyanathan, Prof./ Mech. Engg., SREC                                                                                                                                                              | Member                     |
| 11. | Dr. N.Gunasekar, Asso.P/ Mech. Engg., SREC                                                                                                                                                               | Member                     |
| 12. | Dr.J.Yoganandh, Asso.P/ Mech. Engg., SREC                                                                                                                                                                | Member                     |
| 13. | Dr.T.Velmurugan, AP/ Mech. Engg., SREC                                                                                                                                                                   | Member                     |
| 14. | Dr.M.Ramesh, AP/ Mech. Engg., SREC                                                                                                                                                                       | Member                     |
| 15. | Mr.M.S.Balasanthosh, AP/ Mech. Engg.,                                                                                                                                                                    | Member                     |
| 16. | Dr.S.Sathish, AP/ Mech. Engg., SREC                                                                                                                                                                      | Member                     |
| 17. | Dr.B.Pranesh, AP/ Mech. Engg., SREC                                                                                                                                                                      | Member                     |
| 18. | Dr.V.Tharanidharan, AP/Maths, SREC                                                                                                                                                                       | Member                     |

Dr. P. Karuppuswamy, Chairperson of the Board of Studies, presided over the 23<sup>rd</sup> BoS meeting and warmly welcomed all the members. After a brief introduction, the agenda items listed were taken up for discussion and the following resolutions were passed. He initiated the meeting with a presentation on Vision, Mission of the Department and PEOs, PSOs and POs of the B.E Mechanical Engineering program.

### **Revised Regulations 2020**

#### **ITEM No.1 – Revised Regulations 2020 & Regulations 2025**

- It is resolved that Revised Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit System) will be followed for all B.E./B.Tech. Programmes for students admitted in the Academic year 2022-23, 2023-24 and 2024-25.
- It is resolved that Regulations 2025 (Outcome based Curriculum through Choice based Credit System,) will be followed for all B.E./B.Tech programmes for students admitted in the Academic year 2025-26.



- It is resolved that the curriculum and the syllabi for the Regulations 2025 be approved for the V and VI semesters of B.E Mechanical engineering programme. The listed courses will be passed in appropriate boards.

### Semester V

| S.No                         | Course Code | Course Title                      | Category | L | T | P | C         |
|------------------------------|-------------|-----------------------------------|----------|---|---|---|-----------|
| <b>THEORY</b>                |             |                                   |          |   |   |   |           |
| 1.                           | 25MEXXXX    | Design of Machine Elements        | PC       | 3 | 1 | 0 | 4         |
| 2.                           | 25MEXXXX    | Digital Manufacturing             | PC       | 2 | 0 | 0 | 2         |
| 3.                           | 25MEXXXX    | AI for Mechanical Systems         | MDC      | 3 | 0 | 0 | 3         |
| 4.                           | 25MEXXXX    | Additive Manufacturing Technology | SEC      | 2 | 0 | 0 | 2         |
| 5.                           | 25MEXXXX    | Professional Elective 1           | PEC      | 3 | 0 | 0 | 3         |
| 6.                           | 25MEXXXX    | Open Elective 2                   | OEC      | 3 | 0 | 0 | 3         |
| <b>THEORY CUM LABORATORY</b> |             |                                   |          |   |   |   |           |
| 7.                           | 25MEXXXX    | Thermal Engineering               | PC       | 3 | 0 | 2 | 4         |
| <b>PRACTICALS</b>            |             |                                   |          |   |   |   |           |
| 8.                           | 25MEXXXX    | CAD/CAM Laboratory                | PC       | 0 | 0 | 3 | 1         |
| <b>Total</b>                 |             |                                   |          |   |   |   | <b>22</b> |

### Semester VI

| S.No                         | Course Code | Course Title                          | Category | L | T | P | C         |
|------------------------------|-------------|---------------------------------------|----------|---|---|---|-----------|
| <b>THEORY</b>                |             |                                       |          |   |   |   |           |
| 1.                           | 25MEXXXX    | Design of Transmission Systems        | PC       | 3 | 0 | 0 | 3         |
| 2.                           | 25MEXXXX    | Total Quality Management              | HSSM     | 3 | 0 | 0 | 3         |
| 3.                           | 25MEXXXX    | Simulation of Mechanical Systems      | MDC      | 3 | 0 | 0 | 3         |
| 4.                           | 25MEXXXX    | Professional Elective 2               | PEC      | 3 | 0 | 0 | 3         |
| <b>THEORY CUM LABORATORY</b> |             |                                       |          |   |   |   |           |
| 5.                           | 25MEXXXX    | Mechanical Measurements and Metrology | PC       | 2 | 0 | 2 | 3         |
| 6.                           | 25MEXXXX    | Heat Transfer                         | PC       | 3 | 0 | 2 | 4         |
| <b>PRACTICALS</b>            |             |                                       |          |   |   |   |           |
| 7.                           | 25MEXXXX    | Multidisciplinary Project             | ELC      | 2 | 0 | 0 | 2         |
| 8.                           | 25MEXXXX    | Internship / Field Project            | ELC      |   |   |   |           |
| <b>Total</b>                 |             |                                       |          |   |   |   | <b>21</b> |

- It is resolved that the syllabi for the following new Professional Elective courses under Regulations 2025 be approved and passed.

| Course Code          | Course Title                         | L | T | P | C |
|----------------------|--------------------------------------|---|---|---|---|
| <b>DESIGN</b>        |                                      |   |   |   |   |
| 25MEXXXX             | Machine Tool Design                  | 3 | 0 | 0 | 3 |
| 25MEXXXX             | Design for Manufacturing             | 3 | 0 | 0 | 3 |
| 25MEXXXX             | Computer Aided Design                | 3 | 0 | 0 | 3 |
| 25MEXXXX             | Design of Experiments                | 3 | 0 | 0 | 3 |
| 25MEXXXX             | Automotive Electronics               | 3 | 0 | 0 | 3 |
| <b>MANUFACTURING</b> |                                      |   |   |   |   |
| 25MEXXXX             | Metal Joining Processes              | 3 | 0 | 0 | 3 |
| 25MEXXXX             | Green and Sustainable Manufacturing  | 3 | 0 | 0 | 3 |
| 25MEXXXX             | Lean Manufacturing                   | 3 | 0 | 0 | 3 |
| 25MEXXXX             | Composite Materials                  | 3 | 0 | 0 | 3 |
| <b>THERMAL</b>       |                                      |   |   |   |   |
| 25MEXXXX             | Hydrogen and Fuel Cell Technology    | 3 | 0 | 0 | 3 |
| 25MEXXXX             | Energy Conservation and Management   | 3 | 0 | 0 | 3 |
| 25MEXXXX             | Renewable Energy Sources and Systems | 3 | 0 | 0 | 3 |

- It is resolved that the syllabi for the following new Open Elective courses under Regulations 2025 be approved and passed.

| Course Code | Course Title                 | L | T | P | C |
|-------------|------------------------------|---|---|---|---|
| 25MEXXXX    | Intellectual Property Rights | 3 | 0 | 0 | 3 |

- It is resolved that the syllabi for the following new Multidisciplinary courses (MDC) under Regulations 2025 be approved and passed.

| Course Code | Course Title                          | L | T | P | C |
|-------------|---------------------------------------|---|---|---|---|
| 25MEXXXX    | Design for Manufacturing and Assembly | 3 | 0 | 0 | 3 |



- It is resolved that the syllabi for the following new Skill Enhancement courses (SEC) under Regulations 2025 be approved and passed.

| Course Code | Course Title                      | L | T | P | C |
|-------------|-----------------------------------|---|---|---|---|
| 25MEXXXX    | Additive Manufacturing Technology | 2 | 0 | 0 | 2 |

- It is resolved that the syllabi for the following new Humanities Social Science and Management Courses (HSSM) are offered to other B.E Degree Programmes under Regulations 2025 be approved and passed.

| Course Code | Course Title                             | L | T | P | C |
|-------------|------------------------------------------|---|---|---|---|
| 25MEXXXX    | Engineering Project Management           | 3 | 0 | 0 | 3 |
| 25MEXXXX    | Fundamentals of Management for Engineers | 3 | 0 | 0 | 3 |

**ITEM No.2 – List of new NPTEL online courses to be included**

- It is resolved that the following NPTEL courses are approved for credit transfer during April/May 2026.

| S.No | NPTEL Course Code | NPTEL Course Title                                             | Credits | Course Duration | Equivalent Professional / Open Elective in SREC Curriculum |
|------|-------------------|----------------------------------------------------------------|---------|-----------------|------------------------------------------------------------|
| 1    | noc26-mm46        | Welding Processes                                              | 3       | 12 Weeks        | 20ME2E08 Metal Joining Processes                           |
| 2    | noc26-me15        | Computational Fluid Dynamics for Incompressible Flows          | 3       | 12 Weeks        | 20ME2E11 Computational Fluid Dynamics                      |
| 3    | noc26-ge38        | Non-conventional Energy Resources                              | 3       | 12 Weeks        | 20ME2E12 Renewable Energy Sources and Systems              |
| 4    | noc26-me49        | Product Design and Manufacturing                               | 3       | 12 Weeks        | 20ME2E21 Product Design                                    |
| 5    | noc26-cs38        | Introduction to Industry 4.0 and Industrial Internet of Things | 3       | 12 Weeks        | 20ME2E14 Industry 4.0                                      |

| S.No | NPTEL Course Code | NPTEL Course Title                                                               | Credits | Course Duration | Equivalent Professional / Open Elective in SREC Curriculum |
|------|-------------------|----------------------------------------------------------------------------------|---------|-----------------|------------------------------------------------------------|
| 6    | noc26-me74        | Operations Management                                                            | 3       | 12 Weeks        | 20ME2E38 Operations Management                             |
| 7    | noc26-me77        | Fundamentals of Surface Engineering: Mechanisms, Processes and Characterizations | 3       | 12 Weeks        | 20ME2E47 Surface Engineering                               |

### ITEM No.3 – Result Analysis for the Academic Year 2025-26.

- It is resolved that the Result Analysis for the Academic Year 2025-26 (Semesters VII/V/III) are approved and passed.

| Semester | Appeared | Passed | Pass % | Grade % |    |    |    |    |   |
|----------|----------|--------|--------|---------|----|----|----|----|---|
|          |          |        |        | O       | A+ | A  | B+ | B  | C |
| VII      | 97       | 93     | 95.88  | 8       | 12 | 28 | 37 | 9  | 6 |
| V        | 92       | 52     | 56.52  | 4       | 11 | 37 | 28 | 15 | 5 |
| III      | 97       | 51     | 52.58  | 6       | 12 | 44 | 26 | 9  | 3 |
| I        | 92       | 70     | 76.09  | 10      | 22 | 32 | 21 | 10 | 5 |

### ITEM No.4 – List of Honors/Minor course and Eligible students

- It is resolved that the following Honors/Minor courses are offered during the even semester of Academic Year 2025 - 2026 and the following eligible students be approved for the Honors / minor in B.E. Mechanical Engineering degree programme.

| S.No                  | Course Code | Course Title                 | Credits | Mode of Delivery | Offered by |
|-----------------------|-------------|------------------------------|---------|------------------|------------|
| <b>Batch: 2023-27</b> |             |                              |         |                  |            |
| 3                     | 20ME2E31    | Robot Manipulator Design     | 3       | Offline          | SREC       |
| 4                     | 20ME2E32    | Embedded Systems Engineering | 3       | Offline          | SREC       |



| S.No.                            | Roll No.    | Name of Student  |
|----------------------------------|-------------|------------------|
| <b>Specialization - Robotics</b> |             |                  |
| <b>Batch: 2023-27</b>            |             |                  |
| 1                                | 71812304017 | Dhanesh G        |
| 2                                | 71812304042 | Kowshik Raj Y    |
| 3                                | 71812304103 | Melnick Anto R S |
| 4                                | 71812304117 | Rashmitha S      |
| 5                                | 71812304122 | Samyukktha R     |
| 6                                | 71812304134 | Swathi V         |

#### **ITEM No.5 – Ratification of change in course name**

The Board ratified the change in the course name of the course “20ME286 Computer Aided Engineering Laboratory” to “20ME286 Computational Aided Engineering Lab” with same syllabus content offered under Revised Regulations 2020. The change of the course name is made to better reflect the computational aspects of the laboratory course. The change in course name is in effect with batch 2022 -26 onwards under RR2020.

#### **ITEM No.6 – Suggestions/Comments from External Expert Members and University Nominee.**

1. Dr. Jayabal enquired about the reason for the low pass percentage in the V Semester examination results. Dr. Karuppuswamy responded that the higher failure rate in numerical-oriented courses such as Design of Machine Elements and Heat Transfer is mainly due to inadequate practice by students. He further stated that students are being advised to practice more and improve their performance in the forthcoming examinations. Additionally, remedial classes for slow learners and extra coaching sessions are being conducted to provide necessary academic support.
2. Dr. Jayabal suggested including the Machine Design book authored by Shigley as a textbook and adding another book by Bhandari under the textbook category. He also recommended moving the book by Robert L. Norton to the reference book category.



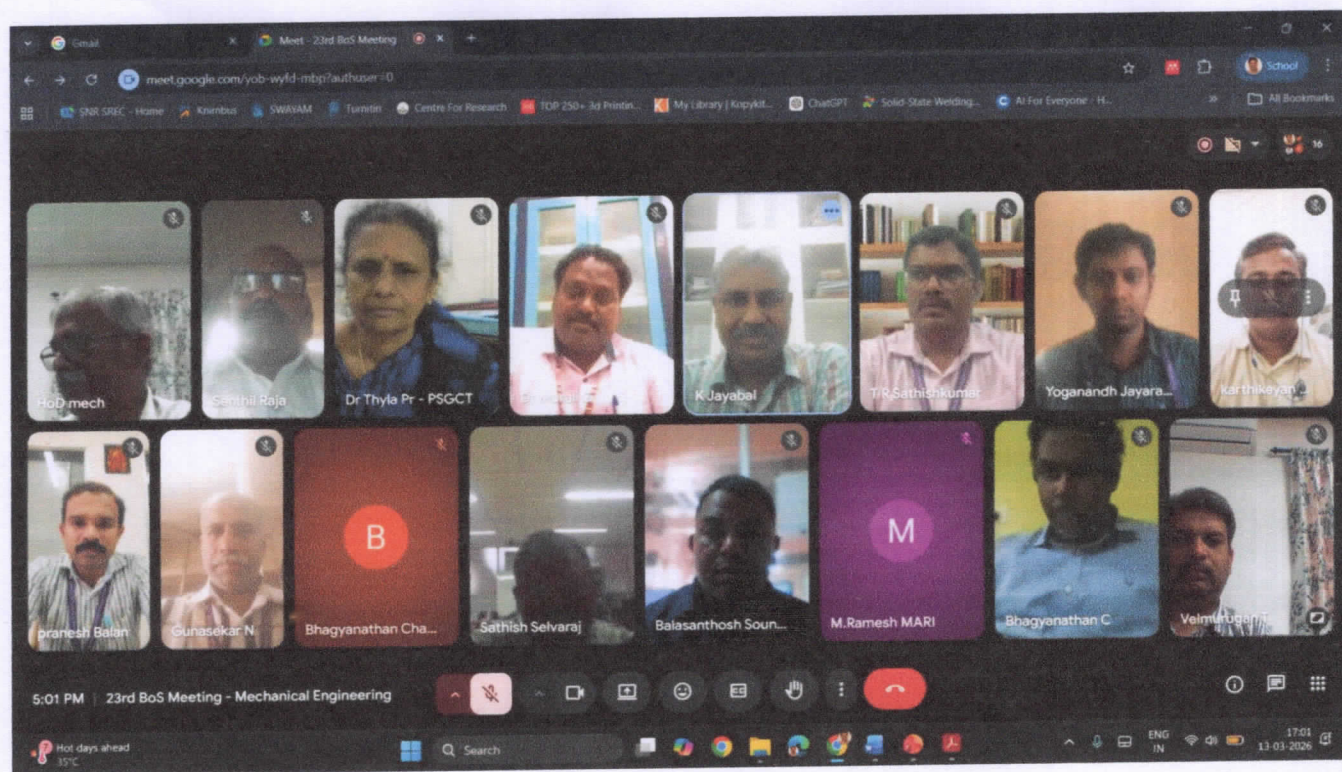
3. Dr. Thyla suggested including more recent books in the textbook category for the course Digital Manufacturing, as it is an emerging field.
4. Dr. Thyla enquired about the mode of evaluation for the course AI for Mechanical Systems. Dr. Karuppuswamy responded that greater weightage will be given to the laboratory component while delivering the course, and therefore an end-semester practical examination will be conducted for evaluation.
5. Dr. Jayabal opined that since the course Digital Manufacturing has significant practical content; the L T P C should be changed from 2 0 0 2 to 1 0 2 2.
6. Dr. Senthil Raja enquired about the evaluation pattern for the course Additive Manufacturing Technology. Dr. Karuppuswamy responded that, as it is a skill enhancement course, evaluation will be carried out through continuous assessment tests.
7. Dr. Senthil Raja enquired about the inclusion of emission testing on IC engines in the course Thermal Engineering. Dr. Karuppuswamy confirmed that emission testing is included in the laboratory component of the course.
8. Dr. Murali suggested checking for any overlap in course contents related to Leadership Qualities in the courses Total Quality Management (TQM) and Fundamentals of Management for Engineers. Dr. Karuppuswamy assured for the same.
9. Dr. Thyla enquired about the faculty responsible for handling the course Simulation of Mechanical Systems, particularly topics such as the PID Controller. Dr. Karuppuswamy clarified that the course will be handled by faculty from the Mechanical Engineering Department, with support from the Electronics and Instrumentation Engineering Department.
10. Dr. Senthil Raja enquired about incorporating field visits or mini-projects in the course Heat Transfer and suggested including such components. Dr. Karuppuswamy responded that, as part of Active Learning Methodology (ALM), which is similar to a mini-project, students solve heat transfer problems using simulation software such as ANSYS and verify the results with their numerical solutions. Dr. Thyla asked whether marks would be awarded for such activities under ALM, and Dr. Karuppuswamy confirmed that marks will be awarded.
11. Dr. Murali suggested including the Heat Transfer textbook authored by Yunus A. Cengel under the reference book category.



12. Dr. Jayabal enquired about the semester in which the Internship/Field Project would be evaluated, whether during the 6th or 7th semester. Dr. Karuppuswamy responded that the students have to complete the internship during second year or third year before the commencement of 7<sup>th</sup> semester. Evaluation will be carried after reporting to the department.
13. Dr. Thyla enquired about offering three HSSM category courses in a single slot in the VI Semester. She further noted that courses offered to other departments need not necessarily be included in the Mechanical Engineering curriculum. Dr. Karuppuswamy responded that the suggestion will be considered.

Dr. Karuppuswamy, convener thanked all the members for their valuable suggestions.

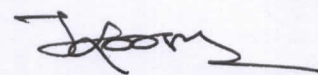
## Screenshot of the 23<sup>rd</sup> BoS Meeting for B.E Mechanical Engineering Programme:





**Members Present for the Meeting of 23<sup>rd</sup> BoS Meeting for B.E Mechanical Engineering Program:**

| S.No | Member                | Designation                                       |
|------|-----------------------|---------------------------------------------------|
| 1.   | Dr.P. Karuppuswamy    | Chairman                                          |
| 2.   | Dr.P.R.Thyla,         | University Nominee                                |
| 3.   | Dr.R.Senthil raja,    | University Nominee                                |
| 4.   | Dr.Jayabal Kaliappan, | Subject expert from CentralUniversity             |
| 5.   | Dr. G.Murali,         | Subject expert from outside the parent University |
| 6.   | Mr.V.Karthikeyan,     | Meritorious Alumni                                |
| 7.   | Dr.T.R.Sathish Kumar  | Department BoS coordinator                        |
| 8.   | Dr.C.Bhagyanathan     | Member                                            |
| 9.   | Dr. N.Gunasekar       | Member                                            |
| 10.  | Dr.J.Yoganandh        | Member                                            |
| 11.  | Dr.T.Velmurugan       | Member                                            |
| 12.  | Dr.M.Ramesh           | Member                                            |
| 13.  | Mr.M.S.Balasanthosh   | Member                                            |
| 14.  | Dr.S.Sathish          | Member                                            |
| 15.  | Dr.B.Pranesh          | Member                                            |
| 16.  | Dr.V.Tharanidharan    | Member                                            |



**CHAIRPERSON  
BOARD OF STUDIES  
Department of Mechanical Engineering**



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## **MINUTES OF THE 22<sup>nd</sup> BOARD OF STUDIES MEETING FOR THE UG MECHANICAL ENGINEERING PROGRAMME HELD ON 08.11.2025 AT 10.30 A.M IN THE DEPARTMENT OF MECHANICAL ENGINEERING**

The following members attended the above meeting.

| S.No | MEMBER                                                                                                                                             | CATEGORY                                                |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| 1.   | Dr.P. Karuppuswamy, Professor & Head,<br>Mechanical Engineering/SREC                                                                               | Chairman                                                |
| 2.   | Dr.P.R.Thyla<br>Professor, Department of Mechanical Engineering,<br>PSG College of Technology, Peelamedu,<br>Coimbatore – 641004.                  | University Nominee                                      |
| 3.   | Dr.R.Senthil raja<br>Professor and Head, Department of Automobile<br>Engineering,<br>Government College of Engineering, (IRTT),<br>Erode – 638316. | University Nominee                                      |
| 4.   | Dr.Jayabal Kaliappan<br>Professor, Department of Mechanical Engineering,<br>IIITDM, Kanchipuram.                                                   | Subject expert from Central<br>University               |
| 5.   | Dr. G.Murali<br>Professor, Department of Mechanical Engineering<br>K L E F Deemed to be University,<br>Guntur Dt., Andra Pradesh.                  | Subject expert from<br>outside the parent<br>University |
| 6.   | Mr.N.C.Shashidhar<br>CEO & Director,<br>Advance Mechanical Services Private Limited,<br>Bangalore.                                                 | Industry Expert                                         |
| 7.   | Mr.V.Karthikeyan<br>Sr. Assistant General Manager, Product                                                                                         | Meritorious Alumni                                      |



|     |                                                                                                                                                                                                                     |                            |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
|     | Development,<br>PAI Machines, Coimbatore.                                                                                                                                                                           |                            |
| 8.  | Mr.T.P.D.Rajan<br>Senior Principal Scientist,<br>CSIR-National Institute for Interdisciplinary Science<br>and Technology (NIIST),<br>Ministry of Science & Technology, Government of<br>India, Trivandrum – 695019. | Special Invitee            |
| 9.  | Dr.T.R.Sathish Kumar, AP/ Mech.Engg., SREC                                                                                                                                                                          | Department BoS coordinator |
| 10. | Dr.C.Bhagyanathan, Asso.P/ Mech. Engg., SREC                                                                                                                                                                        | Member                     |
| 11. | Dr. N.Gunasekar, Asso.P/ Mech. Engg., SREC                                                                                                                                                                          | Member                     |
| 12. | Dr.J.Yoganandh, Asso.P/ Mech. Engg., SREC                                                                                                                                                                           | Member                     |
| 13. | Dr.T.Velmurugan, AP/ Mech. Engg., SREC                                                                                                                                                                              | Member                     |
| 14. | Dr.M.Ramesh, AP/ Mech. Engg., SREC                                                                                                                                                                                  | Member                     |
| 15. | Mr.M.S.Balasanthosh, AP/ Mech. Engg.,                                                                                                                                                                               | Member                     |
| 16. | Dr.S.Sathish, AP/ Mech. Engg., SREC                                                                                                                                                                                 | Member                     |
| 17. | Dr.B.Pranesh, AP/ Mech. Engg., SREC                                                                                                                                                                                 | Member                     |
| 18. | Dr.V.Tharanidharan, AP/Maths, SREC                                                                                                                                                                                  | Member                     |

Dr. P. Karuppuswamy, Chairperson of the Board of Studies, presided over the 22<sup>nd</sup> BoS meeting and warmly welcomed all the members. After a brief introduction, the agenda items listed were taken up for discussion and the following resolutions were passed. He initiated the meeting with a presentation on Vision, Mission of the Department and PEOs, PSOs and POs of the B.E Mechanical Engineering program.

### **Revised Regulations 2020**

#### **ITEM No.1 – Revised Regulations 2020**

- It is resolved that Revised Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit System) will be followed for all B.E./B.Tech. Programmes for students admitted in the Academic year 2022-23, 2023-24 and 2024-25.

#### **ITEM No.2 – List of new NPTEL online courses to be included**

- It is resolved that the following NPTEL courses are approved for credit transfer during Nov/Dec 2025.

| S.No | NPTEL Course Code | NPTEL Course Title                                             | Credits | Course Duration | Equivalent Professional / Open Elective in SREC Curriculum |
|------|-------------------|----------------------------------------------------------------|---------|-----------------|------------------------------------------------------------|
| 1    | noc25-de23        | Ergonomics Research Techniques                                 | 3       | 12 Weeks        | 20ME2E17 Ergonomics                                        |
| 2    | noc25-me160       | Vibrations of Plates and Shells                                | 3       | 12 Weeks        | 20ME2E04 Mechanical Vibration                              |
| 3    | noc25-me165       | Computational Fluid Dynamics                                   | 3       | 12 Weeks        | 20ME2E11 Computational Fluid Dynamic                       |
| 4    | noc25-me122       | Work System Design                                             | 3       | 12 Weeks        | 20ME2E21 Product Design and Development Strategies         |
| 5    | noc25-me178       | Sustainable Energy Technology                                  | 3       | 12 Weeks        | 20ME2E12 Renewable Energy Sources and Systems              |
| 6    | noc25-cs146       | Introduction to Industry 4.0 and Industrial Internet of Things | 3       | 12 Weeks        | 20ME2E14 Industry 4.0                                      |
| 7    | noc25-me109       | Engineering Fracture Mechanics                                 | 3       | 12 Weeks        | 20ME2E20 Fracture Mechanics                                |
| 8    | noc25-me136       | Introduction to Composites                                     | 3       | 12 Weeks        | 20ME2E06 Composite Materials                               |
| 9    | noc25-me137       | Computational Continuum Mechanics                              | 3       | 12 Weeks        | 20ME2E44 Continuum Mechanics                               |

### ITEM No.3 – Result Analysis for the Academic Year 2024-25.

- It is resolved that the Result Analysis for the Academic Year 2024-25 (Semesters VIII/VI/IV/II) are approved and passed.

| Semester | Appeared | Passed | Pass % | Grade % |    |    |    |     |   |
|----------|----------|--------|--------|---------|----|----|----|-----|---|
|          |          |        |        | O       | A+ | A  | B+ | B   | C |
| VIII     | 93       | 93     | 100    | 0.8     | 23 | 56 | 19 | 1.2 | 0 |
| VI       | 96       | 70     | 72.92  | 4       | 12 | 43 | 26 | 11  | 4 |
| IV       | 93       | 46     | 49.46  | 6       | 12 | 35 | 32 | 11  | 4 |
| II       | 83       | 59     | 71.08  | 5       | 15 | 36 | 23 | 13  | 8 |



**ITEM No.4 – List of Honors/Minor course and Eligible students**

- It is resolved that the following Honors/Minor courses are offered during the odd semester of Academic Year 2025 - 2026 and the following eligible students be approved for the Honors / minor in B.E. Mechanical Engineering degree programme.

| S.No                  | Course Code | Course Title                       | Credits | Mode of Delivery | Offered by |
|-----------------------|-------------|------------------------------------|---------|------------------|------------|
| <b>Batch: 2022-26</b> |             |                                    |         |                  |            |
| 1                     | 20ME2E33    | Machine Vision in Robotics         | 3       | Offline          | SREC       |
| 2                     | 20ME2E25    | Robotic Applications               | 3       | Offline          | SREC       |
| <b>Batch: 2023-27</b> |             |                                    |         |                  |            |
| 3                     | 20ME2E28    | Robotic Programming and ROS        | 3       | Offline          | SREC       |
| 4                     | 20ME2E29    | Digital System and Microcontroller | 3       | Offline          | SREC       |

| S.No.                            | Roll No.    | Name of Student   |
|----------------------------------|-------------|-------------------|
| <b>Specialization - Robotics</b> |             |                   |
| <b>Batch: 2023-27</b>            |             |                   |
| 1                                | 71812304017 | Dhanesh G         |
| 2                                | 71812304042 | Kowshik Raj Y     |
| 3                                | 71812304103 | Melnick Anto R S  |
| 4                                | 71812304117 | Rashmitha S       |
| 5                                | 71812304122 | Samyukktha R      |
| 6                                | 71812304134 | Swathi V          |
| <b>Batch: 2022-26</b>            |             |                   |
| 1                                | 71812204149 | Sathyanarayanan S |
| 2                                | 71812204150 | Rangesh Prabhu B  |

**ITEM No.5 – List of Mandatory courses completed**

- It is resolved that the following Mandatory courses be approved for the student in B.E. Mechanical degree Programme.

**Batch: 2023 - 2027**

| S. No | Mandatory Course        | Course Code | No. of Students Completed |
|-------|-------------------------|-------------|---------------------------|
| 1.    | Technical Certification | 20MC275     | 02                        |

**ITEM No.6 – List of Internship/Inplant training**

- It is resolved that the following students have completed 4/6 weeks of Internship/Inplant training be approved for the student in B.E Mechanical Engineering programme.

**Batch: 2022 – 2026**

| S.No | Industry                                                          | No. of Students Completed |
|------|-------------------------------------------------------------------|---------------------------|
| 1    | Ambal Automobiles, Coimbatore                                     | 4                         |
| 2    | Anaamalais Toyota Service Centre, Coimbatore                      | 1                         |
| 3    | Artispec Technologies Pvt Ltd, Coimbatore                         | 1                         |
| 4    | D.R.Tech, Coimbatore                                              | 1                         |
| 5    | DAJ Engineering, Coimbatore                                       | 1                         |
| 6    | Deccan Pumps Pvt Ltd, Coimbatore                                  | 1                         |
| 7    | Elgi Equipments Limited, Coimbatore                               | 6                         |
| 8    | ELTEC Engineering, Coimbatore                                     | 3                         |
| 9    | Engine Factory, Avadi                                             | 2                         |
| 10   | Excel Plast, Coimbatore                                           | 6                         |
| 11   | Generic Automech Engineering Private Ltd, Coimbatore              | 3                         |
| 12   | Jayam Engineering & Tools, Coimbatore                             | 2                         |
| 13   | Larsen And Toubro Limited - PMSC, Coimbatore                      | 2                         |
| 14   | Mahindra CIE Automotive Limited (Bill Forge division), Coimbatore | 2                         |
| 15   | MEG, Coimbatore                                                   | 1                         |
| 16   | NLC India, Neyveli                                                | 8                         |
| 17   | Rabwin Industries Private Limited, Coimbatore                     | 1                         |
| 18   | Rane Engine Valve Limited, Chennai                                | 2                         |
| 19   | RKS Metal Screens, Coimbatore                                     | 3                         |
| 20   | Roots Industries India Private Limited, Coimbatore                | 2                         |



|    |                                                   |   |
|----|---------------------------------------------------|---|
| 21 | Sakthi Sugars Ltd, Erode                          | 1 |
| 22 | Salzer Electronics Limited, Coimbatore.           | 3 |
| 23 | SM Group of Companies, Coimbatore                 | 3 |
| 24 | Smart way Industrial Automation, Coimbatore       | 4 |
| 25 | Sri Mahalakshmi Engineering Works, Coimbatore     | 2 |
| 26 | Sri Venkateshwara Metal Works, Coimbatore         | 1 |
| 27 | Star Engineering, Coimbatore                      | 2 |
| 28 | Steel Authority of India Limited, Salem           | 1 |
| 29 | Toolcom Innovation solutions Pvt. Ltd, Coimbatore | 1 |

### **Regulations 2025**

#### **ITEM No.7 – Regulations 2025**

- It is resolved that Regulations 2025 (Outcome based Curriculum through Choice based Credit System,) will be followed for all B.E./B.Tech/M.Tech (Int). programmes for students admitted in the Academic year 2025-26 and onwards.
- It is resolved that the curriculum and the syllabi for the Regulations 2025 be approved for the III and IV semesters of B.E Mechanical engineering programme. The listed courses will be passed in appropriate boards.

| <b>SEMESTER - III</b>        |                                     |                 |          |          |          |           |
|------------------------------|-------------------------------------|-----------------|----------|----------|----------|-----------|
| <b>Sl.No.</b>                | <b>Course Title</b>                 | <b>Category</b> | <b>L</b> | <b>T</b> | <b>P</b> | <b>C</b>  |
| 1                            | Numerical Methods                   | BSC             | 3        | 1        | 0        | 4         |
| 2                            | Engineering Thermodynamics          | ESC             | 2        | 1        | 0        | 3         |
| 3                            | Strength of Materials               | PC              | 2        | 1        | 0        | 3         |
| 4                            | Ability Enhancement Course          | AEC             | 2        | 0        | 0        | 2         |
| 5                            | Value Added Course -I               | VAC             | 2        | 0        | 0        | 2         |
| 6                            | Skill Enhancement Course            | SEC             | 2        | 0        | 0        | 2         |
| <b>THEORY CUM PRACTICALS</b> |                                     |                 |          |          |          |           |
| 7                            | Manufacturing Process               | PC              | 3        | 0        | 2        | 4         |
| <b>PRACTICALS</b>            |                                     |                 |          |          |          |           |
| 8                            | Design for Manufacturing Laboratory | PC              | 0        | 0        | 3        | 1         |
| 9                            | Mini Project                        | PC              |          |          |          |           |
| <b>Total</b>                 |                                     |                 |          |          |          | <b>21</b> |

| SEMESTER - IV         |                               |          |   |   |   |           |
|-----------------------|-------------------------------|----------|---|---|---|-----------|
| Sl.No.                | Course Title                  | Category | L | T | P | C         |
| 1                     | Industrial Automation         | ESC      | 2 | 0 | 0 | 2         |
| 2                     | IIoT / Industrial Robotics    | MMC      | 3 | 0 | 0 | 3         |
| 3                     | Design Thinking               | AEC      | 2 | 0 | 0 | 2         |
| 4                     | Open Elective - 1             | OEC      | 3 | 0 | 0 | 3         |
| 5                     | Value Added Course -2         | VAC      | 2 | 0 | 0 | 2         |
| 6                     | Vedic Mathematics             | LAC      | 2 | 0 | 0 | 2         |
| THEORY CUM PRACTICALS |                               |          |   |   |   |           |
| 7                     | Theory of Machines            | PC       | 2 | 1 | 2 | 4         |
| 8                     | Fluid Mechanics and Machinery | PC       | 2 | 1 | 2 | 4         |
| PRACTICALS            |                               |          |   |   |   |           |
| 9                     | Mini Project                  | PC       | 0 | 0 | 2 | 2         |
| <b>Total</b>          |                               |          |   |   |   | <b>24</b> |

- It is resolved that the syllabi for the following new Open Elective courses under Regulations 2025 be approved and passed.

| Course Code | Course Title          | L | T | P | C |
|-------------|-----------------------|---|---|---|---|
| 25MEXXXX    | Engineering Economics | 3 | 0 | 0 | 3 |

- It is resolved that the syllabi for the following new Multidisciplinary Elective courses (MDC) under Regulations 2025 be approved and passed.

| Course Code | Course Title                                       | L | T | P | C |
|-------------|----------------------------------------------------|---|---|---|---|
| 25MEXXXX    | Manufacturing Process Planning and Cost Estimation | 3 | 0 | 0 | 3 |
| 25MEXXXX    | 3D Printing in Construction                        | 3 | 0 | 0 | 3 |

- It is resolved that the syllabi for the following new Ability Enhancement courses (AEC) under Regulations 2025 be approved and passed.



| Course Code | Course Title    | L | T | P | C |
|-------------|-----------------|---|---|---|---|
| 25MEXXXX    | Design Thinking | 2 | 0 | 0 | 2 |

- It is resolved that the syllabi for the following new Skill Enhancement courses (SEC) under Regulations 2025 be approved and passed.

| Course Code | Course Title                                    | L | T | P | C |
|-------------|-------------------------------------------------|---|---|---|---|
| 25MEXXXX    | Simulation for Mechanical Engineering           | 2 | 0 | 0 | 2 |
| 25MEXXXX    | Augmented Reality (AR) and Virtual Reality (VR) | 2 | 0 | 0 | 2 |

- It is resolved that the syllabi for the following new Value-Added courses (VAC)) under Regulations 2025 be approved and passed.

| Course Code | Course Title                          | L | T | P | C |
|-------------|---------------------------------------|---|---|---|---|
| 25MEXXXX    | Data Analytics                        | 2 | 0 | 0 | 2 |
| 25MEXXXX    | Intellectual Property Rights          | 2 | 0 | 0 | 2 |
| 25MEXXXX    | Project Management                    | 2 | 0 | 0 | 2 |
| 25MEXXXX    | Circular Economy and Waste Management | 2 | 0 | 0 | 2 |

- It is resolved that the following Mandatory courses be approved for the student in B.E. Mechanical Engineering Degree Programme.

| Course Code | Course Title - Professional Society Activities                          |
|-------------|-------------------------------------------------------------------------|
| 25MEXXXX    | Mechanical Engineering Association                                      |
| 25MEXXXX    | Institution of Engineers                                                |
| 25MEXXXX    | Indian Society for Heating Refrigerating and Air Conditioning Engineers |
| 25MEXXXX    | Indian Foundrymen Association                                           |

**ITEM No.8 – Suggestions/Comments from External Expert Members and University Nominee.**

1. Dr. Jayabal enquired about the low pass percentage in the IV Semester Mathematics course. Dr. Senthilraja sought clarification on the corrective measures to be taken for improvement. Dr. Karuppuswamy informed that special classes for slow learners and bridge course for lateral entry students will be conducted to enhance performance.
2. Dr. Jayabal enquired about the evaluation procedure for internship reports/presentations and the number of credits allotted. Dr. Karuppuswamy clarified that the evaluation is being carried out in accordance with IQAC guidelines and prescribed rubrics.
3. Dr. Rajan enquired whether the course Biology for Engineers is mandatory.  
Dr. Karuppuswamy informed that, the course is offered under Basic Science Course category to provide an opportunity to work as interdisciplinary team and to explore healthcare technology.
4. Dr. Jayabal recommended updating the prescribed textbook for the course Strength of Materials. It was decided that Beer and Johnson will be included as a prescribed textbook, while Bansal R.K. will be moved to the reference list. Dr. Murali additionally suggested including Stephen Timoshenko as a reference book, which was accepted.
5. Dr. Senthilraja suggested incorporating topics related to Injection Moulding into the syllabus, citing its extensive application in automobile components. Dr. Karuppuswamy responded that the suggestion will be considered for inclusion.
6. Dr. Thyla proposed changing the course title from Design for Manufacturing to Machine Drawing or Production Drawing. Dr. Karuppuswamy confirmed that the title will be updated accordingly.
7. Dr. Thyla raised concerns regarding the adequacy of two theory hours for Theory of Machines course with a heavy syllabus and requested a review of the evaluation pattern. Dr. Senthilraja supported the suggestion and recommended necessary revisions.
8. Dr. Thyla suggested removing the topic Governors to reduce the course content.  
Dr. Jayabal recommended replacing Governors with Gyroscope. Dr. Pranesh informed that Gyroscope is already included in the laboratory component of the same course.
9. Dr. Jayabal suggested incorporating Gears and Gear Trains in place of Governors in the Theory of Machines course.

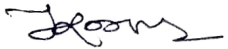
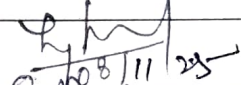
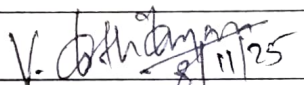
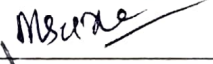
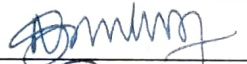
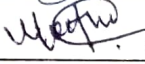
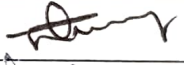
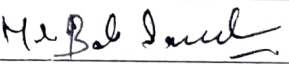
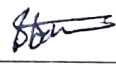
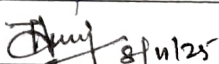


10. Dr. Senthilraja enquired about the offering of PDE in the curriculum. It was noted that PDE has already been offered during the first year of study.
11. Mr. Shashidhar enquired about the availability of laboratory and software facilities to support courses such as SCADA and PLC. Dr. Karuppuswamy informed that the institution is equipped with an IDEA Lab that facilitates PLC programming and provides hardware support for circuit practice.
12. Dr. Murali suggested including Psychrometry under Engineering Thermodynamics. Dr. N. Gunasekar clarified that the topic will be covered under the Thermal Engineering course in the V Semester.
13. Dr. T.P.D. Rajan suggested incorporating Industrial Waste Management in the Circular Economy course. Dr. Karuppuswamy responded that the suggestion will be considered for inclusion.
14. Dr. Rajan suggested including Science and Technology components in Tamil-related courses. Dr. Karuppuswamy informed that this has already been implemented through the Tamils and Technology course offered in the first year.
15. Dr. Jayabal suggested grouping elective courses based on prerequisite requirements and offering them in suitable semesters.

Dr. P. Karuppuswamy expressed gratitude to all members for their valuable contributions and constructive suggestions.



**Members Present for the Meeting of 22<sup>nd</sup> BoS Meeting for B.E Mechanical Engineering Program:**

| S.No | Member                | Designation                                       | Signature                                                                                        |
|------|-----------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 1.   | Dr.P. Karuppuswamy    | Chairman                                          |               |
| 2.   | Dr.P.R.Thyla,         | University Nominee                                | Attended online                                                                                  |
| 3.   | Dr.R.Senthil raja,    | University Nominee                                | Attended online                                                                                  |
| 4.   | Dr.Jayabal Kaliappan, | Subject expert from Central University            | <br>8/11/25   |
| 5.   | Dr. G.Murali,         | Subject expert from outside the parent University | <br>8/11/25   |
| 6.   | Mr.N.C.Shashidhar,    | Industry Expert                                   | Attended online                                                                                  |
| 7.   | Mr.V.Karthikeyan,     | Meritorious Alumni                                | <br>8/11/25    |
| 8.   | Mr.T.P.D.Rajan,       | Special Invitee                                   | Attended online                                                                                  |
| 9.   | Dr.T.R.Sathish Kumar  | Department BoS coordinator                        |               |
| 10.  | Dr.C.Bhagyanathan     | Member                                            |              |
| 11.  | Dr. N.Gunasekar       | Member                                            |              |
| 12.  | Dr.J.Yoganandh        | Member                                            |              |
| 13.  | Dr.T.Velmurugan       | Member                                            |             |
| 14.  | Dr.M.Ramesh           | Member                                            |             |
| 15.  | Mr.M.S.Balasanthosh   | Member                                            |              |
| 16.  | Dr.S.Sathish          | Member                                            |              |
| 17.  | Dr.B.Pranesh          | Member                                            |             |
| 18.  | Dr.V.Tharanidharan    | Member                                            | <br>8/11/25 |

  
**CHAIRPERSON**  
**BOARD OF STUDIES**  
**Department of Mechanical Engineering**





**SRI RAMAKRISHNA ENGINEERING COLLEGE, COIMBATORE – 22**

[Educational Service: SNR Sons Charitable Trust]

[Autonomous Institution, Re-accredited by NAAC with 'A+' Grade]

[Approved by AICTE and Permanently Affiliated to Anna University, Chennai]

[ISO 9001:2015 Certified and all eligible programmes Accredited by NBA]

**MINUTES OF THE 21<sup>st</sup> BOARD OF STUDIES MEETING FOR THE  
UG MECHANICAL ENGINEERING PROGRAMME HELD ON 22.03.2025 AT 2.30  
P.M IN THE DEPARTMENT OF MECHANICAL ENGINEERING.**

The following members attended the above meeting.

| S.No | MEMBER                                                                                                                                             | CATEGORY                                                |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| 1.   | Dr.P. Karuppuswamy, Professor & Head,<br>Mechanical Engineering/SREC                                                                               | Chairman                                                |
| 2.   | Dr.P.R.Thyla<br>Professor and Head, Department of Mechanical<br>Engineering,<br>PSG College of Technology, Peelamedu,<br>Coimbatore – 641004.      | University Nominee                                      |
| 3.   | Dr.R.Senthil raja<br>Professor and Head, Department of Automobile<br>Engineering,<br>Government College of Engineering, (IRTT),<br>Erode – 638316. | University Nominee                                      |
| 4.   | Dr.Jayabal Kaliappan<br>Professor, Department of Mechanical Engineering,<br>IIITDM, Kanchipuram.                                                   | Subject expert from Central<br>University               |
| 5.   | Dr. G.Murali<br>Professor, Department of Mechanical Engineering<br>K L E F Deemed to be University,<br>Guntur Dt., Andra Pradesh.                  | Subject expert from<br>outside the parent<br>University |
| 6.   | Mr.N.C.Shashidhar<br>CEO & Director,<br>Advance Mechanical Services Private Limited,<br>Bangalore.                                                 | Industry Expert                                         |

|     |                                                                                                                                                                                                               |                            |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 7.  | Mr.V.Karthikeyan<br>Sr. Assistant General Manager – Product Development, PAI Machines, Coimbatore.                                                                                                            | Meritorious Alumni         |
| 8.  | Mr.T.P.D.Rajan<br>Senior Principal Scientist,<br>CSIR-National Institute for Interdisciplinary Science and Technology (NIIST),<br>Ministry of Science & Technology, Government of India, Trivandrum – 695019. | Special Invitee            |
| 9.  | Dr.T.R.Sathish Kumar, AP/ Mech.Engg., SREC                                                                                                                                                                    | Department BoS coordinator |
| 10. | Dr.C.Bhagyanathan, Asso.P/ Mech. Engg., SREC                                                                                                                                                                  | Member                     |
| 11. | Dr. N.Gunasekar, Asso.P/ Mech. Engg., SREC                                                                                                                                                                    | Member                     |
| 12. | Dr.J.Yoganandh, Asso.P/ Mech. Engg., SREC                                                                                                                                                                     | Member                     |
| 13. | Dr.T.Velmurugan, AP/ Mech. Engg., SREC                                                                                                                                                                        | Member                     |
| 14. | Dr.M.Ramesh, AP/ Mech. Engg., SREC                                                                                                                                                                            | Member                     |
| 15. | Mr.M.S.Balasanthosh, AP/ Mech. Engg.,                                                                                                                                                                         | Member                     |
| 16. | Dr.S.Sathish, AP/ Mech. Engg., SREC                                                                                                                                                                           | Member                     |
| 17. | Dr.B.Pranesh, AP/ Mech. Engg., SREC                                                                                                                                                                           | Member                     |
| 18. | Dr.V.Tharanidharan, AP/Maths, SREC                                                                                                                                                                            | Member                     |

Dr. P. Karuppuswamy, Chairperson of the Board of Studies, presided over the 21<sup>st</sup> BoS meeting and warmly welcomed all the members. Following brief self-introductions, the agenda items were discussed, and the following resolutions were passed. Dr. Karuppuswamy commenced the meeting with a presentation on the newly framed Institution's Vision and Mission, followed by the Department's Vision and Mission. He also elaborated on the Program Educational Objectives (PEOs), Program Specific Outcomes (PSOs), and Program Outcomes (POs) of the B.E. Mechanical Engineering program. He also requested the members to offer suggestions to improve the academic policies of the department and the programme.

### **Revised Regulations 2020**

#### **ITEM No.1 – Revised Regulations 2020**

- It is resolved that Revised Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit System) will be followed for all B.E./B.Tech. Programmes for students admitted in the Academic year 2022-23, 2023-24 and 2024-25.

#### **ITEM No.2 – List of new NPTEL online courses to be included**

- It is resolved that the following NPTEL courses are approved for credit transfer



during April/May 2025.

| S.No | NPTEL Course Code | NPTEL Course Title                                                               | Credits | Course Duration | Equivalent Professional / Open Elective in SREC Curriculum |
|------|-------------------|----------------------------------------------------------------------------------|---------|-----------------|------------------------------------------------------------|
| 1    | noc25-mm31        | Welding Processes                                                                | 3       | 12 Weeks        | 20ME2E08 Metal Joining Processes                           |
| 2    | noc25-ch18        | Computational Fluid Dynamics for Incompressible Flows                            | 3       | 12 Weeks        | 20ME2E11 Computational Fluid Dynamics                      |
| 3    | noc25-ge24        | Non-conventional Energy Resources                                                | 3       | 12 Weeks        | 20ME2E12 Renewable Energy Sources and Systems              |
| 4    | noc25-me67        | Product Design and Manufacturing                                                 | 3       | 12 Weeks        | 20ME2E21 Product Design                                    |
| 5    | noc25-cs43        | Introduction to Industry 4.0 and Industrial Internet of Things                   | 3       | 12 Weeks        | 20ME2E14 Industry 4.0                                      |
| 6    | noc25-me59        | Operations Management                                                            | 3       | 12 Weeks        | 20ME2E38 Operations Management                             |
| 7    | noc25-me33        | Fundamentals of Surface Engineering: Mechanisms, Processes and Characterizations | 3       | 12 Weeks        | 20ME2E47 Surface Engineering                               |

**ITEM No.3 – Result Analysis for the Academic Year 2024-25.**

- It is resolved that the Result Analysis for the Academic Year 2024-25 (Semesters VII/V/III) are approved and passed.

| Semester | Appeared | Passed | Pass % | Grade % |      |      |      |      |     |
|----------|----------|--------|--------|---------|------|------|------|------|-----|
|          |          |        |        | O       | A+   | A    | B+   | B    | C   |
| VII      | 89       | 76     | 85.39  | 10      | 25.7 | 29.4 | 22.8 | 7.3  | 4.8 |
| V        | 98       | 75     | 76.53  | 7.2     | 14.9 | 36.3 | 25.8 | 11   | 4.8 |
| III      | 97       | 40     | 42.11  | 8.6     | 17.2 | 31.8 | 23.7 | 12.2 | 6.5 |

**ITEM No.4 – List of Specialization/Minor course and Eligible students**

- It is resolved that the following specialization/minor courses are offered during the even semester of Academic Year 2024-25 and the following eligible students be approved for the Honors Specialization / minor in B.E. Mechanical Engineering degree programme.

| S.No | Course Code | Course Title                 | Credits | Mode of Delivery | Offered by |
|------|-------------|------------------------------|---------|------------------|------------|
| 1    | 20ME2E31    | Robot Manipulator Design     | 3       | Class            | SREC       |
| 2    | 20ME2E32    | Embedded Systems Engineering | 3       | Class            | SREC       |

| S.No.                            | Roll No.    | Name of Student   |
|----------------------------------|-------------|-------------------|
| <b>Specialization - Robotics</b> |             |                   |
| 1                                | 71812204149 | Sathyanarayanan S |
| 2                                | 71812204150 | Rangesh Prabhu B  |
| <b>Minor – AI &amp; MI</b>       |             |                   |
| 3                                | 71812204121 | Siva Muthiah C    |

**ITEM No.5 – List of Internship/Inplant training**

- It is resolved that the following students have completed 4/6 weeks of Internship/Inplant training be approved for the student in B.E Mechanical Engineering programme.

**Batch: 2021 – 2025**

| S.No | Industry                                        | No. of Students Completed |
|------|-------------------------------------------------|---------------------------|
| 1    | Aatral Innovations Pvt. Ltd, Chennai            | 1                         |
| 2    | Ankita Crafts, Coimbatore.                      | 6                         |
| 3    | Aquasub Engineering, Coimbatore                 | 5                         |
| 4    | Artispec Technologies Pvt. Ltd, Coimbatore      | 2                         |
| 5    | Chakradhara Aerospace and Cargo Ltd, Coimbatore | 2                         |
| 6    | Cordite factory, Aruvankadu                     | 1                         |
| 7    | Craftsman Automation, Coimbatore.               | 4                         |
| 8    | Deccan Pump, Coimbatore.                        | 2                         |
| 9    | Extreme Engineering, Coimbatore                 | 3                         |
| 10   | Karthick Industries, Coimbatore                 | 5                         |



|    |                                             |   |
|----|---------------------------------------------|---|
| 11 | KGK Industries, Coimbatore                  | 4 |
| 12 | Khaay-zen Equipments, Coimbatore.           | 1 |
| 13 | L & T Machinery, Coimbatore                 | 1 |
| 14 | LMW, Coimbatore                             | 1 |
| 15 | Mechatron Solutions, Coimbatore             | 6 |
| 16 | Nandhu Coats, Coimbatore                    | 3 |
| 17 | NIT, Trichy                                 | 2 |
| 18 | NLC India Ltd, Neyveli                      | 2 |
| 19 | Psychrometric Design Solutions, Coimbatore  | 2 |
| 20 | Revaa Engineering, Coimbatore               | 5 |
| 21 | Roots Industries India Ltd., Coimbatore.    | 8 |
| 22 | Royal Enfield, Chennai                      | 2 |
| 23 | S.M. Industries, Coimbatore                 | 3 |
| 24 | Shanthi Gears Ltd, Coimbatore               | 1 |
| 25 | Sri Sivasakthi Engineering, Coimbatore.     | 3 |
| 26 | Taro pumps, Coimbatore                      | 2 |
| 27 | Texmo Industries, Coimbatore.               | 3 |
| 28 | Veeyes Foundary Pvt. Ltd., Coimbatore       | 3 |
| 29 | Venus Home Appliances Pvt. Ltd., Coimbatore | 1 |
| 30 | Vignesh Industries, Coimbatore              | 1 |

**Batch: 2022 – 2026**

| S.No | Industry                                           | No. of Students Completed |
|------|----------------------------------------------------|---------------------------|
| 1    | Ambal automobiles, Coimbatore                      | 4                         |
| 2    | Anaamalais Toyota Service Centre, Coimbatore       | 1                         |
| 3    | DAJ Engineering, Coimbatore                        | 1                         |
| 4    | Engine Factory, Avadi                              | 2                         |
| 5    | Excel Plast, Coimbatore                            | 6                         |
| 6    | Generic Automech Engineering Pvt. Ltd., Coimbatore | 3                         |
| 7    | Jayam Engineering & Tools, Coimbatore              | 2                         |
| 8    | Larsen And Toubro Ltd. - PMSC, Coimbatore          | 2                         |
| 9    | Mahindra CIE Automotive Ltd., Coimbatore           | 2                         |
| 10   | MEG, Coimbatore                                    | 1                         |
| 11   | NLC India, Neyveli                                 | 7                         |

|    |                                                   |   |
|----|---------------------------------------------------|---|
| 12 | RKS Metal Screens, Coimbatore                     | 3 |
| 13 | Roots Industries India Pvt Ltd, Coimbatore        | 2 |
| 14 | Sakthi Sugars Ltd, Erode                          | 1 |
| 15 | Salzer Electronics Ltd., Coimbatore.              | 2 |
| 16 | Smart way Industrial and Automation, Coimbatore   | 4 |
| 17 | Sri Mahalakshmi Engineering Works, Coimbatore     | 2 |
| 18 | Toolcom Innovation solutions Pvt. Ltd, Coimbatore | 1 |

### **Regulations 2025**

#### **ITEM No.6 – Regulations 2025**

- It is resolved that the Proposed Regulations 2025 (Outcome based Curriculum through Choice based Credit System) be approved and passed.
- It is resolved that Regulations 2025 (Outcome based Curriculum through Choice based Credit System) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2025-26 and onwards.
- It is resolved that the curriculum and the syllabi for the Regulations 2025 be approved for the I and II semesters of B.E Mechanical engineering programme. The listed courses will be passed in appropriate boards.

| SEMESTER - I                 |                                                              |          |   |   |   |           |
|------------------------------|--------------------------------------------------------------|----------|---|---|---|-----------|
| Sl.No.                       | Course Title                                                 | Category | L | T | P | C         |
| 1                            | Matrices, Differential Calculus and Numerical Interpolations | BSC      | 3 | 1 | 0 | 4         |
| 2                            | Engineering Physics                                          | BSC      | 2 | 0 | 0 | 2         |
| 3                            | Biology for Engineers                                        | BSC      | 1 | 0 | 0 | 1         |
| 4                            | Engineering Chemistry                                        | BSC      | 2 | 0 | 0 | 2         |
| 5                            | Fundamentals of Electrical and Electronics Engineering       | ESC      | 3 | 0 | 0 | 3         |
| 6                            | Cultural heritage of India/ Dance / Music/ Yoga              | LAC      | 2 | 0 | 0 | 2         |
| 7                            | The Heritage of Tamils                                       | LAC      | 1 | 0 | 0 | 1         |
| <b>THEORY CUM PRACTICALS</b> |                                                              |          |   |   |   |           |
| 8                            | Business and Corporate Communication                         | HSSM     | 2 | 0 | 2 | 3         |
| <b>PRACTICALS</b>            |                                                              |          |   |   |   |           |
| 9                            | Basic Sciences Lab                                           | BSC      | 0 | 0 | 2 | 1         |
| 10                           | Fundamentals of Electrical and Electronics Engineering Lab   | ESC      | 0 | 0 | 2 | 1         |
| <b>Total</b>                 |                                                              |          |   |   |   | <b>19</b> |



| SEMESTER - II         |                                                 |          |   |   |   |           |
|-----------------------|-------------------------------------------------|----------|---|---|---|-----------|
| Sl.No.                | Course Title                                    | Category | L | T | P | C         |
| 1                     | Indian knowledge system / Psychology            | HSSM     | 3 | 0 | 0 | 3         |
| 2                     | PDE, Integral Calculus and its Applications     | BSC      | 3 | 1 | 0 | 4         |
| 3                     | Engineering Mechanics                           | ESC      | 3 | 0 | 0 | 3         |
| 4                     | Tamils and Technology                           | LAC      | 1 | 0 | 0 | 1         |
| THEORY CUM PRACTICALS |                                                 |          |   |   |   |           |
| 5                     | Materials Engineering and Metallurgy            | PC       | 3 | 0 | 2 | 4         |
| 6                     | Python Programming                              | ESC      | 2 | 0 | 2 | 3         |
| PRACTICALS            |                                                 |          |   |   |   |           |
| 7                     | Engineering Graphics                            | BSC      | 0 | 0 | 4 | 2         |
| 8                     | Lingua skill courses / Foreign language courses | AEC      | 0 | 0 | 4 | 2         |
| 9                     | Engineering Practices Lab                       | ESC      | 0 | 0 | 2 | 1         |
| <b>Total</b>          |                                                 |          |   |   |   | <b>22</b> |

- It is resolved that the following courses are offered to other B.E. Degree programmes

| Sl.No. | Course Title                                   | Category | L | T | P | C |
|--------|------------------------------------------------|----------|---|---|---|---|
| 1      | Computer Aided Engineering Graphics Laboratory | BSC      | 0 | 0 | 2 | 1 |

**ITEM No.7 - Suggestions by expert members on Regulations, curriculum, various courses and electives**

1. In the vision statement of the department, Dr. Thyla recommended to replace the phrase "mechanical engineering and research" as "mechanical engineering education and research".
2. Dr. Jayabal suggested that all mission statements should begin with the word "To", such as "To deliver," "To develop," etc.
3. Dr. Thyla proposed replacing the word "deliver" in mission statement 1 with "impart" or a more relevant term. Additionally, she suggested replacing "curriculum" with "education" in the same statement.
4. Dr. Jayabal recommended revising the phrase "Manufacture Mechanical Systems" in PSO-2. Mr. Karthikeyan suggested replacing it with "Manufacture mechanical products and systems." Dr. Thyla further recommended rephrasing it as "Select suitable manufacturing processes" or a similar alternative.

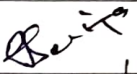
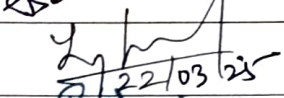
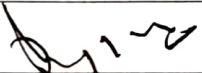
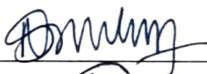
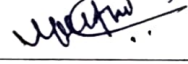
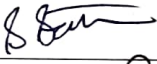
5. Dr. Murali recommended offering NPTEL courses such as Power Plant Engineering and Refrigeration & Air Conditioning (R&AC). Dr. Jayabal suggested allowing more NPTEL courses as alternatives to Professional Elective (PE) courses. Dr. P. Karuppuswamy responded that these courses would be included under professional electives in the existing curriculum.
6. Dr. Jayabal proposed offering specialization/minor courses from the 4th to 7th semesters instead of 4th to 6th semesters to reduce the academic load in the early semesters and align with students' maturity levels. He also suggested scheduling internships at the end of the 5th or 6th semester.
7. Dr. Jayabal inquired about the distinction between open electives and multidisciplinary courses in the R2025 curriculum. Dr. P. Karuppuswamy provided clarification.
8. Dr. Senthilraja asked whether students are involved in community projects. Dr. P. Karuppuswamy responded that many students participate in the Line-in-Lab exercise, a two-week program where they visit rural areas to identify and address real-world challenges.
9. Regarding project assessment, Dr. Jayabal proposed awarding 10 marks to students who present their work at conferences since publication in journal may not be feasible within project period. Dr. Murali added that filing a patent based on the project should also be included in the evaluation criteria.
10. Dr. Jayabal expressed concerns that 2<sup>nd</sup> year students may lack foundational knowledge in subjects like Thermodynamics and Strength of Materials to effectively undertake Mini Projects early in the program. Instead of introducing Mini Projects in the 3rd semester, he recommended revising the project structure as follows:
  - Mini Projects in 5th semester
  - Multidisciplinary Projects in 6th semester
  - Final Year Projects in 7th semester.
11. Dr. Jayabal suggested that a mathematics course on "Numerical Methods" would be more beneficial for Mechanical Engineering students than Probability and Statistics, particularly for applications in FEM, ANSYS, etc.
12. Dr. Jayabal recommended teaching Engineering Graphics using AutoCAD, while still emphasizing the importance of freehand sketching. Dr. Senthilraja cautioned that excessive reliance on software tools could hinder students' imaginative abilities in mastering fundamental Engineering Graphics concepts.



13. Dr. Jayabal recommended limiting the textbook list to only two books, classifying additional materials under reference books. He also suggested including one or two foreign author books in the reference list to benefit students pursuing postgraduate studies abroad.
14. In the Engineering Mechanics course, Dr. Jayabal proposed shifting "Equilibrium of Rigid Bodies" to Module 2. Dr. Murali suggested renaming "Moment of Inertia of Laminae" to "Moment of Inertia" and modifying Module 2 accordingly. Dr. P. Karuppuswamy assured that the entire syllabus would be revised based on these recommendations.
15. Dr. Jayabal recommended reclassifying the following books:
- "Vector Mechanics for Engineers: Statics and Dynamics" by Beer F.P. and Johnson Jr. E.R – from Reference to Textbook for Engineering Mechanics.
  - "Mechanical Metallurgy" by Dieter George – from Reference to Textbook for Materials Engineering and Metallurgy.
16. Regarding Functional English, it was suggested to restructure certain content by integrating relevant topics with Business English to better align with course objectives.
17. For the Engineering Practice Lab, Dr. Jayabal recommended including an exercise on assembling personal computers/laptops.
18. Dr. Jayabal and Dr. Murali emphasized to reduce syllabus content in certain technical courses, focusing more on core and fundamental concepts to enhance student understanding.

Dr.P.Karuppuswamy thanked the members for their valuable feedback and suggestions.

**Members Present for 21<sup>st</sup> BoS Meeting for UG Mechanical Engineering Program:**

| S.No | Member                  | Designation                                       | Signature                                                                             |
|------|-------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------|
| 1.   | Dr.P. Karuppuswamy      | Chairman                                          |     |
| 2.   | Dr.P.R.Thyla            | University Nominee                                | Attended online                                                                       |
| 3.   | Dr.R.Senthil Raja       | University Nominee                                |     |
| 4.   | Dr.Jayabal Kaliappan    | Subject expert from Central University            |     |
| 5.   | Dr. G.Murali            | Subject expert from outside the parent University |     |
| 6.   | Mr.N.C.Shashidhar       | Industry Expert                                   | - Absent -                                                                            |
| 7.   | Mr.V.Karthikeyan        | Meritorious Alumni                                |     |
| 8.   | Mr.T.P.D.Rajan          | Special Invitee                                   | - Absent -                                                                            |
| 9.   | Dr. T. R. Sathish Kumar | Department BoS coordinator                        |    |
| 10.  | Dr. C. Bhagyanathan     | Member                                            |    |
| 11.  | Dr. N. Gunasekar        | Member                                            |  |
| 12.  | Dr.J.Yoganandh          | Member                                            |  |
| 13.  | Dr.T.Velmurugan         | Member                                            |  |
| 14.  | Dr.M.Ramesh             | Member                                            |  |
| 15.  | Mr.M.S.Balasanthosh     | Member                                            |  |
| 16.  | Dr.S.Sathish            | Member                                            |   |
| 17.  | Dr.B.Pranesh            | Member                                            |  |
| 18.  | Dr. V. Tharanidharan    | Member                                            |  |



**CHAIRPERSON  
BOARD OF STUDIES  
Department of Mechanical Engineering**





## Fwd: Request to approve the Minutes of the 21st BoS Meeting - reg.,

1 message

HoD mech <hod-mech@srec.ac.in>

Fri, Apr 4, 2025 at 2:14 PM

To: T R Sathishkumar <sathishkumar.ramalingam@srec.ac.in>

----- Forwarded message -----

From: **Dr Thyla Pr - PSGCT** <prt.mech@psgtech.ac.in>

Date: Fri, Apr 4, 2025 at 11:54 AM

Subject: Re: Request to approve the Minutes of the 21st BoS Meeting - reg.,

To: HoD mech <hod-mech@srec.ac.in>

I approve the minutes of the meeting of the 21st BoS.

With regards,

Dr P R Thyla

Professor

Department of Mechanical Engineering

PSG College of Technology

Coimbatore - 641004, Tamilnadu, India.

On Fri, Apr 4, 2025 at 9:45 AM HoD mech <hod-mech@srec.ac.in> wrote:

Dear Madam,

We sincerely thank you for your participation in the 21<sup>st</sup> Board of Studies (BoS) meeting conducted on 22.03.2025 and your valuable suggestions.

We have attached the Minutes of the Meeting of BOS for your perusal. We kindly request you to confirm your approval to proceed further.

We are thankful to you for your presence and contribution.

Regards,

Dr. P. Karuppuswamy

Professor and Head

Dept. of Mechanical Engg

Sri Ramakrishna Engg. College

Coimbatore 641 022

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the system manager. This message contains confidential information and is intended only for the individual named. If you are not the named addressee you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited.

--

Dr. P. Karuppuswamy

Professor and Head

Dept. of Mechanical Engg

Sri Ramakrishna Engg. College

Coimbatore 641 022

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**Fwd: Request to approve the Minutes of the 21st BoS Meeting - reg.,**

1 message

**HoD mech** <hod-mech@srec.ac.in>

Tue, Apr 8, 2025 at 3:03 PM

To: T R Sathishkumar &lt;sathishkumar.ramalingam@srec.ac.in&gt;

----- Forwarded message -----

From: **Senthil Raja** <senthilrajairtt@gmail.com>

Date: Tue, Apr 8, 2025 at 9:51 AM

Subject: Re: Request to approve the Minutes of the 21st BoS Meeting - reg.,

To: HoD mech &lt;hod-mech@srec.ac.in&gt;

Minutes of the 21 st Board of studies Meeting for the UG Mechanical Engineering Programme held on 22.03.2025 at 2.30 P.M in the department of Mechanical Engineering is thoroughly read. In page No.2/10 and Item No: 1 , Academic Year 2023 - 2024 is repeated again and again. The above mentioned correction is to be carried out. Minutes of the 21 st Board of studies Meeting for the UG Mechanical Engineering Programme is approved to carry out the further process.

Dr.R.Senthilraja,  
Assistant Professor,  
Department of Mechanical Engineering,  
HOD i/c (AC)/ Automobile Engineering  
Government College of Engineering (IRTT),  
Erode - 638 316

On Fri, Apr 4, 2025 at 9:47 AM HoD mech &lt;hod-mech@srec.ac.in&gt; wrote:

Dear Sir,

We sincerely thank you for your participation in the 21<sup>st</sup> Board of Studies (BoS) meeting conducted on 22.03.2025 and your valuable suggestions.

We have attached the Minutes of the Meeting of BOS for your perusal. We kindly request you to confirm your approval to proceed further.

We are thankful to you for your presence and contribution.

--

Dr. P. Karuppuswamy  
Professor and Head  
Dept. of Mechanical Engg  
Sri Ramakrishna Engg. College  
Coimbatore 641 022

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--

Dr. P. Karuppuswamy  
Professor and Head  
Dept. of Mechanical Engg  
Sri Ramakrishna Engg. College  
Coimbatore 641 022



**Fwd: Request to approve the Minutes of the 21st BoS Meeting - reg.,**

1 message

**HoD mech** <hod-mech@srec.ac.in>

Mon, Apr 7, 2025 at 8:50 AM

To: T R Sathishkumar &lt;sathishkumar.ramalingam@srec.ac.in&gt;

----- Forwarded message -----

From: **K Jayabal** <jayabal@iiitdm.ac.in>

Date: Sun, Apr 6, 2025 at 9:36 PM

Subject: Re: Request to approve the Minutes of the 21st BoS Meeting - reg.,

To: HoD mech &lt;hod-mech@srec.ac.in&gt;

Dear Sir,

Approved from my end. Thank you for the invitation. Best Wishes.

Regards,

Jayabal

**Prof. Jayabal K** / பேராசிரியர். ஜெயபால்/ प्राध्यापक. जयबाल के

यांत्रिक अभियांत्रिकी विभाग /Department of Mechanical Engineering

भारतीय सूचना प्रौद्योगिकी, अभिकल्पना एवं विनिर्माण संस्थान, कांचीपुरम /

Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

चेन्नई/Chennai 600127, दूरभाष /Phone: +91-44-2747 6362

<https://iiitdm.ac.in/people/faculty/jayabal@iiitdm.ac.in>

On Fri, 4 Apr 2025 at 09:49, HoD mech &lt;hod-mech@srec.ac.in&gt; wrote:

Dear Sir,

We sincerely thank you for your participation in the 21<sup>st</sup> Board of Studies (BoS) meeting conducted on 22.03.2025 and your valuable suggestions.

We have attached the Minutes of the Meeting of BOS for your perusal. We kindly request you to confirm your approval to proceed further.

We are thankful to you for your presence and contribution.

Regards,

Dr. P. Karuppuswamy

Professor and Head

Dept. of Mechanical Engg

Sri Ramakrishna Engg. College

Coimbatore 641 022

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---

**Fwd: Request to approve the Minutes of the 21st BoS Meeting - reg.,**

1 message

**HoD mech** <hod-mech@srec.ac.in>

Tue, Apr 8, 2025 at 3:09 PM

To: T R Sathishkumar &lt;sathishkumar.ramalingam@srec.ac.in&gt;

----- Forwarded message -----

From: **Shashidhar N C** <shashidhar.nc@ams-india.co.in>

Date: Mon, Apr 7, 2025 at 7:15 PM

Subject: Re: Request to approve the Minutes of the 21st BoS Meeting - reg.,

To: HoD mech &lt;hod-mech@srec.ac.in&gt;

Cc: Gopinath Rao &lt;gopinath.rao@ams-india.co.in&gt;, N J &lt;jaggie.n@ams-india.co.in&gt;

Sir  
Approved  
BR  
Shashi

Sent from my iPhone

On 7 Apr 2025, at 9:09 AM, HoD mech &lt;hod-mech@srec.ac.in&gt; wrote:

Dear Sir,

We kindly request your approval of the Minutes from the 21st Board of Studies (BoS) meeting held on 22nd March 2025. The minutes are attached herewith for your review.

We kindly request you to confirm your approval to proceed further. Your insights and contributions are highly valued, and we thank you for your continued support.

Looking forward to your positive response.

Regards,  
Dr. P. Karuppuswamy  
Professor and Head  
Dept. of Mechanical Engg  
Sri Ramakrishna Engg. College  
Coimbatore 641 022

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--  
Dr. P. Karuppuswamy  
Professor and Head  
Dept. of Mechanical Engg  
Sri Ramakrishna Engg. College  
Coimbatore 641 022





## Fwd: Request to approve the Minutes of the 21st BoS Meeting - reg.,

1 message

HoD mech <hod-mech@srec.ac.in>

Fri, Apr 4, 2025 at 2:14 PM

To: T R Sathishkumar <sathishkumar.ramalingam@srec.ac.in>

----- Forwarded message -----

From: **Murali G** <muralinitt@gmail.com>

Date: Fri, Apr 4, 2025 at 12:20 PM

Subject: Re: Request to approve the Minutes of the 21st BoS Meeting - reg.,

To: HoD mech <hod-mech@srec.ac.in>

Dear Sir,

Thank you for sharing the Minutes of the Meeting. I have reviewed the document and approve it to proceed further.

Best regards,

Dr. G. Murali

Professor, KL University (Deemed to be University)

KL University, Vaddeswaram, Guntur

Andhra Pradesh - 522502

Thanks & Regards.....

**Dr. G.MURALI, M.Tech[NIT],Ph.D,MISTE,MIE,MISHRAE.**

**Professor**

**Research Progression and Assesment Chair**

**Research Group head Energy & CFD**

**Department of Mechanical Engineering**

**K L Deemed to be University**

Green Fields, Vaddeswaram,

Guntur Dist, Andhra Pradesh, INDIA, PIN: 522 502

Email: drmurali@kluniversity.in

Web: www.kluniversity.in

**Mobile: 9442054281**

**Dream is not that you see in sleep, dream is something that does not let you sleep.**

**-- Dr.A.P.J.Abdul Kalam.**

On Fri, 4 Apr, 2025, 9:50 am HoD mech, <hod-mech@srec.ac.in> wrote:

Dear Sir,

We sincerely thank you for your participation in the 21<sup>st</sup> Board of Studies (BoS) meeting conducted on 22.03.2025 and your valuable suggestions.

We have attached the Minutes of the Meeting of BOS for your perusal. We kindly request you to confirm your approval to proceed further.

We are thankful to you for your presence and contribution.

Regards,

Dr. P. Karuppuswamy  
Professor and Head  
Dept. of Mechanical Engg  
Sri Ramakrishna Engg. College  
Coimbatore 641 022

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--

Dr. P. Karuppuswamy  
Professor and Head  
Dept. of Mechanical Engg  
Sri Ramakrishna Engg. College  
Coimbatore 641 022

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**Fwd: Request to approve the Minutes of the 21st BoS Meeting - reg.,**

1 message

**HoD mech** <hod-mech@srec.ac.in>

Mon, Apr 7, 2025 at 9:48 AM

To: T R Sathishkumar &lt;sathishkumar.ramalingam@srec.ac.in&gt;

----- Forwarded message -----

From: **Rajan TPD** <rajantpd.niist@csir.res.in>

Date: Mon, Apr 7, 2025 at 9:32 AM

Subject: Re: Request to approve the Minutes of the 21st BoS Meeting - reg.,

To: &lt;hod-mech@srec.ac.in&gt;

Dear Sir,

Thank you for the mail and the minutes of the meeting of the 21st BoS. I am glad to approve the minutes.

Since my designation has changed recently to Chief Scientist, kindly change it in future documents.

Thank you,

With kind regards,  
Rajan TPD**डॉ. टी पी डी राजन / Dr. T.P.D. RAJAN**

मुख्य वैज्ञानिक/Chief Scientist

पदार्थ विज्ञान तथा प्रौद्योगिकी प्रभाग/ Materials Science and Technology Division (MSTD)

सीएसआईआर- राष्ट्रीय अंतर्विषयी विज्ञान तथा प्रौद्योगिकी संस्थान

CSIR-National Institute for Interdisciplinary Science and Technology (NIIST),

विज्ञान तथा प्रौद्योगिकी मंत्रालय, भारत सरकार

Ministry of Science and Technology, Govt. of India,

तिरुवनंतपुरम, केरल, भारत / Thiruvananthapuram-695019, Kerala, India

दूरभाष/Tele: 0091-471-2515327, / मो./Mobile: 0091-9447035439

फैक्स/Fax – 0091-471-2491712

Email: [tpdrajan@niist.res.in](mailto:tpdrajan@niist.res.in), [tpdrajan@rediffmail.com](mailto:tpdrajan@rediffmail.com), [tpdrajan@gmail.com](mailto:tpdrajan@gmail.com)**From:** [hod-mech@srec.ac.in](mailto:hod-mech@srec.ac.in)**To:** "Rajan TPD" <[tpdrajan@niist.res.in](mailto:tpdrajan@niist.res.in)>**Sent:** Monday, April 7, 2025 9:10:03 AM**Subject:** Request to approve the Minutes of the 21st BoS Meeting - reg.,

Dear Sir,

We kindly request your approval of the Minutes from the 21st Board of Studies (BoS) meeting held on 22nd March 2025. The minutes are attached herewith for your review.

We kindly request you to confirm your approval to proceed further. Your insights and contributions are highly valued, and we thank you for your continued support.

Looking forward to your positive response.

Regards,  
Dr. P. Karuppuswamy  
Professor and Head  
Dept. of Mechanical Engg  
Sri Ramakrishna Engg. College





**SRI RAMAKRISHNA ENGINEERING COLLEGE, COIMBATORE – 22**

[Educational Service: SNR Sons Charitable Trust]

[Autonomous Institution, Re-accredited by NAAC with 'A+' Grade]

[Approved by AICTE and Permanently Affiliated to Anna University, Chennai]

[ISO 9001:2015 Certified and all eligible programmes Accredited by NBA]

**MINUTES OF THE 20<sup>th</sup> BOARD OF STUDIES MEETING FOR THE UG MECHANICAL ENGINEERING PROGRAMME HELD ON 18.11.2024 AT 12.00 P.M (ONLINE) IN THE DEPARTMENT OF MECHANICAL ENGINEERING.**

The following members attended the above meeting.

| S.No | MEMBER                                                                                                                                              | CATEGORY                                             |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| 1.   | Dr.P. Karuppuswamy, Professor & Head,<br>Mechanical Engineering/SREC                                                                                | Chairman                                             |
| 2.   | Dr.P.R.Thyla,<br>Professor and Head, Department of Mechanical<br>Engineering,<br>PSG College of Technology, Peelamedu,<br>Coimbatore – 641004.      | University Nominee                                   |
| 3.   | Dr.R.Senthil raja,<br>Professor and Head, Department of Automobile<br>Engineering,<br>Government College of Engineering, (IRTT),<br>Erode – 638316. | University Nominee                                   |
| 4.   | Dr.Jayabal Kaliappan,<br>Professor, Department of Mechanical<br>Engineering,<br>IIITDM, Kanchipuram.                                                | Subject expert from Central<br>University            |
| 5.   | Dr. G.Murali,<br>Professor, Department of Mechanical<br>Engineering<br>K L E F Deemed to be University,<br>Guntur Dt., Andra Pradesh.               | Subject expert from outside<br>the parent University |
| 6.   | Mr.N.C.Shashidhar,<br>CEO & Director,<br>Advance Mechanical Services Private Limited,<br>Bangalore.                                                 | Industry Expert                                      |
| 7.   | Mr.V.Karthikeyan,<br>Assistant General Manager,<br>L&T, Coimbatore.                                                                                 | Meritorious Alumni                                   |

|     |                                                                                                                                                                                                                      |                            |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 8.  | Mr.T.P.D.Rajan,<br>Senior Principal Scientist,<br>CSIR-National Institute for Interdisciplinary<br>Science and Technology (NIIST),<br>Ministry of Science & Technology, Government<br>of India, Trivandrum – 695019. | Special Invitee            |
| 9.  | Dr.T.R.Sathish Kumar, AP/ Mech.Engg., SREC                                                                                                                                                                           | Department BoS coordinator |
| 10. | Dr. N.Gunasekar, Asso.P/ Mech. Engg., SREC                                                                                                                                                                           | Member                     |
| 11. | Dr.J.Yoganandh, Asso.P/ Mech. Engg., SREC                                                                                                                                                                            | Member                     |
| 12. | Dr.T.Velmurugan, AP/ Mech. Engg., SREC                                                                                                                                                                               | Member                     |
| 13. | Dr.M.Ramesh, AP/ Mech. Engg., SREC                                                                                                                                                                                   | Member                     |
| 14. | Mr.M.S.Balasanthosh, AP/ Mech. Engg.,                                                                                                                                                                                | Member                     |
| 15. | Dr.S.Sathish, AP/ Mech. Engg., SREC                                                                                                                                                                                  | Member                     |
| 16. | Dr.B.Pranesh, AP/ Mech. Engg., SREC                                                                                                                                                                                  | Member                     |
| 17. | Dr.N.Gopalakrishnan, AP/Maths, SREC                                                                                                                                                                                  | Member                     |

Dr. P. Karuppuswamy, Chairperson of the Board of Studies, presided over the 20<sup>th</sup> BoS meeting and warmly welcomed all members. Following the brief self-introductions, the agenda items were discussed, and the following resolutions were passed. Dr. Karuppuswamy opened the meeting with a presentation outlining the Department's Vision and Mission, along with the Program Educational Objectives (PEOs), Program Specific Outcomes (PSOs), and Program Outcomes (POs) of the B.E. Mechanical Engineering program.

### **Regulations 2020**

#### **ITEM No.1 – Revised Regulations 2020**

- It is resolved that Revised Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit System) will be followed for all B.E./B.Tech. Programmes for students admitted in the Academic year 2021-22 and onwards.

#### **ITEM No.2 – List of additional electives to be included under (Revised) Regulations 2020**

- It is resolved that the syllabi for the following new Professional Elective courses under (Revised) Regulations 2020 be approved and passed.

| Code No. | Course Title        | L | T | P | C |
|----------|---------------------|---|---|---|---|
| 20ME2E47 | Surface Engineering | 3 | 0 | 0 | 3 |

**ITEM No.3 – List of new NPTEL online courses to be included**

- It is resolved that the following NPTEL courses are approved for credit transfer during Nov/Dec 2024.

| S.No | NPTEL Course Code | NPTEL Course Title                | Credits | Course Duration | Equivalent Professional / Open Elective in SREC Curriculum |
|------|-------------------|-----------------------------------|---------|-----------------|------------------------------------------------------------|
| 1    | noc24-de17        | Ergonomics Research Techniques    | 3       | 12 Weeks        | 20ME2E17 Ergonomics                                        |
| 2    | noc24-me132       | Vibrations of Plates and Shells   | 3       | 12 Weeks        | 20ME2E04 Mechanical Vibration                              |
| 3    | noc24-me141       | Computational Fluid Dynamics      | 3       | 12 Weeks        | 20ME2E11 Computational Fluid Dynamic                       |
| 4    | noc24-me125       | Work System Design                | 3       | 12 Weeks        | 20ME2E21 Product Design and Development Strategies         |
| 5    | noc24-me144       | Sustainable Energy Technology     | 3       | 12 Weeks        | 20ME2E12 Renewable Energy Sources and Systems              |
| 6    | noc24-me126       | Social Innovation in Industry 4.0 | 3       | 12 Weeks        | 20ME2E14 Industry 4.0                                      |
| 7    | noc24-me113       | Engineering Fracture Mechanics    | 3       | 12 Weeks        | 20ME2E20 Fracture Mechanics                                |
| 8    | noc24-me129       | Introduction to Composites        | 3       | 12 Weeks        | 20ME2E06 Composite Materials                               |
| 9    | noc24-me133       | Computational Continuum Mechanics | 3       | 12 Weeks        | 20ME2E44 Continuum Mechanics                               |

**ITEM No.4 – Result Analysis for the Academic Year 2022-23.**

- It is resolved that the Result Analysis for the Academic Year 2023-24 (Semesters VII / V /III) are approved and passed.

| Semester | Appeared | Passed | Pass % | Grade % |      |      |      |      |      |
|----------|----------|--------|--------|---------|------|------|------|------|------|
|          |          |        |        | O       | A+   | A    | B+   | B    | C    |
| VIII     | 127      | 127    | 100    | 42.5    | 42.6 | 11.5 | 2.1  | 1.4  | 0    |
| VI       | 90       | 54     | 60     | 8.6     | 8.1  | 28   | 32.2 | 14   | 9    |
| IV       | 97       | 45     | 46.39  | 4.3     | 18.2 | 32.5 | 28.4 | 12   | 4.5  |
| II       | 84       | 36     | 42.86  | 5.0     | 16.0 | 25.1 | 22.9 | 17.8 | 12.9 |



### ITEM No.5 – List of Specialization/Minor course and Eligible students

It is resolved that the following candidates who have registered for additional credits during Nov/Dec 2024 examination under the Specialization/Minor courses category Verticals shall be approved according to the communication from Anna University, Chennai via Letter No. 5749/AU/CAC/Honours/2022 dated 16.11.2022.

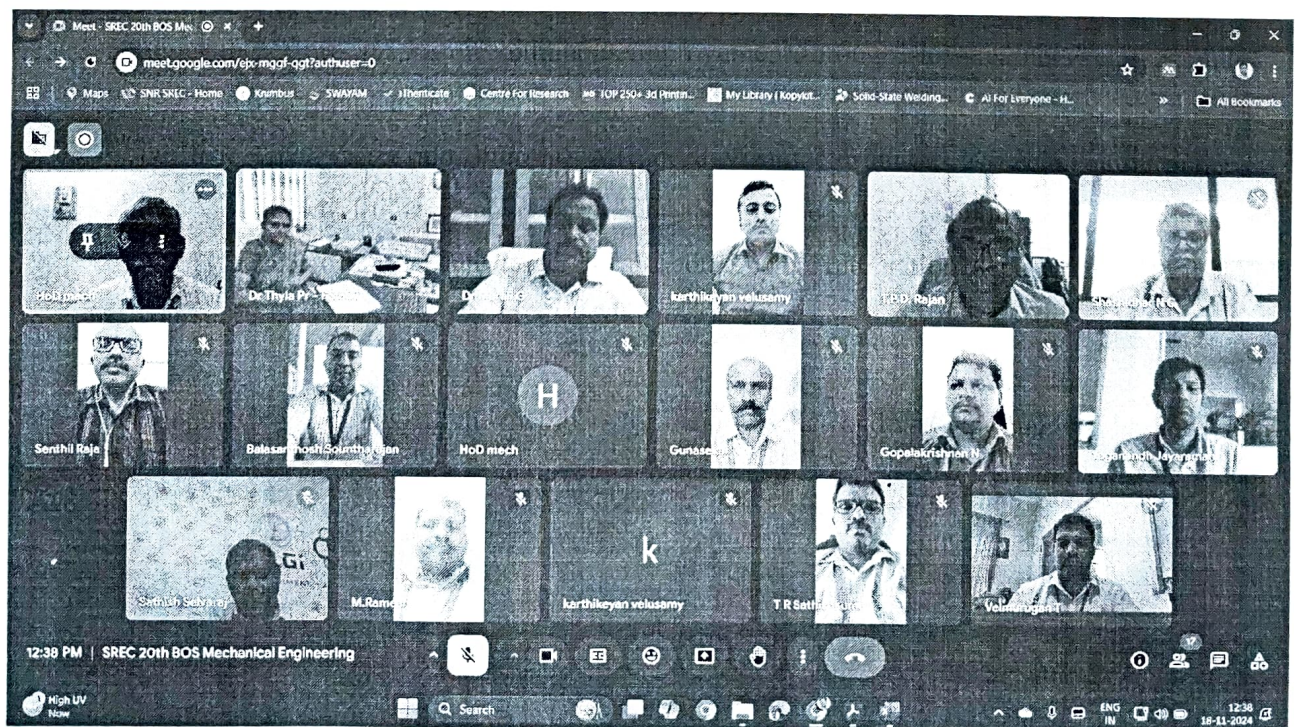
| Specialization/<br>Minor Course<br>Details | Course Code and<br>Title                          | Register No.<br>of the<br>Candidate       | Name                                                | CGPA                 |
|--------------------------------------------|---------------------------------------------------|-------------------------------------------|-----------------------------------------------------|----------------------|
| Robotics                                   | 20ME2E33 Machine<br>Vision in Robotics            | 71812104024<br>71812104130<br>71812104134 | Hemanth Kumar B M<br>Udhayakumar L<br>Vijay Anand A | 8.14<br>7.71<br>9.01 |
|                                            | 20ME2E35 Robotic<br>Applications                  |                                           |                                                     |                      |
|                                            | 20ME2E28 Robotic<br>Programming and ROS           | 71812204150<br>71812204149                | Rangesh Prabhu B S<br>Sathyanarayanan               | 8.6<br>8.0           |
|                                            | 20ME2E29 Digital<br>System and<br>Microcontroller |                                           |                                                     |                      |

### ITEM No.6 - Suggestions by expert members on Regulations, curriculum, various courses and electives

- Dr. P.R Thyla suggested replacing the phrase “cutting-edge technologies” with “cutting-edge research” in the proposed vision statement of the institution while other members expressed their satisfaction about the statements.
- Dr.P. Karuppuswamy, presented the Vision and Mission statements of the Department, PEOs, POs and PSOs of the B.E Mechanical Engineering Degree programme.
- Dr. P.R Thyla further suggested including the word “interdisciplinary” in the vision statement of the department suitably. (“To provide quality engineering education that equips students with adequate knowledge in mechanical engineering, enabling them to adapt to emerging technologies and become successful professionals.”).  
She also suggested changing the word “seek” to “provide” in PEO 2.
- Dr.P. Karuppuswamy, presented the draft of the syllabus of the professional elective titled "Surface Engineering".
- Dr. T P D Rajan recommended replacing “Metal cleaning” with “Metal finishing.”
- Dr. G Murali suggested restructuring the syllabus into four modules to align with the course outcomes (COs).

- Dr. R. Senthilraja suggested including examples of components produced using the processes covered in the course. Dr. Karuppuswamy informed that applications are included in the syllabus.
- Dr. P R Thyla suggested including NPTEL courses without equivalent professional elective courses in the curriculum to widen the students' choices.
- Dr. R. Senthilraja added that this would allow students to explore recent technologies.
- Dr. R. Senthilraja queried on the poor performance in the 4th semester. Dr. P. Karuppuswamy explained that low pass percentages in Mathematics, Thermal Engineering, and Kinematics of Machinery contributed to this outcome. He also briefed about the efforts taken for continuous improvement through slow learners' classes and additional tutorial classes.
- Dr. P R Thyla suggested offering "Advanced Manufacturing" as a specialization under the Mechanical Engineering department. She opined that "Robotics" specialization would be more appropriate under the Robotics and Automation department as minor course.

Dr.P. Karuppuswamy thanked all the members for their presence and valuable suggestions and feedback.





**Members Present for the Meeting of 20<sup>th</sup> BoS Online Meeting for UG Mechanical Engineering Program:**

| <b>Name of the Member</b> | <b>Designation</b>         |
|---------------------------|----------------------------|
| Dr.P.Karuppuswamy         | Chairperson                |
| Dr.P.R.Thyla,             | University Nominee         |
| Dr.R.Senthil raja         | University Nominee         |
| Dr. G.Murali              | Subject expert             |
| Mr.N.C.Shashidhar         | Industry expert            |
| Mr.V.Karthikeyan          | Meritorious Alumni         |
| Mr.T.P.D.Rajan            | Special Invitee            |
| Dr.T.R.Sathish Kumar      | Department BoS coordinator |
| Dr. N.Gunasekar           | Member                     |
| Dr.J.Yoganandh            | Member                     |
| Dr.T.Velmurugan           | Member                     |
| Dr.M.Ramesh               | Member                     |
| Mr.M.S.Balasanthosh       | Member                     |
| Dr. S.Sathish             | Member                     |
| Dr.N.Gopalakrishnan       | Member                     |



**CHAIRPERSON  
BOARD OF STUDIES  
Department of Mechanical Engineering**



**Fwd: Requesti to approve the Minutes of the 20th BoS Meeting - reg.,**

HoD mech &lt;hod-mech@srec.ac.in&gt;

Wed, Nov 27, 2024 at 8:56 AM

To: T R Sathishkumar &lt;sathishkumar.ramalingam@srec.ac.in&gt;

----- Forwarded message -----

From: **Dr Thyla Pr - PSGCT** <pri.mech@psgtech.ac.in>

Date: Tue, Nov 26, 2024 at 3:27 PM

Subject: Re: Requesti to approve the Minutes of the 20th BoS Meeting - reg.,

To: HoD mech &lt;hod-mech@srec.ac.in&gt;

Cc: &lt;senthilraja@irttech.ac.in&gt;, &lt;shashidhar.nc@ams-india.co.in&gt;, &lt;jayabal@iiitdm.ac.in&gt;, Dr Murali G &lt;muralinitt@gmail.com&gt;, &lt;karthikeyan.velusamy@larsentoubro.com&gt;, &lt;tpdrajan@niist.res.in&gt;

I approve the BOS meeting minutes.

With thanks and regards,

Dr P R Thyla

Professor and Head

Department of Mechanical Engineering

PSG College of Technology

Coimbatore - 641004, Tamilnadu, India.

On Tue, Nov 26, 2024 at 9:24 AM HoD mech &lt;hod-mech@srec.ac.in&gt; wrote:

Dear Sir/Madam,

We sincerely thank you for your participation in the 20th Board of Studies (BoS) meeting and the valuable suggestions you provided during the session.

Please find attached the Minutes of the Meeting for your review. We kindly request that you go through the document and confirm your approval to proceed with the next steps.

Additionally, to process the sitting fee for your attendance at the 20th BoS meeting, we would be grateful if you could provide your bank account details.

Thank you once again for your contribution.

Regards,

Dr. P. Karuppuswamy

Professor and Head

Dept. of Mechanical Engg

Sri Ramakrishna Engg. College

Coimbatore 641 022

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--

Dr. P. Karuppuswamy

Professor and Head

Dept. of Mechanical Engg

Sri Ramakrishna Engg. College

**Fwd: Requesti to approve the Minutes of the 20th BoS Meeting - reg.,**

HoD mech &lt;hod-mech@srec.ac.in&gt;

Wed, Nov 27, 2024 at 8:58 AM

To: T R Sathishkumar &lt;sathishkumar.ramalingam@srec.ac.in&gt;

----- Forwarded message -----

From: **Senthil Raja** <senthilrajairtt@gmail.com>

Date: Tue, Nov 26, 2024 at 3:52 PM

Subject: Re: Requesti to approve the Minutes of the 20th BoS Meeting - reg.,

To: HoD mech &lt;hod-mech@srec.ac.in&gt;

I approve the minutes of the 20 th Board of studies.  
Thank You

Dr.R.Senthilraja,  
Assistant Professor,  
Department of Mechanical Engineering,  
Institute of Road and Transport Technology,  
Erode - 638 316

On Tue, Nov 26, 2024 at 12:17 PM HoD mech &lt;hod-mech@srec.ac.in&gt; wrote:

Dear Sir

We sincerely thank you for your participation in the 20th Board of Studies (BoS) meeting and the valuable suggestions you provided during the session.

Please find attached the Minutes of the Meeting for your review. We kindly request that you go through the document and confirm your approval to proceed with the next steps.

Thank you once again for your contribution.

--  
Dr. P. Karuppuswamy  
Professor and Head  
Dept. of Mechanical Engg  
Sri Ramakrishna Engg. College  
Coimbatore 641 022

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--  
Dr. P. Karuppuswamy  
Professor and Head  
Dept. of Mechanical Engg  
Sri Ramakrishna Engg. College  
Coimbatore 641 022

[Quoted text hidden]

**Fwd: Requesti to approve the Minutes of the 20th BoS Meeting - reg.,**

HoD mech &lt;hod-mech@srec.ac.in&gt;

Wed, Nov 27, 2024 at 8:56 AM

To: T R Sathishkumar &lt;sathishkumar.ramalingam@srec.ac.in&gt;

----- Forwarded message -----

From: **K Jayabal** <jayabal@iiitdm.ac.in>

Date: Tue, Nov 26, 2024 at 10:29 AM

Subject: Re: Requesti to approve the Minutes of the 20th BoS Meeting - reg.,

To: HoD mech &lt;hod-mech@srec.ac.in&gt;

Dear Sir,

I went through the content and it's fine with me. Best wishes.

Regards,

Jayabal

**Prof. Jayabal K** / பேராசிரியர். ஜெயபால்/ प्राध्यापक. जयबाल के

यांत्रिक अभियांत्रिकी विभाग /Department of Mechanical Engineering

भारतीय सूचना प्रौद्योगिकी, अभिकल्पना एवं विनिर्माण संस्थान, कांचीपुरम /

Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

चेन्नई/Chennai 600127, दूरभाष /Phone: +91-44-2747 6362

<https://iiitdm.ac.in/people/faculty/jayabal@iiitdm.ac.in>

On Tue, 26 Nov 2024 at 09:24, HoD mech &lt;hod-mech@srec.ac.in&gt; wrote:

Dear Sir/Madam,

We sincerely thank you for your participation in the 20th Board of Studies (BoS) meeting and the valuable suggestions you provided during the session.

Please find attached the Minutes of the Meeting for your review. We kindly request that you go through the document and confirm your approval to proceed with the next steps.

Additionally, to process the sitting fee for your attendance at the 20th BoS meeting, we would be grateful if you could provide your bank account details.

Thank you once again for your contribution.

Regards,

Dr. P. Karuppuswamy

Professor and Head

Dept. of Mechanical Engg

Sri Ramakrishna Engg. College

Coimbatore 641 022

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**Fwd: Requesti to approve the Minutes of the 20th BoS Meeting - reg.,**

5 messages

HoD mech &lt;hod-mech@srec.ac.in&gt;

Wed, Nov 27, 2024 at 8:55 AM

To: T R Sathishkumar &lt;sathishkumar.ramalingam@srec.ac.in&gt;

----- Forwarded message -----

From: **Murali G** <muralinitt@gmail.com>

Date: Tue, Nov 26, 2024 at 10:20 AM

Subject: Re: Requesti to approve the Minutes of the 20th BoS Meeting - reg.,

To: HoD mech &lt;hod-mech@srec.ac.in&gt;

Dear Sir,

Thank you for sharing the Minutes of the 20th Board of Studies (BoS) meeting. I appreciate the opportunity to have participated in the session and the valuable discussions held.

I have reviewed the document and I am pleased to confirm my approval to proceed with the next steps.

Regarding the sitting fee, please find my bank account details

Name: MURALI GOVINDARAJAN

AC No: 37245236387

IFSC: SBIN0021361

Branch code: 21361,

Branch: Vaddeswaram.

Thank you once again for the opportunity to contribute. Please do not hesitate to reach out if further information is needed.

Sincerely,

Dr.G.Murali

On Tue, 26 Nov, 2024, 9:24 am HoD mech, <hod-mech@srec.ac.in> wrote:

Dear Sir/Madam,

We sincerely thank you for your participation in the 20th Board of Studies (BoS) meeting and the valuable suggestions you provided during the session.

Please find attached the Minutes of the Meeting for your review. We kindly request that you go through the document and confirm your approval to proceed with the next steps.

Additionally, to process the sitting fee for your attendance at the 20th BoS meeting, we would be grateful if you could provide your bank account details.

Thank you once again for your contribution.

Regards,

Dr. P. Karuppuswamy

Professor and Head

Dept. of Mechanical Engg

Sri Ramakrishna Engg. College

Coimbatore 641 022

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**Fwd: Requesti to approve the Minutes of the 20th BoS Meeting - reg.,**

HoD mech &lt;hod-mech@srec.ac.in&gt;

Wed, Nov 27, 2024 at 8:56 AM

To: T R Sathishkumar &lt;sathishkumar.ramalingam@srec.ac.in&gt;

----- Forwarded message -----

From: **Karthikeyan Velusamy** <Karthikeyan.Velusamy@larsentoubro.com>

Date: Tue, Nov 26, 2024 at 5:44 PM

Subject: RE: Requesti to approve the Minutes of the 20th BoS Meeting - reg.,

To: HoD mech &lt;hod-mech@srec.ac.in&gt;

Dear Sir,

Hereby, I approve the BoS Minutes of Meeting document for your further action.

Thanks &amp; Regards,

V.Karthikeyan

**From:** HoD mech <hod-mech@srec.ac.in>**Sent:** 26 November 2024 09:24**To:** prt.mech@psgtech.ac.in; senthilraja@irttech.ac.in; shashidhar.nc@ams-india.co.in; jayabal@iiitdm.ac.in; Dr Murali G <muralinitt@gmail.com>; Karthikeyan Velusamy <Karthikeyan.Velusamy@larsentoubro.com>; tpdrajan@niist.res.in**Subject:** Requesti to approve the Minutes of the 20th BoS Meeting - reg.,**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Sir/Madam,

We sincerely thank you for your participation in the 20th Board of Studies (BoS) meeting and the valuable suggestions you provided during the session.

Please find attached the Minutes of the Meeting for your review. We kindly request that you go through the document and confirm your approval to proceed with the next steps.

Additionally, to process the sitting fee for your attendance at the 20th BoS meeting, we would be grateful if you could provide your bank account details.

Thank you once again for your contribution.

Regards,

Dr. P. Karuppuswamy  
Professor and Head



**SRI RAMAKRISHNA ENGINEERING COLLEGE, COIMBATORE – 22**

[Educational Service: SNR Sons Charitable Trust]

[Autonomous Institution, Re-accredited by NAAC with 'A+' Grade]

[Approved by AICTE and Permanently Affiliated to Anna University, Chennai]

[ISO 9001:2015 Certified and all eligible programmes Accredited by NBA]

**MINUTES OF THE 19<sup>th</sup> BOARD OF STUDIES MEETING FOR THE UG MECHANICAL ENGINEERING PROGRAMME HELD ON 06.04.2024 AT 11.00 A.M IN THE DEPARTMENT OF MECHANICAL ENGINEERING.**

The following members attended the above meeting.

| S.No | MEMBER                                                                                                                                        | CATEGORY                                             |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| 1.   | Dr.P.Karuppuswamy, Professor & Head,<br>Mechanical Engineering/SREC                                                                           | Chairman                                             |
| 2.   | Dr.M.Sreekumar,<br>Professor,<br>Department of Mechanical Engineering,<br>IIITDM Kanchipuram, Chennai - 600 127                               | University Nominee                                   |
| 3.   | Dr.N.Siva Shanmugam,<br>Associate Professor,<br>Department of Mechanical Engineering,<br>NIT Trichy, Tiruchirappalli – 620 015                | Subject expert from Central<br>University            |
| 4.   | Dr.L.Ravikumar,<br>Professor, Department of Mechanical<br>Engineering,<br>BMS college of Engineering, Bull Temple                             | Subject expert from outside the<br>parent University |
| 5.   | Dr.S.Rajkumar<br>President, RANE Engine Valves Ltd.<br>Chennai – 600 032                                                                      | Industry Expert                                      |
| 6.   | Mr.Sampathkumar Palanisamy,<br>Technical Project Manager,<br>Robert Bosch Engineering and Business<br>Solutions Limited, Coimbatore – 641 035 | Meritorious Alumni                                   |
| 7.   | Dr.T.R.Sathish Kumar, AP/ Mech.Engg., SREC                                                                                                    | Department BoS coordinator                           |
| 8.   | Dr.P.Chandramohan, P/ Mech. Engg., SREC                                                                                                       | Member                                               |



|     |                                            |        |
|-----|--------------------------------------------|--------|
| 9.  | Dr. N.Gunasekar, Asso.P/ Mech. Engg., SREC | Member |
| 10. | Dr.J.Yoganandh, Asso.P/ Mech. Engg., SREC  | Member |
| 11. | Dr.V. Amarnath, Asso.P / Mech. Engg., SREC | Member |
| 12. | Dr.T.Velmurugan, AP/ Mech. Engg., SREC     | Member |
| 13. | Dr.M.Ramesh, AP/ Mech. Engg., SREC         | Member |
| 14. | Mr.M.S.Balasanthosh, AP/ Mech. Engg.,      | Member |
| 15. | Dr.S.Sathish, AP/ Mech. Engg., SREC        | Member |
| 16. | Dr.B.Pranesh, AP/ Mech. Engg., SREC        | Member |
| 17. | Dr.N.Gopalakrishnan, AP/Maths, SREC        | Member |

Dr.P.Karuppuswamy, Chairperson, Board of Studies, chaired the meeting and welcomed all the members to the 19<sup>th</sup> BoS meeting. After a brief self-introduction by the members, the agenda items listed were taken up for discussion and the following resolutions were passed. He initiated the meeting with a presentation on Vision, Mission of the Department and PEOs,PSOs and POs of the B.E Mechanical Engineering program.

### **Regulations 2020**

#### **ITEM No.1 – Revised Regulations 2020**

- It is resolved that Revised Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit System) will be followed for all B.E./B.Tech. Programmes for students admitted in the Academic year 2021-22 and onwards.

#### **ITEM No.2 – List of additional electives to be included under (Revised) Regulations 2020**

- It is resolved that the syllabi for the following new Professional Elective courses under (Revised) Regulations 2020 be approved and passed.

| Code No. | Course Title                     | L | T | P | C |
|----------|----------------------------------|---|---|---|---|
| 20ME2E44 | Continuum Mechanics              | 3 | 0 | 0 | 3 |
| 20ME2E45 | Computational Multibody Dynamics | 3 | 0 | 0 | 3 |
| 20ME2E46 | Design of Experiments            | 3 | 0 | 0 | 3 |

#### **ITEM No.3 – List of new NPTEL online courses to be included**

- It is resolved that the following NPTEL courses are approved for credit transfer during April/May 2024.

| S.No | NPTEL Course Code | NPTEL Course Title                                             | Credits | Course Duration | Equivalent Professional / Open Elective in SREC Curriculum |
|------|-------------------|----------------------------------------------------------------|---------|-----------------|------------------------------------------------------------|
| 1    | noc24-mm15        | Welding Processes                                              | 3       | 12 Weeks        | 20ME2E08 Metal Joining Processes                           |
| 2    | noc24-me26        | Computational Fluid Dynamics for Incompressible Flows          | 3       | 12 Weeks        | 20ME2E11 Computational Fluid Dynamics                      |
| 3    | noc24-ge24        | Non-conventional Energy Resources                              | 3       | 12 Weeks        | 20ME2E12 Renewable Energy Sources and Systems              |
| 4    | noc24-me58        | Product Design and Manufacturing                               | 3       | 12 Weeks        | 20ME2E21 Product Design                                    |
| 5    | noc24-cs35        | Introduction to Industry 4.0 and Industrial Internet of Things | 3       | 12 Weeks        | 20ME2E14 Industry 4.0                                      |
| 6    | noc24-me15        | Operations Management                                          | 3       | 12 Weeks        | 20ME2E38 Operations Management                             |

#### ITEM No.4 – Result Analysis for the Academic Year 2022-23.

- It is resolved that the Result Analysis for the Academic Year 2023-24 (Semesters VII / V /III) are approved and passed.

| Semester | Appeared | Passed | Pass % | Grade% |       |      |      |      |      |
|----------|----------|--------|--------|--------|-------|------|------|------|------|
|          |          |        |        | O      | A+    | A    | B+   | B    | C    |
| VII      | 128      | 97     | 75.78  | 0.62   | 8.5   | 34.9 | 44.3 | 11.5 | 0    |
| V        | 92       | 43     | 46.74  | 1.5    | 14.4  | 35.8 | 24.5 | 16.4 | 7.09 |
| III      | 96       | 42     | 43.75  | 4.19   | 19.03 | 30.9 | 19.7 | 11.5 | 7.2  |

#### ITEM No.5 – List of Specialization/Minor course and Eligible students

- It is resolved that the following specialization/minor courses are offered during the even semester of Academic Year 2023-24 and the following eligible students be approved for the Honors Specialization / minor in B.E Mechanical Engineering degree programme.

| Specialization      |             | Course Code & Title                                                                 |      |
|---------------------|-------------|-------------------------------------------------------------------------------------|------|
| <b>Robotics</b>     |             | 20ME2E31 - Robot Manipulator Design<br>20ME2E30 - Sensors and Actuation Systems     |      |
| S.No.               | Roll No.    | Name                                                                                | CGPA |
| 1.                  | 71812104134 | Vijay Anand. A                                                                      | 9.03 |
| 2.                  | 71812104024 | Hemanth Kumar B M                                                                   | 8.2  |
| 3.                  | 71812104130 | Udhaykumar L                                                                        | 7.72 |
| Minors              |             | Course Code & Title                                                                 |      |
| <b>AI / ML</b>      |             | 20CS2E05 - Deep Learning<br>20CS2E06 - Robotic Process Automation                   |      |
| 1.                  | 71812104018 | Dinesh Arvind M                                                                     | 8.22 |
| 2.                  | 71812104031 | Kavinkumar S                                                                        | 8.34 |
| 3.                  | 71812104033 | Kishore S                                                                           | 9.09 |
| 4.                  | 71812104105 | Nagul S S                                                                           | 8.32 |
| <b>Data Science</b> |             | 20IT2E84 - Machine Learning Paradigm<br>20IT2E90 - Neural Network and Deep Learning |      |
| 1.                  | 71812104127 | Surendhar K B                                                                       | 7.81 |
| 2.                  | 71812104129 | Timothy Motha N                                                                     | 7.95 |

#### ITEM No.6 – List of Mandatory courses

- It is resolved that the following Mandatory courses be approved for the student in B.E. Mechanical Engineering degree programme

**Batch: 2020 – 2024**

| S.No | Mandatory Course                                                                         | Course Code | No. of Students Completed |
|------|------------------------------------------------------------------------------------------|-------------|---------------------------|
| 1.   | Design Thinking                                                                          | 20IT2101    | 131                       |
| 2.   | Liberal Arts (Web Design)                                                                | 20IT203     | 15                        |
| 3.   | Personality and Character Development (Soft Skills)                                      | 20MC208     | 59                        |
| 4.   | Personality and Character Development (Society of Automotive Engineers (SAE))            | 20MC043     | 62                        |
| 5.   | Personality and Character Development (Nature club)                                      | 20MC215     | 4                         |
| 6.   | Personality and Character Development (Sports and Games)                                 | 20MC201     | 1                         |
| 7.   | Personality and Character Development (Empowerment through Yoga -Yoga & Meditation club) | 20MC202     | 2                         |
| 8.   | Personality and Character Development (National Cadet Corps)                             | 20MC203     | 1                         |
| 9.   | Personality and Character Development (National Service Scheme)                          | 20MC204     | 1                         |



**Batch: 2021 – 2025**

| S.No | Mandatory Course                                     | Course Code | No. of Students Completed |
|------|------------------------------------------------------|-------------|---------------------------|
| 1.   | Architectural Conservation and Historic Preservation | 20CE206     | 37                        |
| 2.   | Design Thinking                                      | 20IT2101    | 95                        |

**Batch: 2022 – 2026**

| S.No | Mandatory Course | Course Code | No. of Students Completed |
|------|------------------|-------------|---------------------------|
| 1.   | Design Thinking  | 20IT2101    | 98                        |

**ITEM No.7 – Internship/Inplant training by students**

- It is resolved that the following students had completed 4/6 weeks of internship/inplant training be approved for the student in B.E. Mechanical Engineering degree programme.

**Batch: 2020 - 2024**

| S. No | Industry                                     | No. of Students Completed |
|-------|----------------------------------------------|---------------------------|
| 1.    | Annamalai Engineering, Coimbatore            | 2                         |
| 2.    | Aquasub Engineering, Coimbatore              | 5                         |
| 3.    | Ashok Leyland Limited, Hosur                 | 3                         |
| 4.    | Ashok Leyland Limited, Chennai               | 1                         |
| 5.    | CIPET, Madurai                               | 3                         |
| 6.    | Craftsman Automation Ltd., Coimbatore        | 1                         |
| 7.    | EIFCO Machine Tools Pvt. Ltd, Coimbatore     | 3                         |
| 8.    | Elgi Equipments, Coimbatore                  | 14                        |
| 9.    | G.S Machineries, Coimbatore.                 | 1                         |
| 10.   | Jega Precision Drives Pvt. Ltd., Coimbatore  | 1                         |
| 11.   | KLRF Eltex supercastings, Coimbatore         | 1                         |
| 12.   | Kongu Engineers, Coimbatore                  | 5                         |
| 13.   | KOSO India Pvt. Ltd, Coimbatore              | 2                         |
| 14.   | KSB Ltd., Coimbatore                         | 4                         |
| 15.   | L & T Defence, Coimbatore                    | 2                         |
| 16.   | Lakshmi Machine Works Ltd, Coimbatore        | 2                         |
| 17.   | Larsen & Toubro Ltd., Chennai                | 1                         |
| 18.   | Linux World Informatics Pvt. Ltd             | 3                         |
| 19.   | Matrix Castings                              | 1                         |
| 20.   | Micro CNC Precision Tech                     | 2                         |
| 21.   | Miracle Sun, Coimbatore                      | 5                         |
| 22.   | Next Generation 3D Printers Pvt. Ltd         | 1                         |
| 23.   | Pumo Technovation India Pvt. Ltd, Coimbatore | 2                         |

| S. No | Industry                                         | No. of Students Completed |
|-------|--------------------------------------------------|---------------------------|
| 24.   | Revathi Equipment Limited, Coimbatore            | 2                         |
| 25.   | Roots Industries India Pvt. Ltd, Coimbatore      | 22                        |
| 26.   | Royal Enfield, Chennai                           | 2                         |
| 27.   | Rydon Industries Pvt. Ltd, Coimbatore            | 1                         |
| 28.   | Shanthi Gears Ltd, Coimbatore                    | 1                         |
| 29.   | Sri Ranganathar Industries Pvt. Ltd., Coimbatore | 1                         |
| 30.   | Srimathi Engineering Works, Coimbatore           | 2                         |
| 31.   | STUD INDIA, Chennai                              | 1                         |
| 32.   | Super Sales India Ltd., Coimbatore               | 1                         |
| 33.   | SyssTech Gears, Coimbatore                       | 1                         |
| 34.   | Thangamani Engineering Industry Pvt. Ltd         | 1                         |
| 35.   | TNPL, Karur                                      | 2                         |
| 36.   | TVS Motor company Ltd., Hosur                    | 1                         |
| 37.   | United Enterprises, Coimbatore                   | 9                         |
| 38.   | VEEJEI Automation Pvt. Ltd, Coimbatore           | 6                         |

**Batch: 2021 - 2025**

| S. No | Industry                           | No. of Students Completed |
|-------|------------------------------------|---------------------------|
| 1.    | Craftsman Automation, Coimbatore.  | 4                         |
| 2.    | Mechatron Solutions, Coimbatore    | 5                         |
| 3.    | NIT, Trichy                        | 2                         |
| 4.    | Roots Industries India Private Ltd | 1                         |

**ITEM No.8 – Curriculum for the B.E. Mechanical Engineering Programme for Working Professionals**

It is resolved that the curriculum for the B.E. (Mech/EEE/ECE) programme for working professionals as communicated by AICTE through AICTE/P&AP/APH/2023-24/01 dated 24.08.2023 may be started with approval from Anna University, Chennai.

| S. No                                              | Course Code | Course Title                                       | Credits (LTPC) |
|----------------------------------------------------|-------------|----------------------------------------------------|----------------|
| <b>Humanities and Social Science Courses (HSC)</b> |             |                                                    |                |
| 1                                                  | 20XXXX      | Liberal Arts (HS)                                  | 1 0 0 1        |
| <b>Basic Science Courses (BSC)</b>                 |             |                                                    |                |
| 1                                                  | 20MA210     | Partial Differential Equations and Tensor Calculus | 2 1 0 3        |
| 2                                                  | 20MA217     | Transforms, Probability and Statistics             | 2 1 0 3        |
| <b>Engineering Science Courses (ESC)</b>           |             |                                                    |                |
| 1                                                  | 20ME201     | Engineering Thermodynamics                         | 2 1 0 3        |
| 2                                                  | 20ME208     | Robotics                                           | 2 0 0 2        |
| 3                                                  | 20ME211     | Strength of Materials                              | 2 1 0 3        |
| 4                                                  | 20CS241/    | Programming Foundations / Python                   | 2 0 0 2        |



|                                            |                     |                                                         |         |
|--------------------------------------------|---------------------|---------------------------------------------------------|---------|
|                                            | 20IT241             | Programming                                             |         |
| 5                                          | 20CS291/<br>20IT291 | Programming Foundations Lab / Python Programming lab    | 0 0 2 1 |
| 6                                          | 20CS201             | Disruptive Technology                                   | 2 0 0 2 |
| 7                                          | 20ME213             | Resource Management and Optimization Techniques         | 2 0 0 0 |
| 8                                          | 20CS243             | Data Structures and Algorithm Analysis                  | 2 0 0 2 |
| 9                                          | 20CS292             | Data Structures and Algorithm Analysis Lab              | 0 0 2 1 |
| <b>Professional Core Courses (PCC)</b>     |                     |                                                         |         |
| 1                                          | 20ME202             | Manufacturing Technology                                | 3 0 0 3 |
| 2                                          | 20ME209             | Additive Manufacturing Technology                       | 2 0 0 2 |
| 3                                          | 20ME275             | Manufacturing Technology lab                            | 0 0 2 1 |
| 4                                          | 20ME277             | Design For Manufacturing Lab                            | 0 0 2 1 |
| 5                                          | 20ME210             | Kinematics of Machinery                                 | 3 0 0 3 |
| 6                                          | 20ME206             | Thermal Engineering                                     | 3 0 0 3 |
| 7                                          | 20ME212             | Electric Vehicles Technology                            | 2 0 0 2 |
| 8                                          | 20ME254             | Mechanical Measurements and Metrology and Metrology Lab | 2 0 1 3 |
| 9                                          | 20ME276             | Computer Aided Modeling and 3D printing Lab             | 0 0 2 1 |
| 10                                         | 20ME285             | Thermal Engineering & Materials Testing Lab             | 0 0 2 1 |
| 11                                         | 20ME214             | Design of Machine Elements                              | 3 0 0 3 |
| 12                                         | 20ME221             | Heat Transfer                                           | 3 0 0 3 |
| 13                                         | 20ME252             | Dynamics of Machinery and Laboratory                    | 3 0 2 4 |
| 14                                         | 20ME219             | Finite Element Method                                   | 3 0 0 3 |
| 15                                         | 20ME220             | Design of Transmission systems                          | 3 0 0 3 |
| 16                                         | 20ME215             | Thermal system and Gas Dynamics                         | 3 0 0 3 |
| 17                                         | 20ME216             | Industrial Automation                                   | 3 0 0 3 |
| 18                                         | 20ME222             | Industrial Engineering and Cost Estimation              | 2 0 0 2 |
| 19                                         | 20ME223             | Digital Manufacturing                                   | 2 0 0 2 |
| 20                                         | 20ME224             | AI for Mechanical Engineers                             | 2 0 0 2 |
| 21                                         | 20ME280             | Automation Lab & Heat Transfer Lab                      | 0 0 2 1 |
| 22                                         | 20ME286             | Computer Aided Engineering Lab                          | 0 0 2 1 |
| <b>Open Elective Courses (OEC)</b>         |                     |                                                         |         |
| 1                                          | 20ME2E01            | Intellectual Property Rights for Engineers              | 3 0 0 3 |
| 2                                          | 20ME2E51            | Engineering Economics                                   | 3 0 0 3 |
| 3                                          | 20ME2E52            | Entrepreneurship and Financial Management               | 3 0 0 3 |
| 4                                          | 20ME2E53            | Project Management                                      | 3 0 0 3 |
| <b>Professional Elective Courses (PEC)</b> |                     |                                                         |         |
| 1                                          | 20ME2E02            | Computer Aided Design                                   | 3 0 0 3 |
| 2                                          | 20ME2E03            | Engineering Tribology                                   | 3 0 0 3 |
| 3                                          | 20ME2E04            | Mechanical Vibration                                    | 3 0 0 3 |
| 4                                          | 20ME2E05            | Machine Tool Design                                     | 3 0 0 3 |
| 5                                          | 20ME2E06            | Composite Materials                                     | 3 0 0 3 |
| 6                                          | 20ME2E07            | Design for Manufacturing and Assembly                   | 3 0 0 3 |
| 7                                          | 20ME2E08            | Metal Joining Processes                                 | 3 0 0 3 |
| 8                                          | 20ME2E09            | Green and Sustainable Manufacturing                     | 3 0 0 3 |
| 9                                          | 20ME2E10            | Refrigeration and Air-conditioning                      | 3 0 0 3 |
| 10                                         | 20ME2E11            | Computational Fluid Dynamics                            | 3 0 0 3 |



|                                             |           |                                           |          |
|---------------------------------------------|-----------|-------------------------------------------|----------|
| 11                                          | 20ME2E12  | Renewable Energy Sources and Systems      | 3 0 0 3  |
| 12                                          | 20ME2E13  | Energy Storage Systems                    | 3 0 0 3  |
| 13                                          | 20ME2E14  | Industry 4.0                              | 3 0 0 3  |
| 14                                          | 20ME2E15  | Machine Vision System                     | 3 0 0 3  |
| 15                                          | 20ME2E16  | Automotive Electronics                    | 3 0 0 3  |
| 16                                          | 20ME2E17  | Ergonomics                                | 3 0 0 3  |
| 17                                          | 20ME2E18  | Micro Electro Mechanical System           | 3 0 0 3  |
| 18                                          | 20ME2E19  | Operations Research                       | 3 0 0 3  |
| 19                                          | 20ME2E20  | Fracture Mechanics                        | 3 0 0 3  |
| 20                                          | 20ME2E21  | Product Design and Development Strategies | 3 0 0 3  |
| 21                                          | 20ME2E22  | Advanced Machining Processes              | 3 0 0 3  |
| 22                                          | 20ME2E23  | Operations and Supply Chain Management    | 3 0 0 3  |
| 23                                          | 20ME2E24  | Battery Management System                 | 3 0 0 3  |
| 24                                          | 20ME2E25  | Value Engineering                         | 3 0 0 3  |
| 25                                          | 20ME2E26  | Data Science for Industrial Applications  | 3 0 0 3  |
| 26                                          | 20ME2E27  | Lean Manufacturing                        | 3 0 0 3  |
| 27                                          | 20ME2E36  | Design of Pressure Vessels and Piping     | 3 0 0 3  |
| 28                                          | 20ME2E37  | Failure analysis in design                | 3 0 0 3  |
| 29                                          | 20ME2E38  | Operations Management                     | 3 0 0 3  |
| 30                                          | 20ME2E39  | Enterprise Resource Planning              | 3 0 0 3  |
| 31                                          | 20ME2E40  | CNC Machine Tools                         | 3 0 0 3  |
| 32                                          | 20ME2E41  | Turbo Machinery                           | 3 0 0 3  |
| 33                                          | 20ME2E42  | Hydrogen and Fuel Cell Technology         | 3 0 0 3  |
| 34                                          | 20ME2E43  | Energy Conservation and Management        | 3 0 0 3  |
| 35                                          | 20ME2E44  | Continuum Mechanics                       | 3 0 0 3  |
| 36                                          | 20ME2E45  | Multibody Dynamics                        | 3 0 0 3  |
| 37                                          | 20ME2E46  | Design of Experiments                     | 3 0 0 3  |
| <b>Employment Enhancement Courses (EEC)</b> |           |                                           |          |
| 1                                           | 20ME278   | Mini Project - I                          | 0 0 4 2  |
| 2                                           | 20ME282   | Mini Project - II                         | 0 0 4 2  |
| 3                                           | 20ME284   | Project Work                              | 0 0 16 8 |
| 4                                           | 20MExxx   | Internship / Startup / Entrepreneurship   | 0 0 4 2  |
| 5                                           | 20ME2EIxx | Industrial One Credit Course              | 0 0 4 1  |

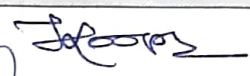
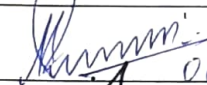
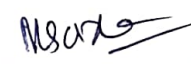
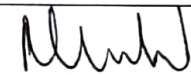
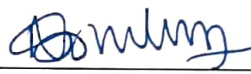
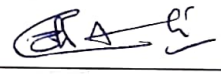
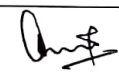
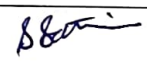
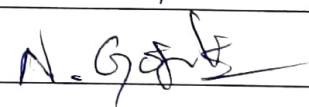
**ITEM No.9 - Suggestions by expert members on Regulations, curriculum, various courses and electives**

- Dr. Sreekumar recommended including a few books by Indian authors as textbooks or reference books for the course Continuum Mechanics.
- Dr. Sreekumar suggested using the latest editions of books as textbooks. He added that if the latest editions are not available then, they may be offered as reference books if it is essential.
- Dr. Sreekumar proposed organizing guest lectures that include case studies for the course Design of Experiments.
- Dr. Rajkumar proposed adding the topic “Modern Methods for Design of Experiments” to the course Design of Experiments.

- Dr. Siva Shanmugam suggested incorporating Central Composite Design and the use of SPSS or Minitab software in the course Design of Experiments.
- Dr. Sreekumar inquired about the inclusion of 3D Multibody Dynamics in the course Computational Multibody Dynamics. Dr. Karuppuswamy responded that the syllabus for the course only covers 2D Multibody Dynamics.
- Dr. Siva Shanmugam proposed teaching the course Computational Multibody Dynamics in collaboration with faculty from the Robotics and Automation department.
- Dr. Siva Shanmugam suggested selecting question paper setters also from renowned institutions such as IITs and NITs to enhance the quality of the questions.
- Dr. Sreekumar suggested evaluating the feasibility of offering the B.E. Mechanical Engineering Program for Working Professionals, noting that the same curriculum and syllabus as that for regular students should be followed for working professionals.

Dr.P.Karuppuswamy thanked the members for their valuable feedback and suggestions

**Members Present for the Meeting of 19<sup>th</sup> BoS for UG Mechanical Engineering Program:**

| Name of the Member   | Designation                | Signature                                                                                                 |
|----------------------|----------------------------|-----------------------------------------------------------------------------------------------------------|
| Dr.P.Karuppuswamy    | Chairperson                |                         |
| Dr.M.Sreekumar       | University Nominee         | <br>06/04/24            |
| Dr.N.Siva Shanmugam  | Subject expert             | <br>(N. Siva Shanmugam) |
| Dr.L.Ravikumar       | Subject expert             | Absent<br>Attended Online                                                                                 |
| Dr.S.Rajkumar        | Industry expert            | Attended online                                                                                           |
| Mr.P.Sampathkumar    | Meritorious Alumni         | Absent .                                                                                                  |
| Dr.T.R.Sathish Kumar | Department BoS coordinator |                         |
| Dr.P.Chandramohan    | Member                     |                        |
| Dr. N.Gunasekar      | Member                     |                         |
| Dr.J.Yoganandh       | Member                     |                        |
| Dr.V. Amarnath       | Member                     |                       |
| Dr.T.Velmurugan      | Member                     |                       |
| Dr.M.Ramesh          | Member                     |                       |
| Mr.M.S.Balasanthosh  | Member                     |                       |
| Dr. S.Sathish        | Member                     |                       |
| Mr.B.Pranesh         | Member                     |                      |
| Dr.N.Gopalakrishnan  | Member                     |                       |

  
**CHAIRPERSON**  
**BOARD OF STUDIES**  
**Department of Mechanical Engineering**





**SRI RAMAKRISHNA ENGINEERING COLLEGE, COIMBATORE – 22**

[Educational Service: SNR Sons Charitable Trust]

[Autonomous Institution, Re-accredited by NAAC with 'A+' Grade]

[Approved by AICTE and Permanently Affiliated to Anna University, Chennai]

[ISO 9001:2015 Certified and all eligible programmes Accredited by NBA]

**MINUTES OF THE 18<sup>th</sup> BOARD OF STUDIES MEETING FOR THE UG MECHANICAL ENGINEERING PROGRAMME HELD ON 08.11.2023 AT 2.00 P.M (ONLINE) IN THE DEPARTMENT OF MECHANICAL ENGINEERING.**

The following members attended the above meeting.

| S.No | MEMBER                                                                                                                                        | CATEGORY                                             |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| 1.   | Dr.P.Karuppuswamy, Professor & Head,<br>Mechanical Engineering/SREC                                                                           | Chairman                                             |
| 2.   | Dr.M.Sreekumar,<br>Professor,<br>Department of Mechanical Engineering,<br>IIITDM Kanchipuram, Chennai - 600 127                               | University Nominee                                   |
| 3.   | Dr.N.Siva Shanmugam,<br>Associate Professor,<br>Department of Mechanical Engineering,<br>NIT Trichy, Tiruchirappalli – 620 015                | Subject expert from Central<br>University            |
| 4.   | Dr.L.Ravikumar,<br>Professor, Department of Mechanical<br>Engineering,<br>BMS college of Engineering, Bull Temple                             | Subject expert from outside the<br>parent University |
| 5.   | Dr.S.Rajkumar<br>President, RANE Engine Valves Ltd.<br>Chennai – 600 032                                                                      | Industry Expert                                      |
| 6.   | Mr.Sampathkumar Palanisamy,<br>Technical Project Manager,<br>Robert Bosch Engineering and Business<br>Solutions Limited, Coimbatore – 641 035 | Meritorious Alumni                                   |
| 7.   | Dr.T.R.Sathish Kumar, AP/ Mech.Engg., SREC                                                                                                    | Department BoS coordinator                           |
| 8.   | Dr.P.Chandramohan, P/ Mech. Engg., SREC                                                                                                       | Member                                               |

|     |                                            |        |
|-----|--------------------------------------------|--------|
| 9.  | Dr. N.Gunasekar, Asso.P/ Mech. Engg., SREC | Member |
| 10. | Dr.J.Yoganandh, Asso.P/ Mech. Engg., SREC  | Member |
| 11. | Dr.V. Amarnath, Asso.P / Mech. Engg., SREC | Member |
| 12. | Dr.T.Velmurugan, AP/ Mech. Engg., SREC     | Member |
| 13. | Dr.M.Ramesh, AP/ Mech. Engg., SREC         | Member |
| 14. | Mr.M.S.Balasanthosh, AP/ Mech. Engg.,      | Member |
| 15. | Dr.S.Sathish, AP/ Mech. Engg., SREC        | Member |
| 16. | Dr.B.Pranesh, AP/ Mech. Engg., SREC        | Member |
| 17. | Dr.N.Gopalakrishnan, AP/Maths, SREC        | Member |

Dr.P.Karuppuswamy, Chairperson, Board of Studies, chaired the meeting and welcomed all the members to the 18<sup>th</sup> BoS meeting. After a brief self-introduction by the members, the agenda items listed were taken up for discussion and the following resolutions were passed. He initiated the meeting with a presentation on Vision, Mission of the Department and PEOs, PSOs and POs of the B.E Mechanical Engineering program.

### **Regulations 2020**

#### **ITEM No.1 – Regulations 2020 curriculum and syllabi**

- It is resolved that Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit System) will be followed for all B.E./B.Tech. Programmes for students admitted in the Academic year 2020-21.
- It is resolved that Revised Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit System) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2021-22 & onwards.

#### **ITEM No.2 – List of additional electives to be included under Regulations 2020**

- It is resolved that the syllabi for the following new Professional Elective courses under (Revised) Regulations 2020 be approved and passed.

| Code No. | Course Title                          | L | T | P | C |
|----------|---------------------------------------|---|---|---|---|
| 20ME2E36 | Design of Pressure Vessels and Piping | 3 | 0 | 0 | 3 |
| 20ME2E37 | Failure analysis in design            | 3 | 0 | 0 | 3 |
| 20ME2E38 | Operations Management                 | 3 | 0 | 0 | 3 |
| 20ME2E39 | Enterprise Resource Planning          | 3 | 0 | 0 | 3 |

|          |                                    |   |   |   |   |
|----------|------------------------------------|---|---|---|---|
| 20ME2E40 | CNC Machine Tools                  | 3 | 0 | 0 | 3 |
| 20ME2E41 | Turbo Machinery                    | 3 | 0 | 0 | 3 |
| 20ME2E42 | Hydrogen and Fuel Cell Technology  | 3 | 0 | 0 | 3 |
| 20ME2E43 | Energy Conservation and Management | 3 | 0 | 0 | 3 |

**ITEM No.3 – List of new NPTEL online courses to be included**

- It is resolved that the following NPTEL courses are approved for credit transfer during April/May 2023 under Regulations 2020.

| S.No | NPTEL Course Code | NPTEL Course Title                | Credits | Course Duration | Equivalent Professional / Open Elective in SREC Curriculum |
|------|-------------------|-----------------------------------|---------|-----------------|------------------------------------------------------------|
| 1    | noc23-de21        | Ergonomics Research Techniques    | 3       | 12 Weeks        | 20ME2E17 Ergonomics                                        |
| 2    | noc23-me115       | Vibrations of Plates and Shells   | 3       | 12 Weeks        | 20ME2E04 Mechanical Vibration                              |
| 3    | noc23-me119       | Computational Fluid Dynamics      | 3       | 12 Weeks        | 20ME2E11 Computational Fluid Dynamic                       |
| 4    | noc23-me124       | Work System Design                | 3       | 12 Weeks        | 20ME2E21 Product Design and Development Strategies         |
| 5    | noc23-me138       | Sustainable Energy Technology     | 3       | 12 Weeks        | 20ME2E12 Renewable Energy Sources and Systems              |
| 6    | noc23-me71        | Social Innovation in Industry 4.0 | 3       | 12 Weeks        | 20ME2E14 Industry 4.0                                      |
| 7    | noc23-me73        | Engineering Fracture Mechanics    | 3       | 12 Weeks        | 20ME2E20 Fracture Mechanics                                |
| 8    | noc23-me89        | Introduction to Composites        | 3       | 12 Weeks        | 20ME2E06 Composite Materials                               |

**ITEM No.4 – Result Analysis for the Academic Year 2022-23.**

- It is resolved that the Result Analysis for the Academic Year 2022-23 (Semesters VII / V / III) are approved and passed.



| Semester | Appeared | Passed | Pass % | Grade% |      |      |      |      |     |
|----------|----------|--------|--------|--------|------|------|------|------|-----|
|          |          |        |        | O      | A+   | A    | B+   | B    | C   |
| VIII     | 128      | 102    | 79.7   | 7.5    | 29.2 | 24.5 | 25.6 | 13.2 | 0   |
| VI       | 122      | 55     | 45.1   | 12     | 18   | 32.4 | 33.6 | 3.9  | 0   |
| IV       | 90       | 33     | 36.6   | 4.8    | 14.7 | 43   | 24.7 | 9.5  | 3.3 |

**ITEM No.5 – Additional credits through Minor/Specialization courses**

- It is resolved that the following candidates who have registered for additional credits during Nov/Dec 2023 examination under the Specialization/Minor courses category Verticals shall be approved according to the communication from Anna University, Chennai via Letter No. 5749/AU/CAC/Honours/2022 dated 16.11.2022.

| Specialization/<br>Minor Course<br>Details | Course Code and Title                         | Register No.<br>of the<br>Candidate | Name              | CGPA |
|--------------------------------------------|-----------------------------------------------|-------------------------------------|-------------------|------|
| Specialization<br>Robotics                 | 20ME2E28 - Robotic Programming and ROS        | 71812104134                         | Vijay Anand.A     | 8.97 |
|                                            | 20ME2E29 - Digital System and Microcontroller | 71812104024                         | Hemanth Kumar B M | 8.34 |
|                                            |                                               | 71812104130                         | Udhaykumar L      | 7.72 |
| Minor<br>AI / ML                           | 20CS2E72 - Machine Learning Techniques        | 71812104018                         | Dinesh Arvind M   | 8.27 |
|                                            | 20CS2E46 - AI Tools and Framework             | 71812104031                         | Kavinkumar S      | 8.53 |
|                                            |                                               | 71812104033                         | Kishore S         | 9.24 |
| Minor<br>Datascience                       | 20IT2E51 - SQL for Data Analytics             | 71812104105                         | Nagul SS          | 8.44 |
|                                            | 20IT2E52 - Introduction to Data Science       | 71812104127                         | SurendharKB       | 7.97 |
|                                            |                                               | 71812104129                         | Timothy Motha N   | 7.89 |

**ITEM No.6 – B.E. Mechanical Engineering Programme for working professionals**

- It is resolved that the B.E. Mechanical Programme for working professionals as communicated by AICTE through AICTE/P&AP/APH/2023-24/01 dated 24.08.2023 may be started with approval from Anna University, Chennai.

**ITEM No.7 – Readmitted student detail**

Nawfil. M. S. (2004144) was detained in the academic year 2022-2023, due to lack of attendance. He has been readmitted in the 5<sup>th</sup> Semester B.E. Mechanical Engineering from the academic Year 2023-2024. It is resolved that curriculum and syllabi of Regulation R20 shall be followed by him.

**ITEM No.8 - Suggestions by expert members on Regulations, curriculum, various courses and electives**

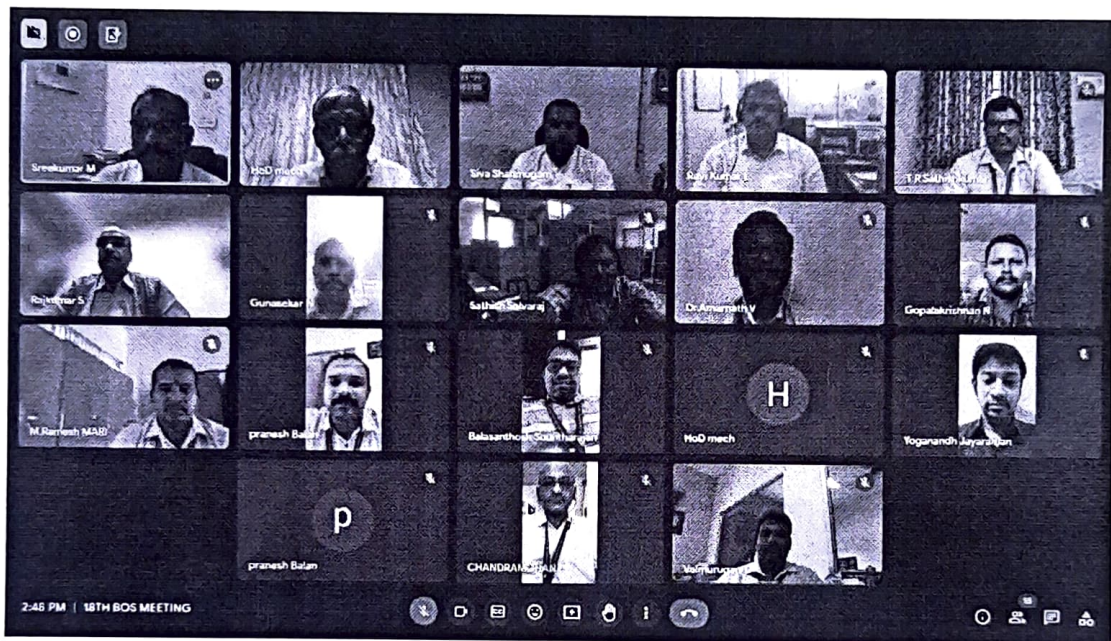
1. Dr.Sreekumar has suggested to include use of suitable software in the course “Design of Pressure Vessels and Piping” since it is industry relevant course and also suggested to add a tutorial or practical session to the above course.
2. Dr.Ravikumar has suggested to look for options to arrange industry experts to handle sessions on use of relevant software in the course Design of Pressure Vessels and Piping.
3. Dr.Ravikumar has suggested to add prerequisite to the syllabus of the course “Failure analysis and design” and to verify the textbooks used in Anna University for the similar course. Further, he added that an impact analysis could be done after offering elective course to the students.
4. Dr.Sreekumar has suggested to mention the use of Ansys software in the course syllabus “Failure analysis and design”.
5. Dr.Ravikumar has suggested to add relevant e-books to the course syllabus “Operations Management”.
6. Dr.Ravikumar enquired about the expertise of the faculty members to handle the course “Enterprise Resource Planning”. Dr. P. Karuppuswamy responded that expert faculty members are available in MBA department. Dr. Sreekumar has added that industry support shall be sought to handle the above course.
7. Dr.Sreekumar has suggested check whether the Text/Reference books for all the proposed courses are updated with latest books/editions.
8. Dr.Sreekumar has opined that the word “Thermal” can be removed from the course title “Thermal Turbo Machinery” if it is not highly relevant to the course content.
9. Mr.Rajkumar opined that Hydrogen fueled IC engine is an emerging technology and has expressed his interest to offer support to develop a course on Hydrogen fueled IC engines through R&D team of M/s Rane Ltd.



10. Dr.Sreekumar suggested to include few relevant reports/manuals released by government bodies under web references in course syllabus for the course “Energy Conservation and Management”.

11. Dr.Siva Shanmugam has suggested to change the title of the course “Failure analysis and design” as “Failure analysis in design”.

Dr.P.Karuppuswamy thanked the members for their valuable presence and for offering suggestions on syllabi and curriculum.





**Members Present for the Meeting of 18<sup>th</sup> BoS for UG Mechanical Engineering Program:**

| <b>Name of the Member</b> | <b>Designation</b>         |
|---------------------------|----------------------------|
| Dr.P.Karuppuswamy         | Chairperson                |
| Dr.M.Sreekumar            | University Nominee         |
| Dr.N.Siva Shanmugam       | Subject expert             |
| Dr.L.Ravikumar            | Subject expert             |
| Dr.S.Rajkumar             | Industry expert            |
| Mr.P.Sampathkumar         | Meritorious Alumni         |
| Dr.T.R.Sathish Kumar      | Department BoS coordinator |
| Dr.P.Chandramohan         | Member                     |
| Dr. N.Gunasekar           | Member                     |
| Dr.J.Yoganandh            | Member                     |
| Dr.V. Amarnath            | Member                     |
| Dr.T.Velmurugan           | Member                     |
| Dr.M.Ramesh               | Member                     |
| Mr.M.S.Balasanthosh       | Member                     |
| Dr. S.Sathish             | Member                     |
| Mr.B.Pranesh              | Member                     |
| Dr.N.Gopalakrishnan       | Member                     |



**CHAIRPERSON**  
**BOARD OF STUDIES**  
Department of Mechanical Engineering



**SRI RAMAKRISHNA ENGINEERING COLLEGE, COIMBATORE – 22**  
 [Educational Service: SNR Sons Charitable Trust]  
 [Autonomous Institution, Re-accredited by NAAC with 'A+' Grade]  
 [Approved by AICTE and Permanently Affiliated to Anna University, Chennai]  
 [ISO 9001:2015 Certified and all eligible programmes Accredited by NBA]

**MINUTES OF THE 17<sup>th</sup> BOARD OF STUDIES MEETING FOR THE UG MECHANICAL ENGINEERING PROGRAMME HELD ON 02.05.2023 AT 10.30 A.M IN THE DEPARTMENT OF MECHANICAL ENGINEERING.**

The following members attended the above meeting.

| S.No | MEMBER                                                                                                                                     | CATEGORY                                          |
|------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| 1.   | Dr.P.Karuppuswamy, Professor & Head,<br>Mechanical Engineering/SREC                                                                        | Chairman                                          |
| 2.   | Dr.M.Sreekumar,<br>Professor,<br>Department of Mechanical Engineering,<br>IIITDM Kanchipuram, Chennai - 600 127                            | University Nominee                                |
| 3.   | Dr.N.Siva Shanmugam,<br>Associate Professor,<br>Department of Mechanical Engineering,<br>NIT Trichy, Tiruchirappalli – 620 015             | Subject expert from Central University            |
| 4.   | Dr.L.Ravikumar,<br>Professor, Department of Mechanical Engineering,<br>BMS college of Engineering, Bull Temple                             | Subject expert from outside the parent University |
| 5.   | Dr.S.Rajkumar<br>President, RANE Engine Valves Ltd.<br>Chennai – 600 032                                                                   | Industry Expert                                   |
| 6.   | Mr.Sampathkumar Palanisamy,<br>Technical Project Manager,<br>Robert Bosch Engineering and Business Solutions Limited. Coimbatore – 641 035 | Meritorious Alumni                                |
| 7.   | Dr.B.A.Saravanan, P/Mech. Engg., SREC                                                                                                      | Department BoS coordinator                        |
| 8.   | Dr.P.Chandramohan, P/ Mech. Engg., SREC                                                                                                    | Member                                            |



|     |                                            |        |
|-----|--------------------------------------------|--------|
| 9.  | Dr. N.Gunasekar, Asso.P/ Mech. Engg., SREC | Member |
| 10. | Dr.J.Yoganandh, Asso.P/ Mech. Engg., SREC  | Member |
| 11. | Dr.V. Amarnath, Asso.P / Mech. Engg., SREC | Member |
| 12. | Dr.T.R.Sathish Kumar, AP/ Mech. Engg.,     | Member |
| 13. | Dr.T.Velmurugan, AP/ Mech. Engg., SREC     | Member |
| 14. | Mr.M.S.Balasanthosh, AP/ Mech. Engg.,      | Member |
| 15. | Dr.S.Sathish, AP/ Mech. Engg., SREC        | Member |
| 16. | Mr.B.Pranesh, AP/ Mech. Engg., SREC        | Member |
| 17. | Dr.N.Gopalakrishnan, AP/Maths, SREC        | Member |

Dr.P.Karuppuswamy, Chairperson, Board of Studies, chaired the meeting and welcomed all the members to the 17<sup>th</sup> BoS meeting. After a brief self-introduction by the members, the agenda items listed were taken up for discussion and the following resolutions were passed. He initiated the meeting with a presentation on Vision, Mission of the Department and PEOs, PSOs and POs of the B.E Mechanical Engineering program. He briefed about the proceedings of various academic committee meetings already conducted.

### **Regulations 2020**

#### **ITEM No.1 – Regulations 2020 curriculum and syllabi**

- It is resolved that Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit System) will be followed for all B.E./B.Tech. Programmes for students admitted in the Academic year 2020-21.
- It is resolved that Revised Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit System) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2021-22 & onwards.

#### **ITEM No.2 – List of additional electives to be included under Regulations 2020**

- It is resolved that the syllabi for the following new Professional Elective courses under (Revised) Regulations 2020 be approved and passed.

| Code No. | Course Title                             | L | T | P | C |
|----------|------------------------------------------|---|---|---|---|
| 20ME2E24 | Battery Management System                | 3 | 0 | 0 | 3 |
| 20ME2E25 | Value Engineering                        | 3 | 0 | 0 | 3 |
| 20ME2E26 | Data Science for Industrial Applications | 3 | 0 | 0 | 3 |
| 20ME2E27 | Lean Manufacturing                       | 3 | 0 | 0 | 3 |



**ITEM No.3 – List of additional one credit courses to be included under Regulations 2020**

- It is resolved that the following new one credit courses will be included under (Revised) Regulations 2020 for B.E. Mechanical Engineering programme

| Course code | Course title                      | Offering industry                     |
|-------------|-----------------------------------|---------------------------------------|
| 20MEI015    | Digital Transformation            | M/s ELGI Equipments Ltd., Coimbatore. |
| 20MEI016    | Data Analytics for Industrial IoT |                                       |
| 20MEI017    | Additive Manufacturing            | M/s Andrew Additive., Bangalore.      |
| 20MEI018    | Data Visualization with Tableau   | M/s Rane Ltd., Chennai.               |

**ITEM No.4 – List of new NPTEL online courses to be included**

- It is resolved that the following NPTEL courses are approved for credit transfer during April/May 2023 under Regulations 2020.

| S.No | NPTEL Course Code | NPTEL Course Title                                             | Credits | Course Duration | Equivalent Professional / Open Elective in SREC Curriculum |
|------|-------------------|----------------------------------------------------------------|---------|-----------------|------------------------------------------------------------|
| 1    | noc23-mm06        | Welding Processes                                              | 3       | 12 Weeks        | 20ME2E08 Metal Joining Processes                           |
| 2    | noc23-me04        | Computational Fluid Dynamics for Incompressible Flows          | 3       | 12 Weeks        | 20ME2E11 Computational Fluid Dynamics                      |
| 3    | noc23-ge04        | Non-conventional Energy Resources                              | 3       | 12 Weeks        | 20ME2E12 Renewable Energy Sources and Systems              |
| 4    | noc23-me14        | Product Design and Manufacturing                               | 3       | 12 Weeks        | 20ME2E21 Product Design                                    |
| 5    | noc23-cs52        | Introduction to Industry 4.0 and Industrial Internet of Things | 3       | 12 Weeks        | 20ME2E14 Industry 4.0                                      |

**ITEM No.5 – Result Analysis for the Academic Year 2022-23.**

- It is resolved that the Result Analysis for the Academic Year 2022-23 (Semesters VII / V / III) are approved and passed.



**ITEM No.6 – One credit Industry oriented courses**

- It is resolved that One credit industry-oriented courses to be included for the completion of 2 credits to be earned under Clause 12 of (Revised) Regulation 2020 for Industrial Training / Internship under the Employability Enhancement Category.

**ITEM No.7 – Tamil courses recommended by Anna University**

- It is resolved that the following Tamil Courses and its syllabi as recommended by Anna University, Chennai be approved to be included as the Mandatory courses.

| Code No. | Course Title                                      | L | T | P | C |
|----------|---------------------------------------------------|---|---|---|---|
| 20HS211  | Tamizh Marabu (Heritage of Tamils)                | 1 | 0 | 0 | 1 |
| 20HS212  | Thamizhum Thozhilnutpamum (Tamils and Technology) | 1 | 0 | 0 | 1 |

**ITEM No.8 - Suggestions by expert members on Regulations, curriculum, various courses and electives**

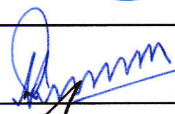
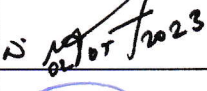
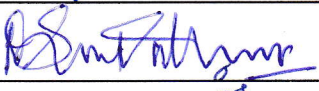
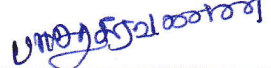
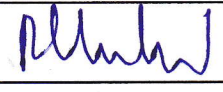
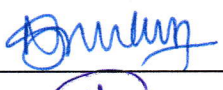
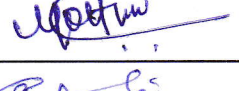
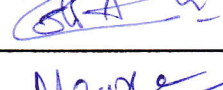
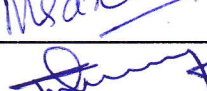
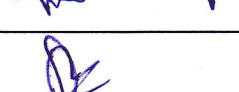
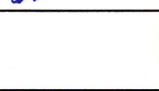
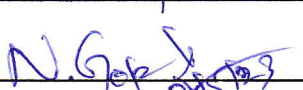
1. Dr.Sreekumar has suggested to include latest Text books and Reference Books to the syllabus of the course Battery Management System.
2. Dr.Ravikumar has suggested to include e-Books and more Web resources to the course Battery Management System. Further, he suggested to involve industry experts for partial delivery of the course. Dr.P.Karuppuswamy responded that the department will get support from Mahendra Research Valley for the course since MoU has been signed to have Center of Excellence in EEE Department.
3. Mr.Sampathkumar has suggested to include overview about battery, ECUs and functions of batteries in vehicles.
4. Dr.Ravikumar has suggested to look for options to arrange an industrial visit to GARC, Chennai to explore new technologies and special labs related to the course Battery Management System.
5. Dr.Rajkumar has suggested to include topics on Maintenance of batteries to the course Battery Management System. Dr.P.Karuppuswamy responded that a course on Battery Maintenance and Service will be prepared and discussed during the next BoS.
6. Dr.Rajkumar opined that case studies/Applications should be a part of the course Value Engineering.

7. Dr.Sreekumar suggested to change the title of the course Data Science for Mechanical Engineers such that it is common to all the disciplines. Further, he suggested to develop expertise of the faculty members to handle the course.
8. Dr.Rajkumar has expressed willingness to offer one/two weeks training for faculty members at M/s.Rane Engine Valves Ltd., in connection to the course Lean Manufacturing.
9. Dr.Rajkumar has suggested to include a module or new course on Hydrogen fueled Engines to the curriculum since it is also upcoming greener technology.
10. Mr.Sampathkumar has suggested to add the topic Agile Product Development to the course Lean Manufacturing.
11. Dr.Siva Shanmugam opined that the syllabus content can be made crisp for the one credit course Digital Visualization.
12. Dr.Sreekumar suggested to remove the word "Introduction to" from the title of the one credit course Introduction to Additive Manufacturing. Further, he has suggested to add "3D printing for Industrial Applications" to the above course.
13. Dr.Siva Shammugam opined that the title of the course Introduction to Additive Manufacturing can be changed as "3D Printing".
14. Dr.Siva Shanmugam has suggested to include "Research Institutes under Government of India" to following resolution passed in the present meeting.  
"One credit industry-oriented courses to be included for the completion of 2 credits to be earned under Clause 12 of (Revised) Regulation 2020 for Industrial Training / Internship under the Employability Enhancement Category"

Dr.P.Karuppuswamy thanked the members for their valuable presence and for offering suggestions on syllabi and curriculum.



**Members Present for the Meeting of 17<sup>th</sup> BoS for UG Mechanical Engineering Program:**

| Name of the Member   | Designation                | Signature                                                                                              |
|----------------------|----------------------------|--------------------------------------------------------------------------------------------------------|
| Dr.P.Karuppuswamy    | Chairperson                |                     |
| Dr.M.Sreekumar       | University Nominee         | <br>02/05/23        |
| Dr.N.Siva Shanmugam  | Subject expert             | <br>02/05/2023      |
| Dr.L.Ravikumar       | Subject expert             | <br>02-05-2023      |
| Dr.S.Rajkumar        | Industry expert            | <br>21/5/23         |
| Mr.P.Sampathkumar    | Meritorious Alumni         |                     |
| Dr.B.A.Saravanan     | Department BoS coordinator | <br>02/05/2023      |
| Dr.P.Chandramohan    | Member                     |                     |
| Dr. N.Gunasekar      | Member                     |                    |
| Dr.J.Yoganandh       | Member                     |                   |
| Dr. V. Amarnath      | Member                     |                   |
| Dr.T.R.Sathish Kumar | Member                     |                   |
| Dr.T.Velmurugan      | Member                     |                   |
| Mr.M.S.Balasanthosh  | Member                     |                   |
| Dr. S.Sathish        | Member                     |                   |
| Mr.B.Pranesh         | Member                     |                   |
| Dr.N.Gopalakrishnan  | Member                     | <br>N.Gop 21/5/23 |

  
**CHAIRPERSON**  
**BOARD OF STUDIES**  
**Department of Mechanical Engineering**



**SRI RAMAKRISHNA ENGINEERING COLLEGE, COIMBATORE – 22**

[Educational Service: SNR Sons Charitable Trust]

[Autonomous Institution, Re-accredited by NAAC with 'A+' Grade]

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[ISO 9001:2015 Certified and all eligible programmes Accredited by NBA]

**MINUTES OF THE 16<sup>th</sup> BOARD OF STUDIES MEETING FOR THE UG MECHANICAL ENGINEERING PROGRAMME HELD ON 08.12.2022 AT 10.30 A.M (ON-LINE) IN THE DEPARTMENT OF MECHANICAL ENGINEERING.**

The following members attended the above meeting.

| S.No | MEMBER                                                                                                                                                           | CATEGORY                                             |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| 1.   | Dr.P.Karuppuswamy, Professor & Head,<br>Mechanical Engineering/SREC                                                                                              | Chairman                                             |
| 2.   | <b>Dr.M.Sreekumar,</b><br>Professor,<br>Department of Mechanical Engineering,<br>IITDM Kanchipuram, Chennai - 600 127                                            | University Nominee                                   |
| 3.   | <b>Dr.N.Siva Shanmugam,</b><br>Associate Professor,<br>Department of Mechanical Engineering,<br>NIT Trichy, Tiruchirappalli – 620 015                            | Subject expert from Central University               |
| 4.   | <b>Dr.L.Ravikumar,</b><br>Professor, Department of Mechanical Engineering,<br>BMS college of Engineering, Bull Temple Road,<br>Basavanagudi, Bengaluru – 560 019 | Subject expert from outside the parent<br>University |
| 5.   | <b>Mr.K.R.Murali</b><br>Former President, RANE Engine Valves Ltd.<br>Chennai – 600 032                                                                           | Industry Expert                                      |
| 6.   | <b>Mr.Manikandan Manickam,</b><br>Technical Project Manager,<br>Bosch Global Software Technologies Ltd.,<br>Coimbatore – 641 035                                 | Meritorious Alumni                                   |
| 7.   | Dr.B.A.Saravanan, P/Mech. Engg., SREC                                                                                                                            | Department BoS coordinator                           |
| 8.   | Dr.P.Chandramohan, P/ Mech. Engg., SREC                                                                                                                          | Member                                               |
| 9.   | Dr. N.Gunasekar, Asso.P/ Mech. Engg., SREC                                                                                                                       | Member                                               |



|     |                                             |        |
|-----|---------------------------------------------|--------|
| 10. | Dr.J.Yoganandh, Asso.P/ Mech. Engg., SREC   | Member |
| 11. | Dr.V. Amarnath, Asso.P / Mech. Engg., SREC  | Member |
| 12. | Dr.T.R.Sathish Kumar, AP/ Mech. Engg., SREC | Member |
| 13. | Dr.T.Velmurugan, AP/ Mech. Engg., SREC      | Member |
| 14. | Mr.M.S.Balasanthosh, AP/ Mech. Engg., SREC  | Member |
| 15. | Dr.S.Sathish, AP/ Mech. Engg., SREC         | Member |
| 16. | Mr.B.Pranesh, AP/ Mech. Engg., SREC         | Member |
| 17. | Dr.N.Gopalakrishnan, AP/Maths, SREC         | Member |

Dr.P.Karuppuswamy, Chairperson, Board of Studies, chaired the meeting and welcomed all the members to the 16<sup>th</sup> BoS meeting. After a brief introduction, the agenda items listed were taken up for discussion and the following resolutions were passed. He initiated the meeting with a presentation on Vision, Mission of the Department and PEOs, PSOs and POs of the B.E Mechanical Engineering program.

### **Regulations 2020**

#### **ITEM No.1 – Regulations 2020 curriculum and syllabi**

- It is resolved that Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit System) will be followed for all B.E./B.Tech. Programmes for students admitted in the Academic year 2020-21.
- It is resolved that Revised Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit System) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2021-22 & onwards
- It is resolved that Award of UG (Hons) with Specialization, UG with Minor and UG (Hons) be implemented as approved by the Academic Council of Anna University, Chennai for the UG students who have joined from the Academic Year 2021-22 for all B.E./B.Tech. Programmes.
  1. B.E. / B.Tech. (Honours) in the same discipline
  2. B.E. / B.Tech. (Minor) in other specialization and
  3. B.E. / B.Tech. (Honours)
- **Norms for B.E. / B.Tech. (Hons) specialization in the same discipline, B.E. / B.Tech. (Hons) and B.E. / B.Tech. (Minor) in other specialization**
  - i) **B.E. / B.Tech. (Hons) specialization in the same discipline**



- a) The student should have earned additionally a minimum of 20 credits from a vertical of the same programme
- b) Should have passed all the courses in the first attempt
- c) Should have earned a minimum CGPA of 7.50.

**ii) B.E. / B.Tech. (Hons)**

- a) The student should have earned additional courses (minimum of 20 credits) from more than one vertical of the same programme.
- b) Should have passed all the courses in the first attempt
- c) Should have earned a minimum CGPA of 7.50.

**iii) B.E. / B.Tech. (Minor) in other specialization**

- a) The student should have earned additionally a minimum of 20 credits in any one of the verticals of other B.E./B.Tech programmes.
  - Students can earn maximum of 6 credits in online mode (SWAYAM platform) out of 20 credits as approved by Chairperson of Board of Studies / Academic Council.
  - B.E. / B.Tech. (Hons) specialization in the same discipline, B.E. / B.Tech. (Hons) and B.E. / B.Tech. (Minor) in other specialization degree will be optional for students.
  - Students will be permitted to register Specialization / Minor courses from 4<sup>th</sup> / 5<sup>th</sup> semester onwards. The eligibility criteria will be the (N-1)<sup>th</sup> semester performance.

The following specialization / minors are proposed from 2021-22 and onwards.

| S.No. | Undergraduate Engineering Programme       | Name of the Specialization/ Minor Degree     | Permitted to Offer      |
|-------|-------------------------------------------|----------------------------------------------|-------------------------|
| 1     | Mechanical Engineering                    | Robotics                                     | Specialization          |
| 2     | Electrical & Electronics Engineering      | Electric Vehicles                            | Specialization          |
| 3     | Electronics & Communication Engineering   | Internet of Things (IoT)                     | Specialization<br>Minor |
| 4     | Electronics & Instrumentation Engineering | Sensors Technology                           | Specialization<br>Minor |
| 5     | Computer Science & Engineering            | Artificial Intelligence and Machine Learning | Specialization<br>Minor |
|       |                                           | Cyber Security                               | Specialization<br>Minor |
|       |                                           | Data Science                                 | Specialization<br>Minor |
|       |                                           | Virtual & Augmented Reality                  | Specialization          |
| 6     | Civil Engineering                         | Green Technology                             | Specialization          |

➤ **CLASSIFICATION OF DEGREE for students who opted for Specialization / Minors**

| <b>1. First Class with Distinction</b>                             |                                                         |                                                       |                                                               |             |                |
|--------------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------|-------------|----------------|
| <b>Degree</b>                                                      | <b>Duration of the Programme</b>                        | <b>Duration Permitted</b>                             | <b>Additional credits above the requirement of curriculum</b> | <b>CGPA</b> | <b>Pass in</b> |
| <b>B.E./B.Tech.</b><br>Regular                                     | 4 years                                                 | 5 years                                               | -                                                             | 8.50        | First Attempt  |
| <b>B.E./B.Tech.</b><br>Lateral Entry                               | 3 years                                                 | 4 years                                               | -                                                             | 8.50        | First Attempt  |
| <b>B.E. / B.Tech. (Hons) specialization in the same discipline</b> | 3 / 4 years<br>(Lateral Entry/<br>Regular respectively) | 4/5 years<br>(Lateral Entry/<br>Regular respectively) | 20 credits from any one vertical of the same programme        | 8.50        | First Attempt  |
| <b>B.E. / B.Tech. (Hons)</b>                                       | 3 / 4 years<br>(Lateral Entry/<br>Regular respectively) | 4/5 years<br>(Lateral Entry/<br>Regular respectively) | 20 credits from more than one vertical of the same programme  | 8.50        | First Attempt  |
| <b>B.E. / B.Tech. (Minor) in other specialization</b>              | 3 / 4 years<br>(Lateral Entry/<br>Regular respectively) | 4/5 years<br>(Lateral Entry/<br>Regular respectively) | 20 credits from any one vertical of the other programme       | 8.50        | First Attempt  |
| <b>2. First Class</b>                                              |                                                         |                                                       |                                                               |             |                |
| <b>B.E./B.Tech.</b><br>Regular                                     | 4 years                                                 | 5 years                                               | -                                                             | 6.50        | -              |
| <b>B.E./B.Tech.</b><br>Lateral Entry                               | 3 years                                                 | 4 years                                               | -                                                             | 6.50        | -              |
| <b>B.E. / B.Tech. (Hons) specialization in the same discipline</b> | 3 / 4 years<br>(Lateral Entry/<br>Regular respectively) | 4/5 years<br>(Lateral Entry/<br>Regular respectively) | 20 credits from any one vertical of the same programme        | 7.50        | First Attempt  |

|                                                       |                                                            |                                                          |                                                                    |      |               |
|-------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------------------|------|---------------|
| <b>B.E. / B.Tech. (Hons)</b>                          | 3 / 4 years<br>(Lateral Entry/<br>Regular<br>respectively) | 4/5 years<br>(Lateral Entry/<br>Regular<br>respectively) | 20 credits from more<br>than one vertical of the<br>same programme | 7.50 | First Attempt |
| <b>B.E. / B.Tech. (Minor) in other specialization</b> | 3 / 4 years<br>(Lateral Entry/<br>Regular<br>respectively) | 4/5 years<br>(Lateral Entry/<br>Regular<br>respectively) | 20 credits from any one<br>vertical of the other<br>programme      | 6.50 | -             |

### 3. Second Class

B.E./B.Tech. Regular / lateral entry and B.E./B.Tech. minor in other specialization degree students (not covered in first class with distinction and first-class classification of degree) who qualify for the award of degree shall be declared to have passed examination in second class.

### 4. Others

Students earned additional 20 credits but do not satisfy the conditions mentioned in first class with distinction and first-class classification of degree shall not be awarded B.E. / B.Tech. Honours. In such cases the mark sheet will show the additional courses studied and those courses shall not be considered for CGPA computation. In such case, if the student becomes eligible for first class, while computing CGPA without taking into account the additional courses studied, the student shall be awarded B.E. / B.Tech. in First Class only.

➤ It is resolved that the syllabi of the following courses under Regulations 2020 be approved.

| Code No. | Course Title                                                                                                                                                                                                                                                                                                                                                                                                   | Category | L | T | P | C |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---|---|---|---|
| 20EE240  | Fundamentals of Electrical and Electronics Engineering<br><br>(Initially it was passed as a Theory cum Lab course 20EE261 Fundamentals of Electrical and Electronics Engineering. In order to balance credit, now it offered as separate Theory course 20EE240 Fundamentals of Electrical and Electronics Engineering & Lab course 20EE281 Fundamentals of Electrical and Electronics Engineering Laboratory ) | ES       | 3 | 0 | 0 | 3 |
| 20EE281  | Fundamentals of Electrical and Electronics                                                                                                                                                                                                                                                                                                                                                                     |          | 0 | 0 | 2 | 1 |



|         |                                                                                                                                                                                                                                                                                                          |    |   |   |   |   |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---|---|---|---|
|         | Engineering Laboratory                                                                                                                                                                                                                                                                                   |    |   |   |   |   |
| 20ME226 | Introduction to Robotics<br>(Initially it was passed as 20ME208 Robotics, now it is changed as 20ME226 Introduction to Robotics as per the suggestion)                                                                                                                                                   | ES | 2 | 0 | 0 | 2 |
| 20ME253 | Materials Engineering and Metallurgy<br>(It is changed from Theory to Theory cum Lab course as per the suggestion. Metallurgy lab was initially attached with Thermal Engineering Lab with course code 20ME274)                                                                                          | PC | 2 | 0 | 2 | 3 |
| 20ME254 | Mechanical Measurements and Metrology<br>(It is changed from Theory to Theory cum Lab course as per the suggestion. Metrology Lab was initially attached with Materials Testing Lab with course code 20ME279)                                                                                            | PC | 2 | 0 | 2 | 3 |
| 20ME285 | Thermal Engineering & Materials Testing Laboratory<br>(Initially Thermal Engineering Lab was offered along with Metallurgy Lab as 20ME274 Thermal Engineering & Metallurgy Laboratory and Materials Testing Lab was offered along with Metrology Lab as 20ME279 Materials Testing Lab and Metrology Lab) | PC | 0 | 0 | 2 | 1 |
| 20ME286 | Computer Aided Engineering Laboratory<br>(Initially it was passed as 20ME281 Computer aided Analysis and Fluid flow Laboratory, now it is changed as 20ME286 Computer Aided Engineering Laboratory as per the suggestion)                                                                                | PC | 0 | 0 | 2 | 1 |

#### ITEM No.2 – List of additional electives to be included under Regulations 2020

- It is resolved that the syllabi for the following new Professional Elective courses under Regulations 2020 be approved and passed.

#### Professional Elective Courses:

| Code No. | Course Title   | L | T | P | C |
|----------|----------------|---|---|---|---|
| 20ME2E21 | Product Design | 3 | 0 | 0 | 3 |

|          |                                        |   |   |   |   |
|----------|----------------------------------------|---|---|---|---|
| 20ME2E22 | Modern Machining Processes             | 3 | 0 | 0 | 3 |
| 20ME2E23 | Operations and Supply Chain Management | 3 | 0 | 0 | 3 |

**ITEM No.3 – List of additional one credit courses to be included under Regulations 2020**

- It is resolved that the following new one credit course will be included under Regulations 2020 for B.E. Mechanical Engineering programme

| Course code | Course title                      | Offering industry                             |
|-------------|-----------------------------------|-----------------------------------------------|
| 20MEI012    | Industrial Automation and Control | M/s. Axis Global Automation, Coimbatore.      |
| 20MEI013    | Tool Design                       | M/s. Mechtech Engineering Centre, Coimbatore. |
| 20MEI014    | Augmented and Virtual Reality     | M/s. Pumo Technovation, Coimbatore            |

**ITEM No.4 – List of new NPTEL online courses to be included**

- It is resolved that the following NPTEL courses are approved for credit transfer during December 2022 under Regulations 2020 and Regulations 2016.

| S.No | Course Name                                 | Duration | Number of Credits |
|------|---------------------------------------------|----------|-------------------|
| 1    | Introduction to CFD                         | 12 Weeks | 3 Credits         |
| 2    | Project Management for Managers             | 12 Weeks |                   |
| 3    | Engineering Fracture Mechanics              | 12 Weeks |                   |
| 4    | Work System Design                          | 12 Weeks |                   |
| 5    | Solar Energy Engineering and Technology     | 12 Weeks |                   |
| 6    | Energy Conservation and Waste Heat Recovery | 12 Weeks |                   |

**ITEM No.5 – Result Analysis and Degree Awarded for the Academic Year 2021-22.**

- It is resolved that the Result Analysis for the Academic Year 2021-22 are approved and passed.
- It is resolved that the Degree awarded details for the Academic Year 2021-22 are approved and passed.

#### **ITEM No.6 – Revised Uniform Evaluation Method**

- It is resolved that the Revised Uniform Evaluation Method of Students based on Relative Grading, as per the communications received from Anna University, Chennai be approved and passed.

#### **ITEM No.7 - Suggestions by expert members on Regulations, curriculum, various courses and electives**

1. Dr.Sivashanmugam has suggested to change the elective course title “Product Design” to “Product Design and Development Strategies” since the syllabus is focusing more towards the development incurred due to product design.
2. Dr.Ravikumar suggested to set the compulsory question asked in Part-C of End Semester Examination as such it covers the topics from all the modules present in the course syllabus. He further suggested to have subdivisions in compulsory question, if necessary to cover all the modules. Dr.Sivashanmugam has seconded the above point and he has suggested to have a case study as compulsory question which requires students knowledge on entire syllabus content to answer the same. Dr.Karuppuswamy has responded that the compulsory question is asked from any one module and this pattern is being followed for all the courses present under Regulations 2020.
3. Mr.Manikandan has suggested to include the topic “Requirements Engineering” in the course 20ME2E21 Product Design under the module Product Development Process and the topics “Design verification and validation” under the module Product Planning and Concept Generation.
4. Dr.Sreekumar has suggested to include “IP protection” in the course 20ME2E21 Product Design under the heading Legal Aspects. He has suggested not to limit the count of reference books to two numbers and also to look for possibilities to add related e-books.
5. Dr.Sreekumar has suggested to have the title of the final module of the course 20ME2E22 Modern Machining Processes as “Machining Processes in Surface Engineering” instead of “Surface Engineering”.
6. Dr.Ravikumar has suggested to add the topic “Design Guidelines for Surface Preparations” in the course 20ME2E22 Modern Machining Processes.
7. Mr.Murali has suggested to look for options to add Pollution control topics related to electro chemical processes mentioned in the syllabus 20ME2E22 Modern Machining Processes.



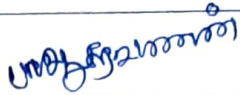
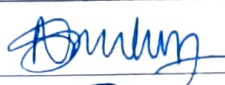
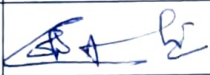
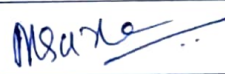
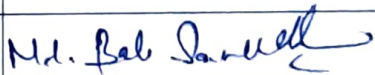
8. Dr.Sivashanmugam has suggested to change the title of the courses 20ME2E22 Modern Machining Processes as Advanced Machining processes and recommended to offer the last module “Surface Engineering” of the above course as a separate elective course.
9. Dr.Sivashanmugam has suggested to concise the syllabus of the courses 20ME2E23 Operations and Supply Chain Management without reducing its technical content.
10. Mr.Murali has suggested to look for possibilities to add the topic “IT advancements in Supply chain management” under the course 20ME2E23 Operations and Supply Chain Management. Mr. Manikandan opined the same and he has suggested to add the topics ERP/MRP, 3rd party logistics, warehousing and tracking to the same course. Dr. Sreekumar has suggested to update the syllabus of the above course with latest Text books and Reference books.
11. Dr.Ravikumar and Dr.Sreekumar have suggested to expand the title of the one credit course 20MEI014 AR/VR as “Augmented and Virtual Reality”.
12. Dr.Sivashanmugam has suggested that the one credit course 20MEI012 Control Automation could be replaced with “Industrial Automation and Control”.

The titles of the elective courses are modified as given below as per the suggestions of the members.

| <b>Code No.</b> | <b>Course Title</b>                       | <b>L</b> | <b>T</b> | <b>P</b> | <b>C</b> |
|-----------------|-------------------------------------------|----------|----------|----------|----------|
| 20ME2E21        | Product Design and Development Strategies | 3        | 0        | 0        | 3        |
| 20ME2E22        | Advanced Machining Processes              | 3        | 0        | 0        | 3        |
| 20ME2E23        | Operations and Supply Chain Management    | 3        | 0        | 0        | 3        |

Dr.P.Karuppuswamy thanked all the members for their valuable feedback/suggestions.

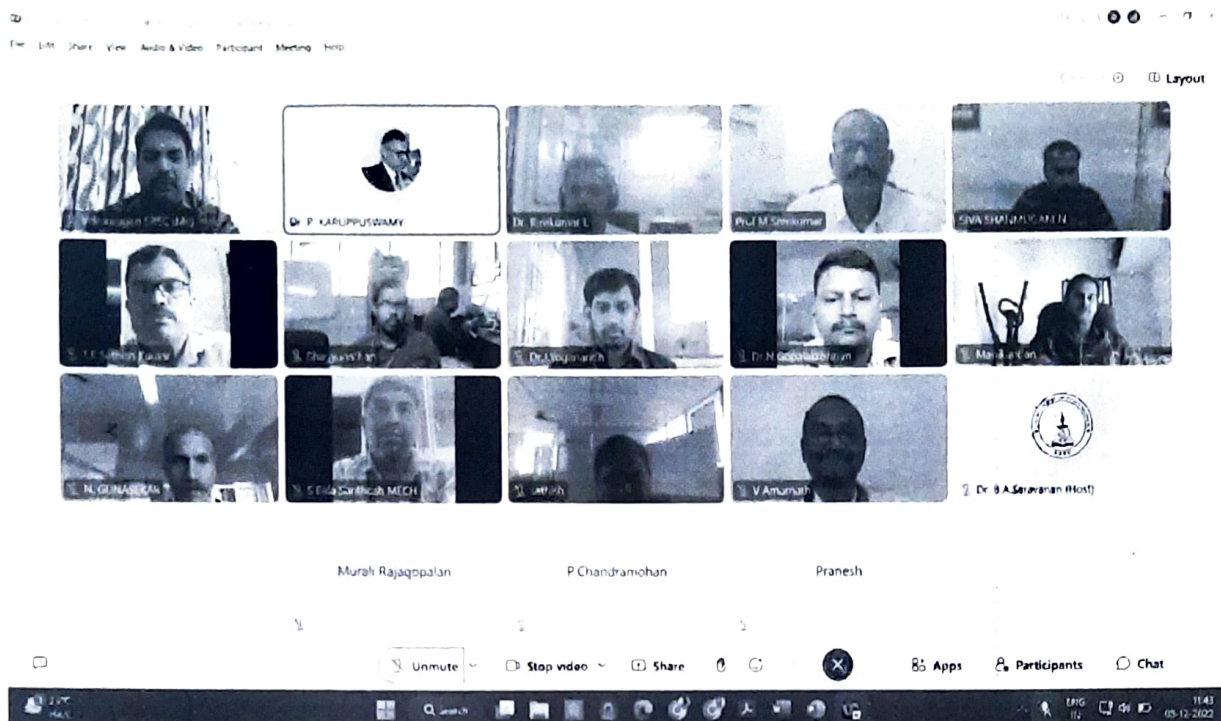
**Members Present for the Meeting of 16<sup>th</sup> BoS for UG Mechanical Engineering Program:**

| Name of the Member     | Designation                | Signature                                                                            |
|------------------------|----------------------------|--------------------------------------------------------------------------------------|
| Dr.P.Karuppuswamy      | Chairperson                |    |
| Dr.M.Sreekumar         | University Nominee         | Attended Online*                                                                     |
| Dr.N.Siva Shanmugam    | Subject expert             |                                                                                      |
| Dr.L.Ravikumar         | Subject expert             |                                                                                      |
| Mr.K.R.Murali          | Industry expert            |                                                                                      |
| Mr.Manikandan Manickam | Meritorious Alumni         |                                                                                      |
| Dr.B.A.Saravanan       | Department BoS coordinator |    |
| Dr.P.Chandramohan      | Member                     |    |
| Dr. N.Gunasekar        | Member                     |    |
| Dr.J.Yoganandh         | Member                     |   |
| Dr.V. Amarnath         | Member                     |  |
| Dr.T.R.Sathish Kumar   | Member                     |  |
| Dr.T.Velmurugan        | Member                     |  |
| Mr.M.S.Balasanthosh    | Member                     |  |
| Dr. S.Sathish          | Member                     |  |
| Dr.N.Gopalakrishnan    | Member                     |  |

\* Screenshot of the 16<sup>th</sup> BoS Meeting is enclosed.

  
**CHAIRPERSON**  
**BOARD OF STUDIES**  
**Department of Mechanical Engineering**

## Screenshot of 16<sup>th</sup> BoS Meeting for UG Mechanical Engineering Programme:



*Handwritten signature*





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## Re: Minutes of the meeting - Signed documents - Dr. NSS, NIT, Trichy - reg.

---

**Sreekumar M** <msk@iiitdm.ac.in>

Sat, Dec 31, 2022 at 12:26 AM

To: "Dr. N. Siva Shanmugam" <nsiva@nitt.edu>

Cc: HoD mech <hod-mech@srec.ac.in>, murali63@yahoo.com, Ravi Kumar L <ravi.mech@bmsce.ac.in>, informmani@gmail.com

The minutes are approved from my end.

These two programs need complete revision (including name change)-which shall be done immediately or in the near future based on the admission.

Next time please change my designation (ME-Mfg yet to be changed)

Thanks and kind regards

Sreekumar

Dr. M. Sreekumar, PhD (IIT Madras)

[Professor and Head-Centre for AI, IoT, and Robotics](#)

Department of Mechanical Engineering

Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

(An Institute of National Importance, Ministry of Education, Government of India)

Chennai-600 127, India

Web: <http://www.iiitdm.ac.in/People/displayProfileFaculty.php?msk@iiitdm.ac.in>

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## Re: Minutes of the meeting - Signed documents - Dr. NSS, NIT, Trichy - reg.

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Dr. N. Siva Shanmugam <nsiva@nitt.edu>

Thu, Dec 29, 2022 at 12:14 PM

To: HoD mech <hod-mech@srec.ac.in>

Cc: msk@iiitdm.ac.in, murali63@yahoo.com, Ravi Kumar L <ravi.mech@bmsce.ac.in>, informmani@gmail.com

Dear sir,

Greetings from NIT, Trichy!

Herewith I have attached the signed document for your kind reference.

Acknowledge the receipt of the same.

Thank you

Quoting HoD mech <hod-mech@srec.ac.in>:

Dear Sir,

Greetings from the Department

We are thankful to you for attending the 16th BOS meeting for B.E Mechanical Engineering and M.E Manufacturing Engineering on 8th December 2022 through ONLINE mode and offering valuable suggestions. I have enclosed the minutes of the BOS for your approval. Kindly excuse us for delay in communicating the minutes due to the NBA visit.

The Department wishes you, " Happy New Year 2023.

Thanking you

--

Dr. P. Karuppuswamy  
Professor and Head  
Dept. of Mechanical Engg  
Sri Ramakrishna Engg. College  
Coimbatore 641 022

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with warm regards,  
Dr. N. Siva Shanmugam  
Associate Professor & Laboratory in-charge

Materials Testing and Welding Research Laboratories  
Department of Mechanical Engineering  
National Institute of Technology  
Tiruchirappalli - 620015  
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Web: <http://www.nitt.edu/home/academics/departments/mech/faculty/lecturers/nsiva/>  
Personal webpage: <https://sites.google.com/view/mjtl/mjtl-team>  
Scopus Author ID: 56360756300  
<http://www.researcherid.com/rid/A-7616-2015>

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## 2 attachments



**16th BOS Minutes M.E MFG.pdf**

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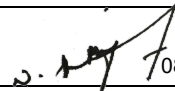


**16th BOS Minutes\_UG Mechanical.pdf**

425K



**Members Present for the Meeting of 16<sup>th</sup> BoS for UG Mechanical Engineering Program:**

| Name of the Member     | Designation                | Signature                                                                                      |
|------------------------|----------------------------|------------------------------------------------------------------------------------------------|
| Dr.P.Karuppuswamy      | Chairperson                |                                                                                                |
| Dr.M.Sreekumar         | University Nominee         |                                                                                                |
| Dr.N.Siva Shanmugam    | Subject expert             |  08.12.2022 |
| Dr.L.Ravikumar         | Subject expert             |                                                                                                |
| Mr.K.R.Murali          | Industry expert            |                                                                                                |
| Mr.Manikandan Manickam | Meritorious Alumni         |                                                                                                |
| Dr.B.A.Saravanan       | Department BoS coordinator |                                                                                                |
| Dr.P.Chandramohan      | Member                     |                                                                                                |
| Dr. N.Gunasekar        | Member                     |                                                                                                |
| Dr.J.Yoganandh         | Member                     |                                                                                                |
| Dr.V. Amarnath         | Member                     |                                                                                                |
| Dr.T.R.Sathish Kumar   | Member                     |                                                                                                |
| Dr.T.Velmurugan        | Member                     |                                                                                                |
| Mr.M.S.Balasanthosh    | Member                     |                                                                                                |
| Dr. S.Sathish          | Member                     |                                                                                                |
| Dr.N.Gopalakrishnan    | Member                     |                                                                                                |

**CHAIRPERSON  
BOARD OF STUDIES  
Department of Mechanical Engineering**



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## Minutes of the meeting - Reg.

---

**Ravi Kumar L** <ravi.mech@bmsce.ac.in>  
To: HoD mech <hod-mech@srec.ac.in>

Thu, Dec 29, 2022 at 10:27 AM

Dear Sir,  
Greetings of the day.  
I have gone through the documents. Noted all the points and appreciated.  
Regards .

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This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the system manager. This message contains confidential information and is intended only for the individual named. If you are not the named addressee you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited.



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## Minutes of the meeting - Reg.

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**Murali K.R.** <murali63@yahoo.com>  
To: HoD mech <hod-mech@srec.ac.in>

Thu, Dec 29, 2022 at 10:32 AM

Dear Prof. Karuppuswamy  
Thanks for the minutes.  
I have read and it is in line with our discussion.  
Do let me know if you need anything else.  
Warm Regards  
Murali K R

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[Quoted text hidden]

[Quoted text hidden]





**SREC**

HoD mech <hod-mech@srec.ac.in>

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## Minutes of the meeting - Reg.

---

**mani kandan** <informmani@gmail.com>  
To: HoD mech <hod-mech@srec.ac.in>

Mon, Jan 9, 2023 at 3:04 PM

Dear sir,  
Thanks a lot for the great opportunity. The minutes are approved from my side also.

Thanks & Regards  
Manikandan.  
Bosch.

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[Quoted text hidden]



**SRI RAMAKRISHNA ENGINEERING COLLEGE, COIMBATORE – 22**

[Educational Service: SNR Sons Charitable Trust]

[Autonomous Institution, Reaccredited by NAAC with 'A+' Grade]

[Approved by AICTE and Permanently Affiliated to Anna University, Chennai]

[ISO 9001:2015 Certified and all eligible programmes Accredited by NBA]

**MINUTES OF THE 15<sup>th</sup> BOARD OF STUDIES MEETING FOR THE UG MECHANICAL ENGINEERING PROGRAMME HELD ON 26.02.2022 AT 10.30 A.M IN THE DEPARTMENT OF MECHANICAL ENGINEERING.**

The following members attended the above meeting.

| S.No | MEMBER                                                                                                                                                    | CATEGORY                                          |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| 1.   | Dr.P.Karuppuswamy, Professor & Head,<br>Mechanical Engineering/SREC                                                                                       | Chairman                                          |
| 2.   | Dr.M.Sreekumar,<br>Associate Professor,<br>Department of Mechanical Engineering,<br>IIITDM Kanchipuram, Chennai - 600 127                                 | University Nominee                                |
| 3.   | Dr.N.Siva Shanmugam,<br>Associate Professor,<br>Department of Mechanical Engineering,<br>NIT Trichy, Tiruchirappalli – 620 015                            | Subject expert from Central University            |
| 4.   | Dr.L.Ravikumar,<br>Professor, Department of Mechanical Engineering,<br>BMS college of Engineering, Bull Temple Road,<br>Basavanagudi, Bengaluru – 560 019 | Subject expert from outside the parent University |
| 5.   | Mr.K.R.Murali<br>President, RANE Engine Valves Ltd.<br>Chennai.                                                                                           | Industry Expert                                   |
| 6.   | Mr.Manikandan Manickam,<br>Technical Project Manager,<br>Bosch Global Software Technologies Ltd.,<br>Coimbatore.                                          | Meritorious Alumni                                |
| 7.   | Dr.B.A.Saravanan, P/Mech. Engg., SREC                                                                                                                     | Department BoS coordinator                        |

|     |                                             |        |
|-----|---------------------------------------------|--------|
| 8.  | Dr.P.Chandramohan, P/ Mech. Engg., SREC     | Member |
| 9.  | Dr. N.Gunasekar, Asso.P/ Mech. Engg., SREC  | Member |
| 10. | Dr.J.Yoganandh, Asso.P/ Mech. Engg., SREC   | Member |
| 11. | Dr.V. Amarnath, Asso.P / Mech. Engg., SREC  | Member |
| 12. | Dr.M.S.Suresh Kumar, AP/ Mech. Engg., SREC  | Member |
| 13. | Mr.T.R.Sathish Kumar, AP/ Mech. Engg., SREC | Member |
| 14. | Dr.T.Velmurugan, AP/ Mech. Engg., SREC      | Member |
| 15. | Mr.M.S.Balasanthosh, AP/ Mech. Engg., SREC  | Member |
| 16. | Dr.S.Sathish, AP/ Mech. Engg., SREC         | Member |
| 17. | Mr.B.Pranesh, AP/ Mech. Engg., SREC         | Member |
| 18. | Dr.N.Gopalakrishnan, AP/Maths, SREC         | Member |

Dr.P.Karuppuswamy, Chairperson, Board of Studies, chaired the meeting and welcomed all the members to the 15<sup>th</sup> BoS meeting. After a brief introduction, the agenda items listed were taken up for discussion and the following resolutions were passed. He initiated the meeting with a presentation on Vision, Mission of the Department and PEOs, PSOs and POs of the B.E Mechanical Engineering program.

### **Regulations 2020**

#### **ITEM No.1 – Regulations 2020 curriculum and syllabi**

- It is resolved that Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2020 & onwards.

#### **ITEM No.2 – List of new electives to be included under Regulations 2020**

- It is resolved that the following new professional elective and open elective courses under Regulations 2020 be approved and passed.

#### **Professional Elective Courses:**

| Code No. | Course Title          | L | T | P | C |
|----------|-----------------------|---|---|---|---|
| 20ME2E01 | Fracture Mechanics    | 3 | 0 | 0 | 3 |
| 20ME2E02 | Computer Aided Design | 3 | 0 | 0 | 3 |



|          |                                       |   |   |   |   |
|----------|---------------------------------------|---|---|---|---|
| 20ME2E03 | Engineering Tribology                 | 3 | 0 | 0 | 3 |
| 20ME2E04 | Mechanical Vibration                  | 3 | 0 | 0 | 3 |
| 20ME2E05 | Machine Tool Design                   | 3 | 0 | 0 | 3 |
| 20ME2E06 | Composite Materials                   | 3 | 0 | 0 | 3 |
| 20ME2E07 | Design for Manufacturing and Assembly | 3 | 0 | 0 | 3 |
| 20ME2E08 | Metal Joining Processes               | 3 | 0 | 0 | 3 |
| 20ME2E09 | Green and Sustainable Manufacturing   | 3 | 0 | 0 | 3 |
| 20ME2E10 | Refrigeration and Air-conditioning    | 2 | 1 | 0 | 3 |
| 20ME2E11 | Computational Fluid Dynamics          | 3 | 0 | 0 | 3 |
| 20ME2E12 | Renewable Energy Sources and Systems  | 3 | 0 | 0 | 3 |
| 20ME2E13 | Energy Storage Systems                | 3 | 0 | 0 | 3 |
| 20ME2E14 | Industry 4.0                          | 3 | 0 | 0 | 3 |
| 20ME2E15 | Machine Vision System                 | 3 | 0 | 0 | 3 |
| 20ME2E16 | Automotive Electronics                | 3 | 0 | 0 | 3 |
| 20ME2E17 | Ergonomics                            | 3 | 0 | 0 | 3 |
| 20ME2E18 | Micro Electro Mechanical System       | 3 | 0 | 0 | 3 |
| 20ME2E19 | Operations Research                   | 3 | 0 | 0 | 3 |

**Open Elective Courses:**

| Code No. | Course Title                              | L | T | P | C |
|----------|-------------------------------------------|---|---|---|---|
| 20ME2E51 | Engineering Economics                     | 3 | 0 | 0 | 3 |
| 20ME2E52 | Entrepreneurship and Financial Management | 3 | 0 | 0 | 3 |
| 20ME2E53 | Project Management                        | 3 | 0 | 0 | 3 |

**ITEM No.3 – List of new one credit courses to be included under Regulations 2020**

- It is resolved that the following new one credit courses will be included under Regulations 2020 for B.E. Mechanical Engineering programme

| Course code | Course title                                     | Offering industry                |
|-------------|--------------------------------------------------|----------------------------------|
| 20MEI009    | Non-Destructive Testing                          | M/s. Shri Sai NDT, Pondicherry   |
| 20MEI010    | HVAC Building Load Calculations and Psychrometry | M/s. Sigma Solutions, Coimbatore |
| 20MEI011    | HVAC Air Distribution System                     |                                  |

**ITEM No.4 – List of new NPTEL online courses to be included**

- It is resolved that the following NPTEL courses are approved for credit transfer during December 2021.

| S.No | Course Name                                       | Duration |
|------|---------------------------------------------------|----------|
| 1    | Heat Exchangers: Fundamentals and Design Analysis | 12 Weeks |
| 2    | Work System Design                                | 12 Weeks |
| 3    | Operations and supply chain management            | 12 Weeks |
| 4    | Introduction to Composites                        | 12 Weeks |
| 5    | Energy conservation and waste heat recovery       | 12 Weeks |
| 6    | Introduction to Turbo machinery                   | 12 Weeks |

- It is resolved that the following NPTEL courses are approved for credit transfer during May 2022.

| S.No | Course Name                                                                      | Duration |
|------|----------------------------------------------------------------------------------|----------|
| 1    | Computational Fluid Dynamics for Incompressible Flows                            | 12 weeks |
| 2    | Fundamentals of Surface Engineering: Mechanisms, Processes and Characterizations | 12 weeks |
| 3    | Product Design and Manufacturing                                                 | 12 weeks |
| 4    | IC Engines and Gas Turbines                                                      | 12 weeks |
| 5    | Welding Processes                                                                | 12 weeks |
| 6    | Introduction To Industry 4.0 and Industrial Internet of Things                   | 12 weeks |



**ITEM No.5 – Specialization / Minor in degree programme under Regulations 2020**

| S.No | Course Code | Course Title                                       | Credits | Mode of Delivery | Offered by                                     |
|------|-------------|----------------------------------------------------|---------|------------------|------------------------------------------------|
| 1    | 20MES01     | Robot Operating Systems and Programming (4)        | 3       | Class/<br>NPTEL  | SREC                                           |
| 2    | 20MES02     | Robotics Programming and Simulation Laboratory (4) | 1       | Class            | SREC                                           |
| 3    | 20MES03     | Digital System and Microcontroller (4)             | 3       | Class/<br>NPTEL  | SREC                                           |
| 4    | 20MES04     | Sensors and Actuation System (5)                   | 3       | Class/<br>NPTEL  | SREC                                           |
| 5    | 20MES05     | Robot Manipulator Design (5)                       | 3       | Class/<br>NPTEL  | SREC                                           |
| 6    | 20MES06     | Embedded Systems Engineering (6)                   | 3       | Class/<br>NPTEL  | SREC                                           |
| 7    | 20MES07     | Machine Vision in Robotics (6)                     | 3       | Class/<br>NPTEL  | SREC                                           |
| 8    | 20MES08     | Artificial Intelligence for Robotics (6)           | 3       | Class/<br>NPTEL  | SREC                                           |
| 9    | 20MES09     | Robotic Applications (6)                           | 3       | Class/<br>NPTEL  | SREC                                           |
| 10   | 20MES10     | Project / Internships (7/8)                        | 1       | Class            | SREC /<br>Premier<br>Institution /<br>Industry |

**ITEM No.6 – Amendment to Clause 35 of B.E./B.Tech programmes under Regulations 2020 for the 2020 – 2021 admitted students only**

- For mandatory courses every student shall put in the required attendance and training as per the course requirement. However, the successful completion of one course from Personality and Character Development category (OR) one course from Allied Skills category is sufficient in addition to mandatory [EEC] Employment Enhancement Courses / department allied courses as prescribed in the curriculum of the programme concerned for the award of degree.



- This decision are taken as ONE TIME MEASURE and with due approval from the academic council standing committee / competent authority for the 2020 – 2021 admitted students only on account of Covid-19 pandemic situation.

**ITEM No.7 – New Liberal Arts course to be included under Regulations 2020**

- It is resolved that the following new Liberal Arts course will be included under Regulations 2020 for B.E. Mechanical Engineering programme

| Code No. | Course Title      | L | T | P | C |
|----------|-------------------|---|---|---|---|
| 20ME214  | Short Film Making | 1 | 0 | 0 | 1 |

**Regulations 2016**

**ITEM No.8 – Regulations 2016**

- It is resolved that Regulation 2016 (Version 1.0) will be followed (Choice Based Credit System) for all B.E./B.Tech. Programmes for students admitted during the Academic year 2018-2019 and 2019-2020.

**ITEM No.9 – Amendment to Clause 3 of B.E./B.Tech programmes under Regulations 2016**

- The clause 13 of Regulation 2016 V-1.0 (Choice Based Credit System) shall be completely exempted for the candidates admitted during the year 2018 – 2019 and 2019 – 2020 and they are permitted to appear for all the reappearance examinations in the subsequent semester upto the maximum period of study.
- This decisions are taken as ONE TIME MEASURE and with due approval from the academic council standing committee / competent authority on account of Covid-19 pandemic situation.

**ITEM No.10 – Amendment to Clause 15.3 of B.E./B.Tech programmes under Regulations 2016**

| Clause | Existing                                                                                                                         | Amended                                                                                                                                                                     |
|--------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15.3   | The student who fails in the laboratory course shall repeat the same in the subsequent semester and repeat the laboratory course | If a candidate fails to secure a pass or is absent for the end semester examinations in the laboratory course he/she shall do reappearance registration for that laboratory |

|  |        |                                                                                                                               |
|--|--------|-------------------------------------------------------------------------------------------------------------------------------|
|  | again. | course in the subsequent semester / when offered next. This is applicable for the candidates admitted under Regulations 2016. |
|--|--------|-------------------------------------------------------------------------------------------------------------------------------|

**ITEM No.11 – List of new electives to be included under Regulations 2016**

- It is resolved that the following new professional elective and open elective courses will be included under Regulations 2016 (Ver 1.0) for B.E. Mechanical Engineering programme

**Professional Elective Courses:**

| Code No. | Course Title                              | L | T | P | C |
|----------|-------------------------------------------|---|---|---|---|
| 16ME2E49 | Engineering Economics                     | 3 | 0 | 0 | 3 |
| 16ME2E50 | Entrepreneurship and Financial Management | 3 | 0 | 0 | 3 |
| 16ME2E51 | Project Management                        | 3 | 0 | 0 | 3 |
| 16ME2E52 | Ergonomics                                | 3 | 0 | 0 | 3 |

**ITEM No.12 – List of new one credit courses to be included under Regulations 2016**

- It is resolved that the following new one credit courses will be included under Regulations 2016 for B.E. Mechanical Engineering programme

| Course code | Course title                                     | Offering industry                |
|-------------|--------------------------------------------------|----------------------------------|
| 16MEI022    | HVAC Building Load Calculations and Psychrometry | M/s. Sigma Solutions, Coimbatore |
| 16MEI023    | HVAC Air Distribution System                     |                                  |

**ITEM No.13 – List of new NPTEL online courses to be included**

- It is resolved that the following NPTEL courses are approved for credit transfer during December 2021.

| S.No | Course Name                                       | Duration |
|------|---------------------------------------------------|----------|
| 1    | Heat Exchangers: Fundamentals and Design Analysis | 12 Weeks |
| 2    | Work System Design                                | 12 Weeks |
| 3    | Operations and supply chain management            | 12 Weeks |



|   |                                             |          |
|---|---------------------------------------------|----------|
| 4 | Introduction to Composites                  | 12 Weeks |
| 5 | Energy conservation and waste heat recovery | 12 Weeks |
| 6 | Introduction to Turbo machinery             | 12 Weeks |

- It is resolved that the following NPTEL courses are approved for credit transfer during May 2022.

| S.No | Course Name                                                                      | Duration |
|------|----------------------------------------------------------------------------------|----------|
| 1    | Computational Fluid Dynamics for Incompressible Flows                            | 12 weeks |
| 2    | Fundamentals of Surface Engineering: Mechanisms, Processes and Characterizations | 12 weeks |
| 3    | Product Design and Manufacturing                                                 | 12 weeks |
| 4    | IC Engines and Gas Turbines                                                      | 12 weeks |
| 5    | Welding Processes                                                                | 12 weeks |
| 6    | Introduction To Industry 4.0 and Industrial Internet of Things                   | 12 weeks |

#### ITEM No.14

- It is informed that the register number allotted for the students admitted to the various UG/PG programmes from the academic year 2021 – 2022 will be prefixed with the college code 7181. Hence the register number will be as follows.

Register Number: 718121XXYYZZ

7181 – College Code

21 – Year of Admission

XX – Branch Code

Y – Section

ZZ – Serial number

#### ITEM No.15 - Suggestions by expert members on Regulations, curriculum, various courses and electives

1. Dr.Sivashanmugam appreciated the inclusion of the terms entrepreneurship and society in the Department Vision statement and Mr.Murali opined that the Mission statement is well constructed and looks comprehensive.



2. Dr.Sivashanmugam suggested to replace the term “Physical Sciences” with the term “Science” present in the PEO1.
3. Dr.Sivashanmugam suggested to bring in the terms Innovation, Research, Product development, Management into the PSOs meet out the needs of stakeholders.
4. Dr.Sreekumar propound that terms reflecting recent technologies such as Automation, Digital Manufacturing, Industry 4.0 shall be included in the PSO statements.
5. Dr.Sivashanmugam suggested to have a common course code (example: 20IR001, IR – Institution requirement) for the common courses such as Simulation Lab, Engineering Graphics, UHV etc., rather than having department course codes.
6. Dr.Ravikumar suggested to minimize offering more number of courses in a semester.
7. In general, all the members appreciated the inclusion of new courses to the R2020 curriculum but suggested to rearrange few courses considering prerequisites in order to improve the connectivity in learning.
8. Dr.Ravikumar suggested to plan for suitable Bridge courses for lateral entry students to overcome the curriculum gap. Dr.Karuppuswamy replied that English and Mathematics bridge courses are already being conducted every year for lateral entry students.
9. Dr.Ravikumar suggested to allocate faculty with Materials Engineering/Chemical Engineering specialization to handle 20CH207 Corrosion Science course.
10. Dr.Sivashanmugham suggested to move the Smart Manufacturing topic to the later semester. Dr.Karuppuswamy responded that the addition of topics such as Introduction to Industry 4.0 and IIoT would help students to do interdisciplinary Mini projects.
11. Dr.Sivashanmugham suggested to add “Industrial Robotics” by M.P.Groover in reference Book list.
12. Dr.Ravikumar suggested to mention Module number in the syllabus so that the mapping of Modules shall be done with POs effectively.
13. The members appreciated the inclusion of new courses to the R2020 curriculum but suggested to look for possibilities to rearrange few courses semester wise by considering prerequisites in order to improve the connectivity in learning.
14. Dr.Ravikumar opined that Vibration and Control Engineering topics are vital for Mechanical Engineering students to take up higher studies abroad. Hence suggested to include the above contents in core courses.
15. Dr.Ravikumar suggested to include “Computational Fluid Dynamics” and “Multi body Dynamics” courses to the Professional Electives.

16. Dr.Sivashanmugam suggested to include “Engineering Tribology” and “Fracture Mechanics” courses to the Professional Electives. Further he suggested to change the title of the course “Tool Design“ to “Machine Tool design” and “Tribology” to “Engineering Tribology”.
17. Dr.Sreekumar suggested to change the title of the course “Disruptive Technology“ to “Disruptive Technologies”.
18. Dr.Sivashanmugam suggested to offer the Profession electives as separate baskets based on specialization as follows;
- Design: Fracture Mechanics, CFD, Engineering Tribology, Mechanical Vibration
  - Thermal: R&AC, Renewable Energy Sources and Systems, Energy Storage Systems
  - Manufacturing: Machine Tool Design, Composite Materials, Design for Manufacturing and Assembly
  - Multidisciplinary: Industry 4.0, Ergonomics, MEMS, Operations Research, Automotive Electronics
19. Dr.Ravikumar suggested to include CAD, CAM, CIM content to the curriculum. Dr.Karuppuswamy responded that CAD is already been included under Professional Electives and other topics will be included in the curriculum as Professional Electives.
20. Dr.Ravikumar opined that prerequisites are essential and should be mentioned in the syllabus for Robotics specialization courses. He added that mapping shall be made to check the prerequisites.
21. Dr.Sivashanmugam suggested to offer Value added course on “Product innovation and Development” seeking development of a new product using reverse engineering principle. Dr.Karuppuswamy responded that a Value added course on “Reverse Engineering” will be offered.

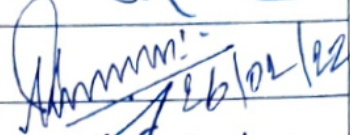
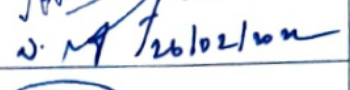
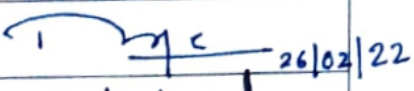
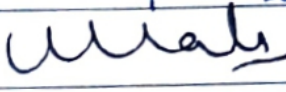
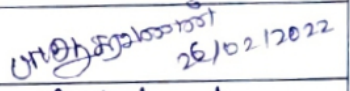
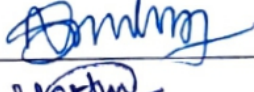
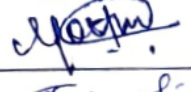
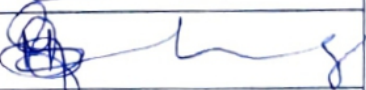
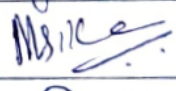
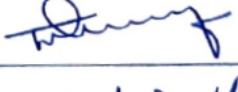
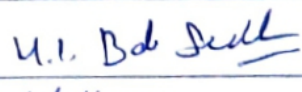
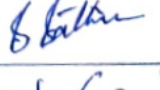
Dr.P.Karuppuswamy thanked all the members for attending the meeting in person and for offering valuable suggestions.

#### **ITEM No.16**

- The following decisions are taken as one time measure due to the COVID Pandemic.
1. Classes to be handled online with 5 sessions per day.
  2. End semester examination to be conducted online.



Members present for the meeting of 15<sup>th</sup> BoS for UG Mechanical Engineering program held on 26.02.2022 at 10.30 a.m in the Department of Mechanical Engineering:

| Name of the Member     | Designation                | Signature                                                                             |
|------------------------|----------------------------|---------------------------------------------------------------------------------------|
| Dr.P.Karuppuswamy      | Chairperson                |    |
| Dr.M.Sreekumar         | University Nominee         |     |
| Dr.N.Siva Shanmugam    | Subject expert             |     |
| Dr.L.Ravikumar         | Subject expert             |     |
| Mr.K.R.Murali          | Industry expert            |    |
| Mr.Manikandan Manickam | Meritorious Alumni         |                                                                                       |
| Dr.B.A.Saravanan       | Department BoS coordinator |     |
| Dr.P.Chandramohan      | Member                     |   |
| Dr. N.Gunasekar        | Member                     |  |
| Dr.J.Yoganandh         | Member                     |  |
| Dr.V. Amarnath         | Member                     |   |
| Dr.M.S.Suresh Kumar    | Member                     |   |
| Mr.T.R.Sathish Kumar   | Member                     |  |
| Dr.T.Velmurugan        | Member                     |  |
| Mr.M.S.Balasanthosh    | Member                     |   |
| Dr. S.Sathish          | Member                     |   |
| Dr.N.Gopalakrishnan    | Member                     |   |

  
**CHAIRPERSON**  
**BOARD OF STUDIES**  
 Department of Mechanical Engineering