

DEPAERTMENT OF MECHATRONICS ENGINEERING MINUTES OF THE SEVENTH MEETING OF BOARD OF STUDIES

Venue

: Board Room

Date

28.05.2024

Time

: 02.00PM

Members Present:

S. No.	Name and Designation	Position in Committee	Signature with date
1.	Dr.K.Manikanda Subramanian Professor & Head of the Department, Department of Mechatronics Engineering, Coimbatore Institute of Engineering & Technology, Coimbatore.	Chairman	Justin
2.	Dr.A.S. Prasanth Associate Professor, Department of Mechanical Engineering, PSG College of Technology, Coimbatore.	University Nominee	-online mode
3.	Dr.B.Vinod Professor & Head, Department of Robotics and Automation Engineering, PSG College of Technology, Coimbatore.	Subject Expert	28 05 /2
4.	Dr.Sanjivi Arul Associate Professor, Department of Mechanical Engineering, Amrita Vishwa Vidyapeetham School of Engineering, Coimbatore.	Subject Expert	G 28. 15. 1021
5.	Mr. Surendran Devaraj Chief Autonomous Officer, Maxbyte Technologies, Coimbatore.	Industry Representative	23/ 6/ 24
6.	Mr. D.Natrayasamy Software Testing Engineer, Maxbyte Technologies, Coimbatore.	Alumni	Forther Sur

	Mr.K.Senthilkumar,		
7.	Assistant Professor, Department of Mechatronics Engineering, Coimbatore Institute of Engineering & Technology, Coimbatore.	Member	1. land 28/5/
	Mr.B.Avinash,		
8.	Assistant Professor, Department of Mechatronics Engineering, Coimbatore Institute of Engineering & Technology, Coimbatore.	Member	B. 28 5 12024
	Mr.M.Mohandass,		1
9.	Assistant Professor, Department of Mechatronics Engineering, Coimbatore Institute of Engineering & Technology, Coimbatore.	Member	M. Musik 5/20
10.	Mr.V.Arunprasath		
	Assistant Professor, Department of Mechatronics Engineering, Coimbatore Institute of Engineering & Technology, Coimbatore.	Member	Y. Denerosiosiosiosi
	Mr.R.Parthiban		
11.	Assistant Professor, Department of Mechatronics Engineering, Coimbatore Institute of Engineering &	Member	29.05:24
	Technology, Coimbatore.		
	Mr.R.Srinivasan		
12.	Assistant Professor, Department of Mechatronics Engineering, Coimbatore Institute of Engineering & Technology, Coimbatore.	Member	P. S. 24 24

Agenda:

- i. Approval of syllabi for the 3rd, 4th semester for the Regulation 2023 under CBCS for the batch of Mechatronics Engineering students admitted in the academic year 2023 2024.
- ii. Approval of syllabi brought forward by the chairperson for the academic year 2024 2025 for the categories Humanities and Social Sciences (HS), Basic Sciences (BS), Engineering Sciences (ES), Professional Core (PC), Professional Elective (PE), Open Elective (OE), Mandatory Courses (MT) and Employment Enhancement Courses (EEC) for the batch of students admitted in the academic year 2023 2024 under Regulation 2023 incorporating the suggestions.

- iii. Approval of Panel of Examiners and Question Paper Setters.
- iv. Any other matter with the permission of the chair.

The meeting commenced with welcome address by the Chairman, Dr.K.Manikanda Subramanian. Then various items of agenda were taken up for discussion and after detailed discussion, the following suggestions were given by the members of board of studies.

- i. It is appropriate to recommend the most recent edition of text and reference books.
- ii. The title of the course "Kinematics and Dynamics of Machinery" to be changed to "Theory of Machines" or "Mechanics of Machines"
- iii. The number of hours for each unit need not be equal; it may also vary depending upon the course outcome level.
- iv. Pre-requisite for all the courses are necessary
- v. Instead of K1 to K5, Bloom's Taxonomy level may be mentioned as L1 to L5.
- vi. CO-PO mapping of all the courses needs to be verified and justified.
- vii. Utilize the first three levels of Blooms Taxonomy verbs to set course objectives and outcomes.
- viii. Rename the Professional Elective(PE) course titled "Guidance and Control" to "Flight Guidance and Control"
- ix. The course "Thermodynamics and Heat Transfer" may be moved to Professional Core(PC) category and the course titled "Total Quality Management" may be shifted to Professional Elective(PE) verticals
- x. Bridge courses to be conducted for lateral entry students on "C and Python Programming"
- xi. The course titled "Industrial Robotics" to be renamed as "Robotics"
- xii. Professional Elective(PE) courses are to be chosen based on current trends in job market
- xiii. The course titled "Fluid Power System Automation and PLC" to be renamed as" Fluid Power Systems and PLC"

After much deliberation, the following resolutions were passed.

Item 7.1: Resolved to approve the syllabi for the 3rd, 4th semester and Professional Elective (PE) courses for the Regulation2023 under CBCS for the batch of students admitted in the academic year 2023 –2024.

Item 7.2: Resolved to approve the syllabi brought forward by the chairperson for the academic year 2024 –2025 for the categories Humanities and Social Sciences (HS), Basic Sciences (BS), Engineering Sciences (ES), Professional Core (PC), Professional Elective (PE), Open Elective (OE), Mandatory Courses (MT) and Employment Enhancement Courses (EEC) for the batch of students admitted in the academic year 2023 – 2024 under Regulation 2023 incorporating the suggestions.

Item 7.3: Resolved to approve the list of Examiners and Question Paper Setters.

Course where major Syllabus Revision were made (more than 20% of syllabus change):

A major syllabus change in the following course was proposed based on feedback received from stakeholders. The proposed changes were discussed and approved by the BOS members.

• U23MCT03- Electrical Machines

Introduction of new courses:

The following new courses are introduced in the 2023 regulation (UG-Mechatronics) and the same were approved by the BOS Members.

- U23MCT02- Digital System Design and Microprocessor
- U23MCV03- Production of Automotive Components
- U23MCV04– Design for X
- U23MCV05- Electronics Manufacturing Technology
- U23MCV08- Mobile Robotics
- U23MCV09- Underwater Robotics
- U23MCV10- Microrobotics
- U23MCV11- Humanoid Robotics

- U23MCV12- Agricultural Robotics and Automation
- U23MCV13- Medical Robotics
- U23MCV14- Robotic Operating System
- U23MCV15- Drone Technologies
- U23MCV16-Flight Guidance and Control
- U23MCV18- Aircraft Mechatronics
- U23MCV19- Design of UAV systems
- U23MCV20- Navigation and Communication System
- U23MCV21-Aerodynamics of Drones
- U23MCV22- Battery Management System
- U23MCV24- Electric and Hybrid Vehicles
- U23MCV25- Vehicle Dynamics and Controls
- U23MCV26-Smart mobility and Intelligent Vehicles
- U23MCV27- Automotive System Modeling and Simulation
- U23MCV28- Advanced Driver Assistance Systems
- U23MCV29- Immersive Technologies And Haptics
- U23MCV30- Computer Networks and Security
- U23MCV31-Applied Signal Processing
- U23MCV32-Applied Image Processing
- U23MCV33- Computer Vision
- U23MCV34- Artificial Intelligence for Robotics
- U23MCV35- Intelligent Control Systems
- U23MCV37- Cloud Computing
- U23MCV38- Industrial control of Motion Drives
- U23MCV40- Total Integrated Automation
- U23MCV41- Industrial Network Protocols
- U23MCV42- Digital Twin and Industry 5.0

% of syllabus revision made in the program: UG: 67%

The total numbers of 29 courses are categorized as follows:

- 1. Employability Oriented Courses 01
- 2. Entrepreneurship Oriented Courses -01
- 3. Skill Development Oriented Courses -10
- 4. Other Category- 17

Since there were no other points to be discussed, the Chairman thanked all the members of the Board of Studies for their active participation, valuable suggestion and contribution made for recommending the 3rd and 4thsemester and Professional Elective (PE) courses syllabi.

The meeting concluded by 04.30 P.M.

CHAIRMAN

Dr. K. MANIKANDA SUBRAMANIAN, M.E., Ph.D.,
Professor & Head
Dept. of Mechatronics Engineering
Coimbatore Institute of Engineering and Technology,
Vellimalaipattinam, Narasipuram, (P.O),
Coimbatore - 641 109.