



**SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES
(AUTONOMOUS)**

**DEPARTMENT OF MECHANICAL ENGINEERING
(Accredited by NBA)**

Ref: BoS/MECH/21-22

6th Board of Studies Meeting held on 9th October 2021

The 6th Board of Studies Meeting of the Department of Mechanical Engineering is held on **09.10.2021** through virtual mode (Zoom App) at 11:00 a.m.

The following members were present in the meeting

S.No	Name of the Members with Full Address	Role
1.	Dr.S.RAJESH.,	BoS Chairman
2.	Dr.B.DURGA PRASAD, Vice-Principal and Controller of Examination (PG), JNT University Anantapur, Ananthapuramu.	University Nominee
3.	Dr.B.JANARTHANAN., Professor, Department of Mechanical Engineering, Mohamed Sathak AJ college of engineering, Chennai- 603103	Subject Expert-I
4.	Dr.N.VENKAIAH, Associate Professor, Department of Mechanical Engineering, IIT Tirupathi, Tirupathi.	Subject Expert-II
5.	Dr.R.RAVINDER, Chief Executive Officer, Heatechs Instruments, , Mugalivakkam Main Road, Porur, Chennai, 600 116	Industry Expert
6.	Mr. P.NAVEEN KUMAR, Ph.D Research Scholar, VIT University, Vellore.	Alumni
7.	Dr.K.VIMALANATHAN Professor, Department of Mechanical Engineering, SITAMS, Chittoor.	Program Co-ordinator
8.	Dr.T.CHINNA PAMULETY Associate Professor, Department of Mechanical Engineering, SITAMS, Chittoor.	Module Co-ordinator
9.	Mr.R.SATHEESH Associate Professor, Department of Mechanical Engineering, SITAMS, Chittoor.	Module Co-ordinator
10.	Mr.P.GNANA PRAKASH Assistant Professor, Department of Mechanical Engineering, SITAMS, Chittoor.	Module Co-ordinator
11.	Mr.N.SATISH KUMAR Assistant Professor, Department of Mechanical Engineering, SITAMS, Chittoor.	Module Co-ordinator
12.	Mr.D.RAJU Assistant Professor, Department of Mechanical Engineering, SITAMS, Chittoor.	Module Co-ordinator

Minutes of the Meeting

A. Dr. P. Ramesh Kumar, Principal, Introduced all the members In the Board and handed over to **Dr. S.Rajesh, Chairman – BOS.**

B. Action taken report on minutes / resolutions of BOS Meeting held on 08.01.2021

Resolved to ratify Action Taken Report on minutes / resolutions of the BOS meeting held on **08.01.2021** submitted by the Chairman, BOS (Mechanical).

C. Report on Implementation of autonomy

Chairman BOS presented a report on Implementation of autonomy to the members. The board has congratulated the college authorities for successful Implementation of SITAMS R20 regulations and syllabus for B.Tech First Year and SITAMS R20 regulations and syllabus for M.Tech – Product Design Programs.

D. R20 – Course Structure and Syllabi of II, III and IV B.Tech. (Mechanical) for Regular, Honor and Minor Degree.

Chairman, BOS (Mechanical) presented the course structure and syllabus for B.Tech - II, III and IV year of Mechanical Engineering Regular courses, Open elective courses including management elective courses, Honor degree courses (Only Pool-I) and Minor degree courses. It is resolved to accept the same after thorough discussion and taking into consideration of the suggestions and remarks given by the members.

The Members of BoS made the following suggestions for R20 - B.Tech (Mechanical) - II, III and IV (Mechanical), Open Elective, Honors and Minor Courses:

I. Dr.B.DURGA PRASAD, University Nominee, JNTU, Ananthapur.

1. University Nominee suggested that, in "Thermal Engineering" course, if possible to move Steam Turbine contents from Unit-IV into Unit-V.

- The suggestion is accepted and incorporated.

2. University Nominee suggested that, in "Refrigeration and Air-conditioning" course, add some more basic topics on principle and working of summer, winter and year-round air-conditioning systems in Unit-V.

- The suggestion is accepted and incorporated.

3. University Nominee suggested that, in Honor program more specific courses can be identified for all the domains and including in "Thermal Engineering" domain.

- The suggestion is accepted and same will be discussed in the next board of meeting.

4. University Nominee suggested that, in Minor program "Applied Thermal Engineering", course can be renamed as "Fundamentals of Thermal and Fluid Engineering".

- The suggestion is accepted and incorporated.

5. University Nominee suggested that, in Minor program, if possible to find some more specialized tracks like Automotive Systems, Industrial Robotics, etc.,

- The suggestion is accepted and sent the approval request to Institute Curriculum Development Cell.

II. Dr.B.JANARTHANAN, Subject Expert, Mohamed Sathak AI college of Engineering Chennai.

1. Subject Expert suggested that, with reference to the Program Outcomes, the Course Outcomes need to be strengthened / re-written.

- The suggestion is accepted to re-write the Course Outcomes for all the courses.

2. Subject Expert suggested that, with reference to the Program Outcomes, the Course Outcomes need to be simplified and re-written with respect to the Cognitive Levels / Blooms Taxonomy.

- The suggestion is accepted to re-write the Course Outcomes for all the courses with respect to the Cognitive Levels / Blooms Taxonomy.

3. Subject Expert suggested that, with reference to the CO-PO mapping table, the different levels can be mapped for all the courses by extracting various teaching learning components.

- The suggestion is accepted to re-write CO-PO levels based POs for all the courses.

4. Subject Expert suggested that, with reference to the CO-PO mapping table, Program Outcomes like PO5 (Modern Tool Usage) can be improved by enhancing the exercises based on skill oriented courses / skill advanced courses.

- The suggestion is accepted to re-write the CO-PO mapping for all the courses.

5. Subject Expert suggested that, with reference to the CO-PO mapping table, the Program Outcomes PO8 (Ethics), PO9 (Individual and team work), PO10 (Communication) and PO12 (Life-long learning) can be improved for all the courses by extracting self-study topics, assignments submission, technical presentation.
 - *The suggestion is accepted to re-write the CO-PO mapping for all the courses.*
6. Subject Expert suggested that, with reference to the CO-PO mapping table, Program Outcomes like PO6 (The Engineer and Society) and PO7 (Environment and Sustainability) can be improved by conducting various departmental association activities.
 - *The suggestion is accepted to re-write the CO-PO mapping for all the courses.*
7. Subject Expert suggested that, in "Mechanics of Solids" Course the sequence of Unit order need to be verified and re-arrange it.
 - *The suggestion is accepted and incorporated.*
8. Subject Expert suggested that, in "Computer Aided Design" the skill course exercises can be improved for more specific in design with the help of standard design packages and also suggested that add some more exercises based the use of MATLAB / Simulink / Scilab / etc.,
 - *The suggestion is accepted and incorporated.*
9. Subject Expert suggested that, in "Automotive Systems" skill course, the exercises can be improved based on the use of MATLAB / Simulink / Scilab / LabVIEW etc.,
 - *The suggestion is accepted and incorporated.*
10. Subject Expert suggested that, in "Dynamics of Machinery" course, Theory of Vibrations with Applications authored by William T Thomson books can be added as a reference book.
 - *The suggestion is accepted and incorporated.*
11. Subject Expert suggested that, in "Design of Machine Elements" course, rearrange the Unit-III and Unit-V in order.
 - *The suggestion is accepted and incorporated.*
12. Subject Expert suggested that, in all the laboratory courses avoid the study experiments.
 - *The suggestion is accepted and incorporated.*

13. Subject Expert suggested that, in "Design of Transmission System" course the Unit-IV title can be replaced as Selection of Bearings Instead of Design of Bearings.

- The suggestion is accepted and incorporated.

14. Subject Expert suggested that, in "Mechatronic System Design" skill course, the exercises can be improved based on the use of MATLAB / Simulink / Scilab / LabVIEW etc.,

- The suggestion is accepted and incorporated.

15. Subject Expert suggested that, in "Project Skills Lab (Mini Project) / Project Work " course the following contents like advanced / Industry required / skill oriented / current trends / design oriented fields can be identified in the course contents for their employment enhancement.

- The suggestion is accepted and incorporated in core elective list.

16. Subject Expert suggested that, all kind of courses and course contents can be avoided the use of short forms and it can be abbreviated fully.

- The suggestion is accepted and incorporated in core elective list.

17. Subject Expert suggested that, in Minor courses, if possible to change scheme of instructions 3-1-0-4 (L-T-P-C) instead of 3-2-0-4 (L-T-P-C).

- The suggestion is accepted and incorporated in core elective list.

18. In general, for all the courses CO-PO mapping values need to be verified.

- The suggestion is accepted to recheck the CO-PO values for all the courses.

III. Dr.N.VENKATAIAH, Subject Expert, IIT Tirupathi, Tirupathi

1. Course Educational Objectives need to reduced / simplified

- The suggestion is accepted to simplify the Course Educational Objectives for alsl thecourses.

2. Subject Expert suggested that, in "Manufacturing Technology" Course the unit titles can be renamed as Joining process and Forming process are Instead of Welding Technology and Sheet Metal, Forging, Extrusion and Rolling.

- The suggestion is accepted and incorporated.

3. Subject Expert suggested that, in "Manufacturing Technology" Course the Unit V can be split in to two separate Units as Processing of Plastics, Composites and Ceramics as Unit-IV and Powder Metallurgy as Unit-V.
 - *The suggestion is accepted and incorporated.*
4. Subject Expert suggested that, in "Machine Tools Technology" Course the title can be renamed as "Metal Cutting and Machine Tools".
 - *The suggestion is accepted and incorporated.*
5. Subject Expert suggested that, in "Machine Tools Technology" course, replace the Broaching part from Unit-V into Unit-IV and expand the metal cutting theory part into two units (Unit-I & Unit-II) instead of Unit-I.
 - *The suggestion is accepted and incorporated.*
6. Subject Expert suggested that, in "Machine Tools Technology" add some more contents in metal cutting part and hence it is more helpful for GATE examinations.
 - *The suggestion is accepted and incorporated.*
7. Subject Expert suggested that, in "Computer Aided Manufacturing" skill course exercises can be improved based on more specific CNC relevance software's.
 - *The suggestion is accepted and incorporated.*
8. Subject Expert suggested that, in "Computer Aided Manufacturing" skill course exercises can be improved based on more specific CNC relevance software's.
 - *The suggestion is accepted and incorporated.*
9. Subject Expert suggested that, in "Metrology and Measurements" course, rename the Unit-I title as Metrology and Standards of Measurements.
 - *The suggestion is accepted and incorporated.*
10. Subject Expert suggested that, in "Metrology and Measurements" course, to balance the course contents weightage based on Metrology (as UNIT-I, II & III) and Measurements (as Unit-IV & V).
 - *The suggestion is accepted and incorporated.*

11. Subject Expert suggested that, in "Metrology and Measurements Lab" course, to balance the exercises based on Metrology and Measurements.

- The suggestion is accepted and incorporated.

12. Subject Expert suggested that, in "Metrology and Measurements Lab" course, the standard sentence framings like (I) Evaluation of (II) Measurements of - are used for the exercises based on the suitability of measurement devices.

- The suggestion is accepted and incorporated.

13. Subject Expert suggested that, in "Additive Manufacturing Processes" course, the Unit titles and contents need to be framed as follows; Reverse Engineering and Overview of Additive Manufacturing (Unit-I), Materials for Additive Manufacturing (Unit-II), CAD Modeling (Unit-III), Additive Manufacturing Processes (Unit-IV) and Post Processing Techniques, Case Studies and Applications (Unit-V).

- The suggestion is accepted and incorporated.

14. Subject Expert suggested that, in "Mechatronic System Design" course title can be renamed as "Mechatronics".

- The suggestion is accepted and incorporated.

15. Subject Expert suggested that, in "Mechatronic System Design" course, the Modeling of Mechanical System can be introduced.

- The suggestion is accepted and incorporated.

16. Subject Expert suggested that, in "Computational Fluid Dynamics" course can be added as a core course or core elective course, instead of Honor course list.

- The suggestion is accepted and incorporated in core elective list.

19. Subject Expert suggested that, in "Open Elective" courses can be offered globally.

- The suggestion is accepted and incorporated in core elective list.

20. Subject Expert suggested that, in VII semester offered "Core Elective" courses can be grouped as single group instead of different domain basis.

- The suggestion is accepted and incorporated in core elective list.

17. With reference to the Program Outcomes, the Course Outcomes need to be strengthened / re-written.

- Accepted to re-write the Course Outcomes for all the courses.

IV. Mr. P.NAVEEN KUMAR, Ph.D Research Scholar, VIT University, Chennai.

1. Improve the presentation skills of the students.

- Accepted to Improve the for presentation skills through Department Association Activities.

2. Subject Expert suggested that, In "Mechatronic System Design" course the Unit-V contents of IoT and Industry 4.0 need to be verified as per sequence.

- The suggestion is accepted and Incorporated.

Dr. S.Rajesh, Chairman-BoS also, explained about Department Assessment and Quality Improvement Committee, Department Curriculum Development Cell, Evaluation process for theory and laboratory courses, Evaluation process for skill oriented / skill advanced courses, Evaluation process for Honor / Minor programs, Value Added Courses, Research activities of 2020-21, Faculty and Student Development Programs proposed for 2021-22 to all the members of the BoS.

The meeting was concluded with a vote of thanks by Dr. K. Vimalanathan, Program Co-ordinator of Mechanical Engineering Department.


BoS Chairman
Dr.S.RAJESH