

SVKM's NMIMS Deemed-to-be University
Mukesh Patel School of Technology Management and Engineering

Minutes of the Meeting of Board of Studies (BoS) of Mechanical Engineering Department, was held on September 08, 2022 at 6.00 PM on Microsoft Teams platform.

The following members were present:

1. Dr. Hari Vasudevan, Principal, D.J. Sanghvi College of Engineering - Academic Expert
2. Dr. Ashok Bhonsale, Ex. Principal, Vidyavardhini College of Engineering & Technology - Academic Expert
3. Mr. Saket Bhishekar, International Business, Kirloskar Chillers Pvt. Ltd.- Alumni Member
4. Dr. Asha Ingle, Head, Department of Mechanical Engineering, MPSTME, Mumbai
5. Dr. Ravi Terkar, Professor, Department of Mechanical Engineering, MPSTME
6. Dr. Rajesh Patil, Associate Professor, Department of Mechanical Engineering, MPSTME
7. Dr. Ashish Deshmukh, Associate Professor, Department of Mechanical Engineering, MPSTME
8. Dr. Prashob P S, Assistant Professor, Department of Mechanical Engineering, MPSTME (Invitee)
9. Dr. Abhishek Priyam, Assistant Professor, Department of Mechanical Engineering, MPSTME (Invitee)
10. Prof. Sawankumar Naik, Assistant Professor, Department of Mechanical Engineering, MPSTME (Invitee)
11. Prof. Swati Donde, Assistant Professor, Department of Mechanical Engineering, MPSTME (Invitee)
12. Prof. Samadhan Deshmukh, Assistant Professor, Department of Mechanical Engineering, MPSTME (Invitee)
13. Prof. Sunil Bhil, Assistant Professor, Department of Mechanical Engineering, MPSTME (Invitee)
14. Prof. Zoya Rizvi, Assistant Professor, Department of Mechanical Engineering, MPSTME (Invitee)
15. Prof. Giridhar Chavan, Assistant Professor, Department of Mechanical Engineering, MPSTME (Invitee)
16. Prof. Abira Mukherjee, Assistant Professor, Department of Mechanical Engineering, MPSTME (Invitee)
17. Prof. Mahavir Bhattacharya, Assistant Professor, Department of Mechanical Engineering, MPSTME (Invitee)
18. Prof. Mayur Marathe, Assistant Professor, Department of Mechanical Engineering, MPSTME (Invitee)

Leave of absence is granted to the following members:

1. Dr. Aika Mahajan, Dean, MPSTME, NMIMS University
 2. Dr. Guruprasad Rao, Director, Imaginarium India Pvt. Ltd.- Industry Expert
1. The BoS members confirmed the minutes of meetings of BoS in Mechanical Engineering held on April 22, 2022.
 2. The BoS members considered and deliberated upon the revision in the curricula of B Tech and MBA Tech in Mechanical Engineering. They approved the following:
 - A. Minor revision of curricula of B Tech and MBA Tech in Mechanical Engineering by way of -
 - i. Revision in course structure for the students admitted in AY 2021-22 and direct second year students admitted in AY 2022-23 (Encl.-Ia)

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- ii. Revision in course structure for the students admitted in AY 2020-21 and direct second year students admitted in AY 2021-22 **(Encl.-Ib)**
- B. Introduction of Teaching & Examination Scheme and Syllabi of all the courses for B Tech and MBA Tech in Mechanical Engineering Semester VI for the students admitted in AY 2020-21 onwards. **(Encl.-II)**
 - i. Heat Transfer
 - ii. CAD/CAM/CIM
 - iii. Industrial Applications of HVAC
 - iv. Machine Shop-II
 - v. Department Elective - III
 - a. Industrial Engineering
 - b. Hydraulic and Pneumatic Systems
 - c. Product Design and Development
 - d. Fluid Machinery
 - vi. Department Elective - IV
 - a. Autonomous Navigation of Electric Vehicles
 - b. Aerodynamics in Flight Design
 - c. Advances in IC Engines
 - d. Vibration Engineering

The remaining course is approved in earlier AC Meeting.

- 3. To consider and deliberate upon the revision in the curricula of B Tech (Integrated) in Mechanical Engineering by way of -
 - A. Minor revision of curricula of B Tech (Integrated) in Mechanical Engineering by way of -
 - i. Revision in course structure for the students admitted in AY 2021-22 onwards **(Encl.-IIIa)**
 - ii. Revision in course structure for the students admitted in AY 2020-21 **(Encl.-IIIb)**
 - iii. Revision in course structure for the students admitted in AY 2018-19 and AY 2019-20 **(Encl.-IIIc)**
 - B. Revision in Teaching & Examination Scheme of Semester IV for the students admitted in AY 2021-22 onwards **(Encl.-IV)**
 - C. Introduction of Teaching & Examination Scheme and Syllabi of courses of Semester VI for the students admitted in AY 2020-21 onwards **(Encl.-V)**
 - i. Industrial Engineering and Ergonomics
 - ii. Python for Mechanical Engineers
 - iii. Fundamentals of Engineering Design
 - iv. Automotive Engineering

The remaining courses are approved in earlier AC meetings/ placed for approval by other departments.

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- D. Introduction of Teaching & Examination Scheme and Syllabi of all the courses for B Tech (Integrated) in Mechanical Engineering Semester X for the students admitted in AY 2018-19 and AY 2019-20 (Encl.-VI)
- i. Additive Manufacturing
 - ii. Total Quality Management
 - iii. Automatic Control Systems
 - iv. Department Elective - III
 - a. Artificial Intelligence for Mechanical Engineers
 - b. Design of Mechanical Systems
 - c. Computational Fluid Dynamics
 - v. Department Elective - IV
 - a. Vibration Engineering
 - b. Operations Research
 - c. Aircraft Design

The remaining courses are approved in earlier AC meetings/placed for approval by other departments.

BoS Committee Suggestions:

1. In the course of "Industrial Applications of HVAC" include "industrial visit" since it will expose students to the application of HVAC.
2. The course "Industrial Engineering and Management" rename as "Industrial Engineering and Ergonomics" and include new unit 6 - Ergonomics and Anthropometry into the syllabus.
3. In the course of "Fundamentals of Engineering Design" include new unit 5 - Design of Fasteners.
4. In the course of "CAD/CAM/CIM" include various actuation systems and feedback devices in unit 4 and also include virtual prototyping concepts in unit 6.

Action taken:

The above suggestions are incorporated into the revised curriculum.



Chairperson
Dean, Board of Studies



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Minutes of the Meeting of Board of Studies (BoS) of Mechanical Engineering Department, was held on 6th November, 2022 at 06.30 PM on Microsoft Teams platform.

The following members were present:

1. Dr. Hari Vasudevan, Principal, D.J. Sanghvi College of Engineering - Academic Expert
2. Dr. Ashok Bhonsale, Ex. Principal, Vidyavardhini College of Engineering & Technology - Academic Expert
3. Mr. Saket Bhishekar, International Business, Kirloskar Chillers Pvt. Ltd.- Alumni Member
4. Dr. Asha Ingle, Head, Department of Mechanical Engineering, MPSTME, Mumbai
5. Dr. Ravi Terkar, Professor, Department of Mechanical Engineering, MPSTME
6. Dr. Rajesh Patil, Associate Professor, Department of Mechanical Engineering, MPSTME
7. Dr. Ashish Deshmukh, Associate Professor, Department of Mechanical Engineering, MPSTME

The proceedings were as follows:

Leave of absence was granted to Dr. Alka Mahajan, Dean, MPSTME, NMIMS
- Comments and suggestions received prior and incorporated.

1. The BoS members confirmed the minutes of meetings of BoS in Mechanical Engineering held on 8th September, 2022.
2. The BoS members considered and deliberated upon the revision in the curricula of B Tech and MBA Tech in Mechanical Engineering. They approved the following:
 - A. Revision in Course structures of B Tech in Mechanical Engineering for the students admitted in AY 2023-24 onwards (**Encl.-I a**)
 - B. Revision in Teaching & Examination Scheme and Syllabus of the "3D Printing and Engineering Workshop" for B Tech in Mechanical Engineering Semester I for the students admitted in AY 2023-24 onwards. The course of "Digital Manufacturing Laboratory" is replaced by "3D Printing and Engineering Workshop". (**Encl.-II**)
 - C. Revision in Teaching & Examination Scheme for B Tech and MBA Tech in Mechanical Engineering of Semester V for the students admitted in AY 2021-22 onwards by renaming a course, "Electric Hybrid Automotive Technology" to "Electric and Hybrid Automotive Technology". (The syllabus is approved by Mechatronics Dept.) (**Encl.-III a, c**)
 - D. Approval of Teaching & Examination Scheme for B Tech and MBA Tech in Mechanical Engineering of Semester VI for the students admitted in AY 2021-22 onwards for a course "Interpersonal Skills". (**Encl.-III b, d**)
 - E. Introduction of Teaching and Examination Scheme and Syllabi of the following courses B Tech and MBA tech in Mechanical Engineering, Semester VII for the students admitted in AY 2020-21 onwards (**Encl.-IV a, b, c**)
 - i. Finite Element Analysis
 - ii. Mechanical Measurements and Metrology
 - iii. Capstone Project
 - iv. Department Elective - V
 - a. Design of Transmission Systems
 - b. Ergonomics in Design

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- c. Wind Turbine Technology
 - d. Design of Heat Exchangers
 - v. Department Elective - VI
 - a. Total Quality Management
 - b. Supply Chain Analytics
 - c. Automation in Manufacturing
 - d. Micro and Nano Manufacturing
3. The BoS members considered and deliberated upon the revision in the curricula of B Tech (Integrated) in Mechanical Engineering by way of –
- A. Introduction of course structure for the students admitted in AY 2023-24 onwards and revision in course structures for the students admitted in AY 2022-23, 2021-22 & 2020-21 of B Tech (Integrated) in Mechanical Engineering. **(Encl.-I b, c, d, e)**
 - B. Revision in Teaching & Examination Scheme for B Tech Integrated in semester I & II for students admitted in 2023-24 onwards.
 - i. Introduction of syllabus of “3D Printing Workshop” to replace the course of “Mechanical Workshop”. This will be applicable to all B Tech Integrated programs except Mechanical Engineering.
 - ii. The course “Electrical and Computer Workshop” is shifted from semester II to I and “Mechanical workshop” is shifted from semester I to II **(Encl.-V a, b)**
 - C. Revision in Teaching & Examination Scheme for B Tech Integrated in semester III for the students admitted in 2022-23 onwards **(Encl.-VI)**
 - i. Reducing the theory hours from 3 to 2 (credits from 3 to 2) for “Basics of Manufacturing Engineering”.
 - ii. Reducing the Term End Examination (TEE) hours from 3 to 2 and Maximum marks from 100 to 50 for “Engineering Graphics”.
 - D. Revision in Teaching & Examination Scheme of Semester V for the students admitted in AY 2021-22 onwards by introducing the course of “Environmental Science”. **(Encl.-VII)**
 - E. Introduction of Teaching & Examination Scheme of Semester VII to align with semester III of B Tech Mechanical Engineering. Syllabi of the all courses are approved in earlier Academic council meeting. This is applicable for the students admitted in AY 2020-21. **(Encl.-VIII)**

BoS Committee Suggestion -

Dr. Hari Vasudevan suggested renaming the course “**Digital Manufacturing and Engineering Workshop**” to “**3D Printing and Engineering Workshop**”.

Action taken -

The above suggestion is incorporated into the revised curriculum.


Chairperson
Dean, Board of Studies



Minutes of the Meeting of Board of Studies (BoS) of Mechanical Engineering Department, was held on 6th May, 2023 at 05.00 PM on Microsoft Teams platform.

The following members were present:

1. Dr. Alka Mahajan, Dean, MPSTME, NMIMS
2. Dr. Hari Vasudevan, Principal, D.J. Sanghvi College of Engineering - Academic Expert
3. Dr. Ashok Bhonsale, Ex. Principal, Vidyavardhini College of Engineering & Technology - Academic Expert
4. Dr. Asha Ingle, Head, Department of Mechanical Engineering, MPSTME, Mumbai
5. Dr. Ravi Terkar, Professor, Department of Mechanical Engineering, MPSTME
6. Dr. Rajesh Patil, Associate Professor, Department of Mechanical Engineering, MPSTME
7. Dr. Ashish Deshmukh, Associate Professor, Department of Mechanical Engineering, MPSTME

The proceedings were as follows:

Leave of absence was granted Mr. Saket Bhishekar, International Business, Kirloskar Chillers Pvt. Ltd.- Alumni Member

1. The BoS members confirmed the minutes of meetings of BoS in Mechanical Engineering held on 6th November, 2022.
2. The BoS members considered and deliberated upon the revision in the structure of B Tech and MBA Tech (all branches). They approved the following -
 - A. Revision in the Teaching & Examination scheme of the course "Community Service" for the Students of B Tech and MBA Tech (all branches), semester III and BTI Semester V admitted in AY 2022-23 onwards. **(Encl.-I)**
 - The Teaching and Examination scheme is changed from ICA only to TEE. If any student is unable to successfully complete the above course, he/she gets a chance to re-register for the course.
3. Introduction of the Course "Computational Fluid Dynamics" in the department elective basket for B Tech in Mechanical Engineering, Semester VII for the students admitted in AY 2020-21 onwards.
 - This course is important for those students who are planning their careers in aerospace and automotive industries. This Course is added in the Department Elective - VI Basket. **(Encl.-II)**
4. The BoS members considered and deliberated upon the revision in the Teaching scheme and syllabi of B Tech (Integrated) in Mechanical Engineering. They approved the following -
 - A. Revision in syllabus of the "Engineering Drawing", B Tech (Integrated) semester I of all branches, for the students admitted in AY 2023-24 onwards.
 - Topic on free hand sketches removed from the syllabus as the course is taught using AutoCAD software.
 - B. Revision in syllabus of the course "Elements of Mechanical Engineering" of B Tech (Integrated) in Mechanical Engineering, Semester III for the students admitted in AY 2022-23 onwards.
 - The topic 'Introduction to Automobiles' is replaced with 'hydraulic turbine and pumps' as hydraulic turbine and pumps are important mechanical elements. Topic on 'lifting machines' is also added to the syllabus.
 - C. Introduction of the Teaching & Examination Scheme of the following courses of Semester V for the students admitted in AY 2021-22 onwards. **(Encl.-III)**
 - **Programming for Problem Solving** - The syllabus is approved in BOS of Computer Engineering Department. This course is added in the B.Tech. (Integrated) program to bring it in line with B Tech First year curriculum.

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- **English Communication** - The syllabus is approved in BOS of BSH Department. This course is added in the B.Tech. (Integrated) program to bring it in line with B Tech First year curriculum.
- D. Revision in the syllabi of the courses "Theory of Machines and Mechanisms" and "Production Technology" of Semester V for the students admitted in AY 2021-22 onwards.
- **Theory of Machines and Mechanisms** - Units on 'development of machines' is replaced with 'simple mechanisms' and 'machines and mechanisms' is replaced with 'mechanisms with lower pair'. Topic on 'velocity in mechanisms' is added as it lays foundation for the course, "Kinematics and Dynamics of Machines", which is in semester IX.
 - **Production Technology** - The unit on 'gear manufacturing processes' is replaced with 'numerical control of machine tools' as it lays foundation for the course "CAD/CAM/CIM" which is in the semester X.
- E. Introduction of two new courses in the basket of Open Elective - I for B Tech (Integrated) in Mechanical Engineering, Semester IX for the students admitted in AY 2019-20. **(ENCL-IV)**
- "Nutrition for Health" (Approved in BoS of BSH Department)
 - "Graphology for Personal Development" (Approved in BoS of BSH Department)
- F. **Reporting Items** - Revision in the Course Outcomes of Syllabus of the course "Engineering Graphics" in Semester III for the students admitted in AY 2022-23 onwards.

Action taken -

The above suggestions are incorporated into the revised curriculum.



Chairperson
Dean, Board of Studies

