# SDM COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD Department of Mechanical Engineering Board of Studies Meeting 2017-18

Meeting No: 11 Date: 17.02.2018

# Members Present:

#### External members:

| Sl. No. | Name                 | College/organization  |
|---------|----------------------|---|
| 1       | Dr. K.V.A.Balaji     | Subject expert, Professor – Mech. Engg., SJCE,<br>Mysore                |
| 2       | M. Hari Prasad       | Industry / Corporate sector representative, Scientist E, ADE, Bengaluru |
| 3       | Sri Santosh Kushtagi | (Alumni) Sr. Engineer, Honeywell, Bengaluru                             |

# Internal members:

| Sl.<br>No. | Name                     | Particulars      |
|------------|--------------------------|------------------|
| 1          | Dr. Anilkumar H.C        | HOD and Chairman |
| 2          | Prof. A.G.Raikar         | Internal member  |
| 3          | Dr. K.Gopinath           | Internal member  |
| 4          | Prof. D.S.Bhat           | Internal member  |
| 5          | Dr. P.S.Shivakumar gouda | Internal member  |
| 6          | Dr. S.R.Joshi            | Internal member  |
| 7          | Dr. I.Sridhar            | Member Secretary |
| 8          | Prof. K.C.Shindhe        | Special invitee  |
| 9          | Prof. A.V.Kulkarni       | Special invitee  |
| 10         | Dr. D.V.Patil            | Special invitee  |
| 11         | Dr. G M Gadad            | Special invitee  |
| 12         | Dr. S.S.Honnungar        | Special invitee  |
| 13         | Dr. B. H. Vadavadagi     | Special invitee  |
| 14         | Dr. V. S. Yaliwal        | Special invitee  |

Members Absent: 1. Dr. A. S. Deshpande

> 2. Dr. S. G. Gopala Krishna 3. Prof. G. L. Rajabanshi

#### **Proceedings**

The Chairman welcomed and greeted all the members and expressed sincere thanks to all the members that they could make it possible to attend the meetings in spite of their busy schedule. The faculty members were introduced to the other members of the committee. The Chairman sought the permission of the committee to commence the proceedings. The presentation was made on the points of the agenda.

Agenda No: BOS/ME/17-18/01:

To read and confirm the proceedings of previous BOS meeting held on 25.03.2017.

Resolution: The proceedings were read and confirmed.

Agenda No: BOS/ME/17-18/02:

Discussion and approval of syllabus change:

a. New code and new subjects for 4<sup>th</sup> year.

b. 10% change for all semesters.

Resolution: New codes for 4<sup>th</sup> year subjects were discussed and approved. There were no changes in the subjects offered to the students for the fourth year. It was felt that the present subjects were adequate for the curriculum. 10% syllabus change for all semester subjects if any were discussed and approved.

Computer aided Machine Drawing subject was discussed for effective learning by the students. It was opined that the subject be taught with drawing board manually and with an introduction to Computer aided machine drawing. Tutorial classes be conducted for the subject for 2 hours for the whole class.

Tutorial classes are to be taken for numerical subjects wherever possible.

Agenda No: BOS/ME/17-18/03:

New subjects and change in syllabi for PG (both EAD and IAR).

Resolution: New subjects and change in syllabi for PG programs (both EAD and IAR) were discussed. Following were the suggestions/recommendations given by the members:

#### For PG –Engineering Analysis & Design:

For the subject Advanced Material Technology, inclusion of smart materials and Nano materials chapters were suggested.

Computational Fluid Dynamics was made a core subject in place of Power Plant Design, which is made an elective subject in the  $2^{nd}$  semester curriculum.

Advanced Mechanical Vibrations is included in the elective list and Turbulence and Shear Flows has been removed from the elective list for  $2^{nd}$  semester.

Introduction of Failure Analysis of Materials subject in 3<sup>rd</sup> semester as core/elective subject is to be discussed in the department and to be finalized. Members felt that the subject has relevance to industry requirements for better placement opportunities.

Inclusion of HVAC and design of renewable energy plants (solar plants, wind turbine design etc.) subjects in the curriculum of EAD program to be discussed in the department. Effective implementation of Project work was discussed at length. It was opined that the project work be started much earlier in the curriculum rather than in 3<sup>rd</sup> semester. The matter is to be discussed in the department and suitably implemented.

#### For PG –Industrial Automation & Robotics:

No changes were suggested. The curriculum remains the same.

Agenda No: BOS/ME/17-18/04:

Revision of Mission and vision statements in line with Institute vision and Mission.

Resolution: The above agenda was discussed and the members suggested some modifications in the mission statements and PSOs. The corrections/suggestions made were incorporated and mission and vision statements finalized and kept for Academic Council approval.

Agenda No: BOS/ME/17-18/05:

Inclusion of CNC/VMC machine exercises /demonstration in Machine Shop Lab for V Semester from 2018-19 Academic year onwards.

Resolution: Discussion was done on the inclusion of CNC/VMC exercises in the machine shop lab for 5<sup>th</sup> semester students. The members approved the inclusion. The students should write programs and that programs are demonstrated on the machine. Faculty and staff members to be trained on the machine so that demonstration can be done for students.

Agenda No: BOS/ME/17-18/06:

Any other relevant matter with the permission

Resolution: The following points were suggested by the members for better teaching-learning process:

- 1. Inclusion of wind tunnel experiments for PG students be taken up for better visualization of flow. Comparing experimental with software results was suggested.
- 2. More industrial interaction for UG students (industrial tours/internships)

Dr. I. Sridhar Secretary, BOS Dr. Anilkumar H. C. Chairman, BOS

Copy to: 1.Principal

2. Dean (Academic Program) for information.

# SDM COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD Department of Mechanical Engineering Board of Studies Meeting 2018-19

Meeting No: 12 Date: 04.05.2019

# Members Present:

#### External members:

| Sl. No. | Name             | College/organization  |
|---------|------------------|---|
| 1       | Dr. T. Nagaraju  | Subject expert; Professor, Dept. of Mechanical Engineering, PES College of Engineering, Mandya. |
| 2       | S. P. Deshapande | Industry / Corporate sector representative; Head, Operations, Divagi TTS, Sirsi.                |
| 3       | Mr. Vivek Joshi  | Alumni; Sr. Engineer, Honeywell, Bengaluru  |

# Internal members:

| Sl.<br>No. | Name                       | Particulars      |
|------------|----------------------------|------------------|
| 1          | Dr. Anilkumar H. C.        | HOD and Chairman |
| 2          | Prof. D. S. Bhat           | Internal member  |
| 3          | Prof. G. L. Rajabanshi     | Internal member  |
| 4          | Dr. G. M. Gadad            | Internal member  |
| 5          | Dr. P. S. Shivakumar Gouda | Internal member  |
| 6          | Dr. I. Sridhar             | Member Secretary |
| 7          | Dr. K. Gopinath            | Special invitee  |
| 8          | Prof. A.V. Kulkarni        | Special invitee  |
| 9          | Dr. K. N. Patil            | Special invitee  |
| 10         | Dr. S. S. Honnungar        | Special invitee  |
| 11         | Dr. B. H. Vadavadagi       | Special invitee  |

Members Absent: 1. Dr. D.V. Patil

2. Dr. S. Narendranath

3. Dr. V. V. Katti

# **Proceedings**

The Chairman welcomed and greeted all the members and expressed sincere thanks to all the members that they could make it possible to attend the meetings in spite of their busy schedule. The new external BOS members were introduced to the other members of the committee. The Chairman sought the permission of the committee to commence the proceedings. The presentation was made on the points of the agenda.

Agenda No: BOS/ME/18-19/01:

To read and confirm the proceedings of previous BOS meeting held on 17.02.2018.

**Resolution:** The proceedings were read and confirmed.

Agenda No: BOS/ME/18-19/02:

Discussion and approval of syllabus change:

- c. New code and new subjects for 2<sup>nd</sup> year.
- d. 10% change for all remaining semesters.
- e. New scheme for the program according to revised credit system.

**Resolution:** New scheme for the program was discussed. Grouping of the electives based on the stream (production, design and thermal) was discussed. The members advised to mix up the electives of different streams so that student can get specialization in his interested area. They suggested convening a DUGC meeting and discussing the same to finalize the grouping of the electives. However, members also felt that it can be taken up on pilot basis. Members also discussed that students opts for only easier subjects to pass rather than good subjects which requires effort to score.

They also suggested checking the feasibility of having vibration and control system subjects in two different semesters. Members opined that student while doing minor projects routinely does and do not satisfy the objectives/purpose of the minor project work. The members discussed at length the syllabus for 3<sup>rd</sup> and 4<sup>th</sup> semesters. Machine drawing subject was discussed and approved as presented.

Numerical integration to be included in chapter 1 of the syllabus of FEM and the contents were approved.

New codes and new subjects for 2<sup>nd</sup> year (3<sup>rd</sup> and 4<sup>th</sup> semesters) subjects were discussed and approved.

Agenda No: BOS/ME/18-19/03:

Change in syllabi for PG (EAD) course.

**Resolution:** New subjects and change in syllabi for PG program were discussed and approved.

Title change for advanced material technology subject was approved and made as advanced composite materials and mechanics.

Members also suggested to group electives as per the order in the scheme.

Agenda No: BOS/ME/18-19/04:

NBA approvals for PG (PEOs, POs etc.) course(EAD).

**Resolution:** The PEOs and POs of the PG course were presented and the members approved the same after discussion.

Agenda No: BOS/ME/18-19/05:

Any other relevant matter with the permission of chair.

**Resolution:** General discussion on improvement of the department was made. Members gave the following inputs:

- Every possible tool should be tried in project work (e.g. GD & T, production part approval diagram, process flow diagram etc.).
- Formal introduction of industrial soft skills in project work.
- Introducing industrial practices in project work.
- Feasibility of implementing FMEA (failure mode and effects analysis) in project work.
- Exposing students to CREO 3D modeling software so that students are industry ready.
- Introduction of experiments and exercises on industrial instrumentation in measurements lab/theory.
- Possible implementation of theoretical concepts in minor project work.
- Staff should compulsorily attend IMTEX meeting/exhibition at Bengaluru so that staff can have first-hand information of cutting edge technologies presently running in industry.
- To tie up with more industries and upgrade so that students are industry ready.
- Possible implementation of QC rules (e.g. Pareto diagram, cause and effect diagram etc.) quality management system (eg. Introduction to ISO series, environmental certification etc.) and time management in the project work.
- Inclusion of recent topics on metallurgy (coatings, cooling curve optimization etc.) in the curriculum.
- Implementing cross consultancy across various departments in the institute.

- To take up multidisciplinary projects through cross consultancy across various departments in the institute.
- Implementation of more experimental work/industrial practices should be emphasized in curriculum.

Dr. I. Sridhar Secretary, BOS Dr. Anilkumar H. C. Chairman, BOS

Copy to: 1.Principal

2. Dean (Academic Program) for information.

# SDM COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD

# **Department of Mechanical Engineering** Board of Studies Meeting 2019-20 (Online- CISCO WebEx tool)

Meeting No: 13 Date: 27.07.2020

#### Members Present:

### External members:

| Sl.<br>No. | Name                     | Particulars                                | College/organization                      |
|------------|--------------------------|--|---|
| 1          | Dr. Somashekhar Hiremath | VTU – nominee                              | IIT Madras, Chennai                       |
| 2          | Dr. Veeresh kumar G.B.   | Subject expert                             | NIT, Andhra Pradesh.                      |
| 3          | Dr. K. S. Shashishekar   | Subject expert                             | SIT, Tumakuru                             |
| 4          | Dr. Srinivasa Y. V.      | Industry / Corporate sector representative | Rolls-Royce India Pvt. Ltd.,<br>Bengaluru |
| 5          | Mr. Santosh Kushtagi     | Alumnus                                    | Honeywell, Bengaluru                      |

# Internal members:

| Sl.<br>No. | Name                       | Particulars      |
|------------|----------------------------|------------------|
| 1          | Dr. I. Sridhar             | HOD and Chairman |
| 2          | Prof. D. S. Bhat           | Internal member  |
| 3          | Prof. G. L. Rajabanshi     | Internal member  |
| 4          | Dr. Anilkumar H. C.        | Internal member  |
| 5          | Dr. G. M. Gadad            | Internal member  |
| 6          | Dr. P. S. Shivakumar Gouda | Member Secretary |
| 7          | Dr. D.V. Patil             | Special invitee  |
| 8          | Dr. K. N. Patil            | Special invitee  |
| 9          | Dr. S. S. Honnungar        | Special invitee  |
| 10         | Dr. Jayaraj Kudariyavar    | Special invitee  |
| 11         | Prof. S. R Daboji          | Special invitee  |

Members Absent: NIL

## **Proceedings**

The Chairman welcomed and greeted all the members and expressed sincere thanks to all the members that they could make it possible to attend the meeting in spite of their busy schedule. The new external BOS members introduced themselves to the other members of the committee. The Chairman sought the permission of the committee to commence the proceedings. The presentation was made on the points of the agenda.

#### Agenda No: BOS/ME/2019-20/01:

Approval of Course contents of B. E. V & VI Semesters (2018 -2022 Scheme)

**Resolution:** Course contents for B. E. V and VI semesters were discussed and approved. The following suggestions were given:

- Pre-requisites are not required for UG courses.
- Design data hand book is to be included in the reference list for the subject Design of Machine elements –II of fifth semester.
- Change of title for Programing with Python as Introduction to Scientific Computing in 6<sup>th</sup> semester elective list was suggested.
- Equal weightage (credits) for both Minor project-I in 5<sup>th</sup> semester and minor project II in 6<sup>th</sup> semester is to be given (1+1credits).
- Include topics related to journal publications and citations in the subject Management, Economics &Intellectual Property Rights of 5<sup>th</sup> semester.
- Include text books for UG courses along with existing references.
- Include electives on Artificial Intelligence, Embedded systems, Data sciences & mining, & Internet of Things.
- Do not specify software names like solid edge, Phython, LS-Dyna etc. anywhere in the syllabus.

#### Agenda No: BOS/ME/2019-20/02:

Approval of Scheme of M. Tech. in Engineering Analysis and Design (EAD) (2020-2022 Scheme)

**Resolution:** New scheme for the PG EAD program was discussed and approved with change of title in one of the elective subject as Scientific Computing instead of Scientific Computing using Python.

#### Agenda No: BOS/ME/2019-20/03:

Approval of Course Content of I & II Semester M. Tech. in Engineering Analysis and Design (2020-2022 Scheme)

**Resolution:** New subjects and change in syllabi for PG program were discussed and approved with the following input:

Finite Element Methods is to be made as an elective subject and Advanced Fluid dynamics is to be made as core subject. However they suggested to discuss in DPGC meeting before finalization.

#### Agenda No: BOS/ME/2019-20/04:

Course outcomes (COs) and their mappings to POs and PSOs for UG and PG programs.

**Resolution:** The COs and their mappings to POs of UG and PG courses were presented and the members approved the same after discussion.

#### Agenda No: BOS/ME/2019-20/05:

Approval of modification (to the extent of 10% only) and course content arranged in five units of B.E. II, III and IV Semesters (2018-2022 Scheme)

**Resolution:** Unit wise syllabus of B.E. II, III and IV Semesters UG courses were presented and the members approved the same after discussion with the following inputs:

- Equal weightage is to be given for both Metrology and Measurements sections in the subject Metrology and Measurements of 4<sup>th</sup> Semester.
- Change of title Measurements lab to Metrology and Measurements lab in 4<sup>th</sup> semester.
- Provide design, production and thermal themes for 4<sup>th</sup> semester project work so that students can opt any one theme and carry out project work.
- Students can be given review papers to study and asked to present the paper before the guide in 4<sup>th</sup> semester project work.
- Include super finishing topics in Manufacturing Processes-II subject of 4<sup>th</sup> semester.
- Include 2 stroke engine working in Elements of Mechanical Engineering.
- To combine Manufacturing processes-I and II and make one subject with the following topics:
  - Metal forming processes
  - Metal additive processes
  - Metal cutting processes
- CNC machine technology is to be made as core subject instead of Manufacturing Processes-II.

#### Agenda No: BOS/ME/2019-20/06:

Approval of course content arranged in five units of B.E. VII & VIII Semesters (2015-2019 Scheme).

**Resolution:** Unit wise syllabus for VII & VIII Semesters UG courses were presented and the members approved the same after discussion.

Agenda No: BOS/ME/2019-20/07:

Revalidation of Vision/Mission/PEOs and PSOs for UG program if required.

**Resolution:** Vision/Mission/PEOs and PSOs were presented and the members approved the same.

## Agenda No: BOS/ME/2019-20/08:

Approval of PEOs & POs for PG in Engineering Analysis & Design (EAD) program.

**Resolution:** PEOs and POs for PG (EAD) program were presented and the members approved the same.

# Agenda No: BOS/ME/2019-20/09:

Reporting items in terms of: (a) Performance of students in the examinations (b) Placement report and (c) Lockdown period activities.

**Resolution:** UG and PG result analysis for the previous year (2018-19), Placement updates for UG and activities done during lock down period were presented to the members.

# Agenda No: BOS/ME/2019-20/10:

Approval of finishing schools for UG final year students

**Resolution:** Finishing schools and their syllabus was presented and the members approved the same after discussion.

#### **Agenda No: BOS/ME/2019-20/11:**

General discussion on improvement of the department was carried out. Members gave the following inputs:

- To tie up with more industries so that students are industry ready.
- Implementation of more experimental work/industrial practices should be emphasized in curriculum.
- Activities of training & placements cell for PG students should be improved.

Dr. P. S. Shivakumar Gouda

Secretary, BOS

Dr. I. Sridhar **Chairman, BOS** 

**Copy to:** 1.The Principal

2. The Dean (Academic Program) for information.

# SDM COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD

# Department of Mechanical Engineering Board of Studies Meeting 2020-21 (Online)

Meeting No: 14 Date: 12.06.2021

# Members Present:

#### External members:

| Sl.<br>No. | Name                     | Particulars    | College/organization |
|------------|--------------------------|----------------|----------------------|
| 1          | Dr. Somashekhar Hiremath | VTU – nominee  | IIT Madras, Chennai  |
| 2          | Dr. Veeresh kumar G.B.   | Subject expert | NIT, Andhra Pradesh. |
| 3          | Dr. K. S. Shashishekar   | Subject expert | SIT, Tumakuru        |
| 4          | Mr. Santosh Kushtagi     | Alumnus        | Honeywell, Bengaluru |

# Internal members:

| Sl.<br>No. | Name                       | Particulars      |
|------------|----------------------------|------------------|
| 1          | Dr. I. Sridhar             | HOD and Chairman |
| 2          | Prof. G. L. Rajabanshi     | Internal member  |
| 3          | Dr. Anilkumar H. C.        | Internal member  |
| 4          | Dr. G. M. Gadad            | Internal member  |
| 5          | Dr. P. S. Shivakumar Gouda | Member Secretary |
| 6          | Dr. D.V. Patil             | Special invitee  |
| 7          | Dr. K. N. Patil            | Special invitee  |
| 8          | Dr. S. S. Honnungar        | Special invitee  |
| 9          | Dr. Jayaraj Kudariyavar    | Special invitee  |
| 10         | Prof. S. R Daboji          | Special invitee  |

Members Absent: Dr. Y. V. Srinivas

#### **Proceedings**

The Chairman welcomed and greeted all the members and expressed sincere thanks to all the members that they could make it possible to attend the meeting in spite of their busy schedule. The new external BOS members introduced themselves to the other members of the committee. The Chairman sought the permission of the committee to commence the proceedings. The presentation was made on the points of the agenda.

#### Agenda No: BOS/ME/2020-21/01:

Approval of Course contents of B. E. VII & VIII Semesters (2018 -2022 Scheme)

**Resolution:** Course contents for B. E. VII and VIII semesters were discussed and approved. The following suggestions were given:

- Pre-requisites are not required for some courses.
- Electives of different streams can be mixed up so that students can opt their subjects of interest.
- Possibility of making Industry 4.0 and Artificial Intelligence course as core subject was suggested.
- Implementation of NEP in the curriculum should be thought and activity-based learning/skill development should be introduced during syllabus revision.
- Include at least two textbooks for UG courses along with existing references.
- Topics/Subject on Autonomous vehicles can be introduced.

#### Agenda No: BOS/ME/2020-21/02:

Approval of Course Content of III & VI Semester M. Tech Engineering Analysis and Design (2020-2022 Scheme)

**Resolution:** Course contents for PG (EAD) III and IV semesters were discussed and approved. The following suggestions were given:

- L-T-P for the elective subjects need to be changed.
- Option for undertaking project work phase-I and phase-II independently to facilitate the student to change their project work during 3<sup>rd</sup> and 4<sup>th</sup> semesters should be given.
- Internship duration can be fixed for a stipulated period (6 weeks.)

#### Agenda No: BOS/ME/2020-21/03:

Course outcomes and their mappings to POs and PSOs for UG and PG programs.

**Resolution:** The COs and their mappings to POs of UG and PG courses were presented, and the members approved the same after discussion.

#### Agenda No: BOS/ME/2020-21/04:

Approval of modification to the course content to the extent of 10%.

**Resolution:** There was no modification in the syllabus to the tune of 10% from  $1^{st}$  to  $6^{th}$  semesters.

## Agenda No: BOS/ME/2020-21/05:

Revalidation of Vision/Mission/PEOs/POs and PSOs UG if required.

**Resolution:** Vision/Mission/PEOs and PSOs were presented, and the members approved the same.

#### Agenda No: BOS/ME/2020-21/06:

Revalidation of PEOs & POs for PG EAD program if required.

**Resolution:** PEOs and POs for PG (EAD) program were presented and the members approved the same.

# Agenda No: BOS/ME/2020-21/07:

Reporting items in terms of: (a) Performance in the examinations and (b) Placement report **Resolution:** UG and PG result analysis for the previous year (2019-20), Placement updates for UG and activities done during lock down period were presented to the members.

# Agenda No: BOS/ME/2020-21/08:

General discussion on improvement of the department was carried out. Members gave the following inputs:

- To tie up with more industries so that students are industry ready.
- Implementation of more experimental work/industrial practices should be emphasized in curriculum.
- Activities of training & placements cell for PG students should be improved.
- More number of guest lectures for students should be arranged.
- Arrange guest lectures on machine learning and Industry 4.0.
- Conduct value added training programs based on industry inputs.
- Conduct training programs for faculty also to update their knowledge in the latest subjects.

Dr. P. S. Shivakumar Gouda **Secretary, BOS** 

Dr. I. Sridhar Chairman, BOS

**Copy to:** 1. The Principal

2. The Dean (Academic Program) for information.

# SDM COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD Department of Mechanical Engineering Board of Studies Meeting 2021-22

Meeting No: 15 Date: 13.08.2022

# Members Present:

# External members:

| Sl.<br>No. | Name                  | Particulars     | College/organization   |
|------------|-----------------------|-----------------|------------------------|
| 1          | Dr. G C Mohankumar    | VTU – nominee   | NITK, Surathkal        |
| 2          | Dr. Somashekar M A.   | Subject expert  | IIT, Dharwad.          |
| 3          | Dr. Raghavendra Joshi | Subject expert  | BITM, Ballari          |
| 4          | Dr. Srinivasa Y. V.   | Industry Expert | Rolls Royce, Bengaluru |
| 5          | Mr. Santosh Kushtagi  | Alumnus         | GE, Bengaluru          |

# Internal members:

| Sl.<br>No. | Name                       | Particulars      |
|------------|----------------------------|------------------|
| 1          | Dr. I. Sridhar             | HOD and Chairman |
| 2          | Dr. Anilkumar H. C.        | Internal member  |
| 3          | Dr. K. N. Patil            | Internal member  |
| 4          | Prof. A V Javali           | Internal member  |
| 5          | Prof. S C Galaveen         | Internal member  |
| 6          | Dr. P. S. Shivakumar Gouda | Member Secretary |
| 7          | Prof. G. L. Rajabanshi     | Special invitee  |
| 8          | Dr. G. M. Gadad            | Special invitee  |
| 9          | Dr. S. S. Honnungar        | Special invitee  |
| 10         | Dr. Jayaraj Kudariyavar    | Special invitee  |
| 11         | Prof. S. R Daboji          | Special invitee  |

Members absent: Dr. Jayaraj Kudariyavar

**Members attended online:** Dr. G C Mohan kumar, VTU – nominee

# **Proceedings**

The Chairman welcomed and greeted all the members and expressed sincere thanks to all the members that they could make it possible to attend the meeting in spite of their busy schedule. The new external BOS members introduced themselves to the other members of the committee. The Chairman sought the permission of the committee to commence the proceedings. The presentation was made on the points of the agenda.

### **Agenda No: BOS/ME/2021-22/01:**

Approval of Scheme and Course contents of **B. E. III & IV Semesters** (2022 -2025 Scheme)

**Resolution:** Course contents for B. E. III & IV semesters were discussed and approved. The following suggestions were given:

- Term project within the course can be offered for some UG courses.
- Include topic on smart material in 3<sup>rd</sup> semester materials science course
- If possible, accommodate practice on Low cycle and High cycle fatigue calculations in the core subject Mechanics of Materials.
- If possible, increase the number of software teaching hours for Machine drawing subject and model only one assembly along with GD &T details, and 2D drawing.
- Introduce basics of machine tools in CNC technology so the student can know the fundamentals of machining.
- In Foundry & Forging laboratory, cast a part and carry out NDT tests on the casted part.
- Faculty can refer open-source software on mould flow/casting by Prof. Ravi IIT Bombay.
- Include topics on curve generation in Engineering Graphics as the students learn about curves in Mathematics.
- Faculty from the department can themselves handle mathematical subjects in the higher semesters
- Include topics on Nontraditional machining processes in Manufacturing processes.
- Selection of bearings topic can be included in design of machine elements.
- Error analysis topics can be included in Metrology and Measurements subject.
- Experiments on Dynamometers can be included in Measurements laboratory.

#### Agenda No: BOS/ME/2021-22/02:

Approval of modification to the course content for B.E I and II Semester (under NEP 2020) to the extent of 10%.

#### **Resolution:**

Syllabus modification for I & II Semesters UG courses were presented and the members approved the same after discussion.

#### Agenda No: BOS/ME/2021-22/03:

Approval of modification to the course content for B.E V to VIII Semester to the extent of 10% - 2018 Scheme

#### **Resolution:**

Syllabus modification from V to VIII Semesters UG courses (2018 scheme) were presented and the members approved the same after discussion.

#### Agenda No: BOS/ME/2021-22/04:

Approval of complete revision of scheme M. Tech. I to IV semester.

#### **Resolution:**

Revision of scheme for M. Tech I to IV semester was discussed and finalized with the following suggestions:

Change the title for Theoretical stress analysis as Continuum mechanics, FEM to Advanced FEM and Rapid prototyping to Additive manufacturing technology.

#### Agenda No: BOS/ME/2021-22/05:

Approval I and II semester M.Tech. EAD syllabus from 2022 onwards.

#### **Resolution:**

- Syllabus for I & II Semesters PG courses were presented, and the members approved the same after discussion with the following inputs:
  - Include if possible experimental validation for simulation results in PG labs.
  - Mounting of strain gauges, photo elasticity can be included in PG labs.
  - Topics on linear and non-linear FE analysis can be included in PG labs.
- List of online courses (audit courses) were discussed and approved.

#### Agenda No: BOS/ME/2021-22/06:

Approval of modification to the course content for M. Tech. III and IV Semester to the extent of 10% -2020 Scheme.

**Resolution:** Syllabus modification for III & IV Semesters PG courses were presented and the members approved the same after discussion.

#### Agenda No: BOS/ME/2021-22/07:

Revalidation of Vision/Mission/PEOs/POs and PSOs UG if required.

**Resolution:** Vision/Mission/PEOs and PSOs were presented, and the members approved the same.

# Agenda No: BOS/ME/2021-22/08:

Revalidation of PEOs & POs for PG EAD program if required.

**Resolution:** PEOs and POs for PG (EAD) program were presented, and the members approved the same.

#### Agenda No: BOS/ME/2021-22/09:

Reporting items in terms of Placement report.

**Resolution:** UG and PG Placement report for the previous year (2019-20), placement updates for UG and activities done were presented and the members expressed their appreciation and satisfaction.

# Agenda No: BOS/ME/2021-22/10:

Any other matter with the permission of chair

#### **Resolution:**

General discussion on improvement of the department was carried out. Members gave the following inputs:

- Add new subjects as per the industry requirement as and when required.
- Include software component wherever possible in the curriculum in line with theory.
- Try to finish all fundamentals within 2 years and offer student specialized training in his area of interest.
- Include value added courses in 3<sup>rd</sup> and 4<sup>th</sup> years for better placement opportunities.

Dr. P. S. Shivakumar Gouda **Secretary, BOS** 

Dr. I. Sridhar **Chairman, BOS** 

**Copy to:** 1. The Principal

2. The Dean (Academic Program) for information.