# 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 Mechatronics Engineering Department, was through circulation.

The mail for suggestion/confirmation was sent to the following BoS members:

- 1. Dr. Alka Mahajan, Dean, MPSTME, NMIMS University
- 2. Dr. Prasanna Gandhi, Professor (Mechanical Department), IIT Mumbai
- 3. Mr. Bhuvan Damahe, Joint General Manager, L&T, Mumbai
- 4. Mr. Nitish Kati, Director, Pegasys System Pvt. Ltd., Mumbai
- 5. Mr. Aslam Adam, Project Lead, Chrysler Group, Detroit, USA
- 6. Dr. Vaishali Kulkarni, Associate Dean, MPSTME, Mumbai
- 7. Dr. Archana Bhise, Associate Dean, MPSTME, Mumbai
- 8. Dr. Ketan Shah, Associate Dean, MPSTME, Mumbai
- 9. Prof. Vinod Jain, HoD, Department of Mechatronics Engineering, MPSTME, Mumbai
- 10. Dr. Asha Ingle, HoD, Department of Mechanical Engineering, MPSTME, Mumbai
- 11. Dr. Avinash More, HoD, Department of Electronics & Telecommunication Engineering, MPSTME, Mumbai
- 12. Dr. Venkatesh Deshmukh, Professor, Department of Mechanical Engineering, MPSTME,
- 13. Prof. Sawankumar Naik, Department of Mechanical Engineering, MPSTME, Mumbai
- 14. Prof. Ainal Abdul Azeez, Department of Mechatronics Engineering, MPSTME, Mumbai
- 15. Prof. Chetna Sharma, Department of Mechatronics Engineering, MPSTME, Mumbai
- The BoS members considered and deliberated upon the minor revision in the curricula of B. Tech. in Mechatronics Engineering. They approved the following:
  - A. Minor revision of Course Structure of semester I to VIII and Teaching & Examination Scheme of the courses in semester III and IV for the students admitted in 2021-22 onwards and direct second year students admitted in the academic year 2022-23 (Encl.-I).
    - Replace the course "Transforms and Series" by "Complex Variables and Transforms" in semester III.
    - Introduction of the course on "Chemistry" in place of "Open Elective -I (Technical)" in semester IV.
  - B. Minor revision of Course Structure of semester I to VIII for the students admitted in 2020-21 onwards and direct second year students admitted in the academic year 2021-22 (Encl.-II).

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- C. Minor revision of Teaching & Examination Scheme of the courses in semester IV for the students admitted in 2020-21 (Encl.-II).
  - Replace the course "Intelligence of Biological systems" by "Elements of Biology" in semester IV.
  - Open Elective I (Technical) course is to be removed from semester IV.

Action taken: All the suggestions are incorporated in syllabi.

Chairperson

Dean, Board of Studies

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# SVKM's Narsee Monjee Institute of Management Studies Mukesh Patel School of Technology Management and Engineering

Minutes of the Meeting of Board of Studies (BoS) of Mechatronics Engineering Department, was held on 4th May, 2022 at 1.00 PM in MPSTME.

The following members were present:

1. Mr. Nitish Kati, Director, Pegasys Systems Pvt. Ltd.

2. Mr. Chandrashekhar Limaye, Director, Supertech Instrumentation Services (India) Pvt. Ltd.

3. Dr. Faruk Kazi, Professor, Department of Electrical Engineering, Dean, Research, Development and Consultancy, VJTI

 Dr. Venkatesh Deshmukh, Professor and Head, Department of Mechatronics Engineering, MPSTME, NMIMS

5. Mr. Vinod Jain, Associate Professor, Department of Mechatronics Engineering, MPSTME, NMIMS

- 6. Mr. Ainal Abdul Azeez, Assistant Professor, Department of Mechatronics Engineering, MPSTME, NMIMS
- Mr. Dattatray Sawant, Assistant Professor, Department of Mechatronics Engineering, MPSTME, NMIMS

The proceedings were as follows:

- 1. Leave of absence is granted to Dr. Alka Mahajan, Dean, MPSTME, NMIMS.
- The BoS members confirmed the minutes of meetings of BoS in Mechatronics Engineering held on 28th August, 2021.
- 3. The BoS members considered and deliberated upon the revision in the curricula of B Tech in Mechatronics Engineering. They approved the following:

A. A minor revision of curricula of B Tech in Mechatronics Engineering by way of -

 I.
i. Revision in Course Structure for the students admitted in AY 2022-23 onwards (Encl.-I)

• Increasing the practical hours from 2 to 4 and the credits from 3 to 4 for the course "Programming for Problem Solving" in Semester I.

Shifting the course "Environmental Science" from IV to II.

 Introducing the course "Digital Manufacturing Laboratory" and "Electrical and Electronics Workshop" in place of "Workshop Practice" in Semester II.

 Increasing the theory hours from 2 to 3 and the credits from 3 to 4 for the course "Data Structures and Algorithms" in Semester II.

 Splitting the course "English Communication" of 3 credits in Semester II into three courses "English Communication" in Semester II, "Technical Communication" in Semester III, "Employability Skills" in Semester VI of 1 credit each.

ii. Revision in Teaching and Examination Scheme for Semester I & II for the students admitted in AY 2022-23 onwards (Encl.-Ia)

II.

i. Revision in Course Structure for the students admitted in AY 2021-22 and direct second year students admitted in AY 2022-23 (Encl.-II)

 Renaming the course "Applied Statics and Dynamics" to "Engineering Mechanics" in Semester III. (The syllabus approved in BoS of Mechanical Dept.)

 Shifting the course "Signal, Systems and Inference" from Semester V to III and renaming it "Signals and Systems" (The syllabus approved in BoS of EXTC Dept.)

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 Shifting the course "Thermodynamics & Heat Transfer" from Semester IV to III, renaming it "Thermodynamics" with change from practical 2 hours to tutorial 1 hour and revision in the syllabus.

• Shifting the course "Manufacturing Processes" from Semester III to V.

- Shifting the course "Fluid Mechanics & Machinery" from Semester III to IV and renaming it "Fluid Mechanics" and revision in the syllabus.
- Shifting the course "Dynamics of Machines" from Semester V to IV and renaming it "Dynamic Systems Modelling" and revision in the syllabus.
- Shifting the course "Fundamentals of Control Systems" from Semester IV to V
- Reducing the theory hours from 3 to 2 and credits from 4 to 3 for the course "Mechanics of Materials" in Semester IV and revision in the syllabus.
- Introducing the course "Python Programming" in Semester IV. (The syllabus approved in BoS of AI Dept.)
- Renaming the course "Industrial Electronics & Drives" to "Industrial Drives" in Semester V
- Renaming the course "Industrial Control Systems" to "Supervisory Control and Data Acquisition" in Semester VI
- Renaming the course "Mechanical Measurements & Instrumentation" to "PLCs and Instrumentation" with increase in credits from 2 to 3 in Semester VI
- Introducing the course "Artificial Intelligence and Machine Learning" in Semester VI
- Renaming the course "Industrial Robotics" to "Industrial Robotics and Motion Control" and shifting from Semester VI to VII as Department Elective – V
- Introducing the course "Employability Skills" in Semester VI
- Introducing the course "Robotic Systems Design" in Semester VII
- Removing the course "Product Design and Development" from Semester VII
- Renaming the course "Minor Project" to "Capstone Project" with increase in credits from 2 to 4 in Semester VII
- Renaming the course "Major Project" to "Project based Internship" with reduced credits from 12 to 10 in Semester VIII
- · Removing the course "Technical Internship" from Semester VII
- ii. Revision in Teaching and Examination Scheme for Semester III & IV and Syllabi of the courses "Thermodynamics" of Semester III, "Dynamic Systems Modelling", 'Mechanics of Materials' and "Fluid Mechanics" of Semester IV for the students admitted in AY 2021-22 and direct second year students admitted in AY 2022-23 (Encl.-IIa)

#### III.

- ·i. Revision in Course Structure for the students admitted in AY 2020-21 and direct second year students admitted in AY 2021-22 (Encl.-III)
  - Renaming the course "Industrial Electronics & Drives" to "Industrial Drives" in Semester V
  - Renaming the course "Dynamics of Machines" to "Dynamic Systems Modelling" in Semester V
  - Renaming the course "Signal, Systems and Inference" to "Signals and Systems" in Semester V (The syllabus approved in BoS of EXTC Dept.)
  - Renaming the course "Industrial Control Systems" to "Supervisory Control and Data Acquisition" in Semester VI

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- Renaming the course "Mechanical Measurements & Instrumentation" to "PLCs and Instrumentation" with increase in credits from 2 to 3 in Semester VI
- Introducing the course "Artificial Intelligence and Machine Learning" in Semester VI
- Renaming the course "Industrial Robotics" to "Industrial Robotics and Motion Control" and shifting from Semester VI to VII as Department Elective – V
- Introducing of the course on "Robotic Systems Design" in Semester VII
- Removing the course "Product Design and Development" from Semester VII
- Renaming the course "Minor Project" to "Capstone Project" with increase in credits from 2 to 4 in Semester VII
- Renaming the course "Major Project" to "Project based Internship" with reduction in credits from 12 to 10 in Semester VIII
- Removing the course "Technical Internship" from Semester VII
- ii. Revision in Teaching and Examination Scheme and Syllabi of Semester V for the students admitted in AY 2020-21 and direct second year students admitted in AY 2021-22 (Encl-IIIa)
- B. Introducing the Teaching and Examination Scheme and Syllabi of open elective courses offered by the Department of Mechatronics Engineering for Semester V & VI. This will be applicable for the students of B Tech and MBA Tech programs except B Tech CSBS and B Tech CSE (DS) admitted in AY 2020-21 and direct second year students admitted in AY 2021-22 onwards (Encl.-IV)
  - i. Supervisory Control and Data Acquisition (except B Tech Mechatronics)
  - Robotic Process Automation (except B Tech Mechatronics, B Tech and MBA Tech AI, DS)

### **BoS Committee Suggestions:**

- The Department Elective II course "Industrial Data Communication" should include OPC, Ethernet and LORA WAN.
- 2. Fundamentals of Control Systems should precede Dynamic Systems Modelling.

#### Action taken:

**Item 1 -** Ethernet and LORA WAN has been included in the syllabus of "Industrial Data Communication" and OPC would be included in the syllabus of "Supervisory Control and Data Acquisition" in Semester VI.

**Item 2 -** The suggestion would be considered once the feedback is received after implementation of the current curriculum for two academic years.

Chairperson

Dean, Board of Studies

