

**Walchand College of Engineering, Sangli**  
**Overview of MDM Revamping**  
**(MDM- 14 Credits: (IVth to VIII Semester))**

- MDM Cycle 1: w.e.f. Even Semester 2024-25
- MDM Cycle 2: Revised MDM courses w.e.f. Even Semester 2025-26 for all classes

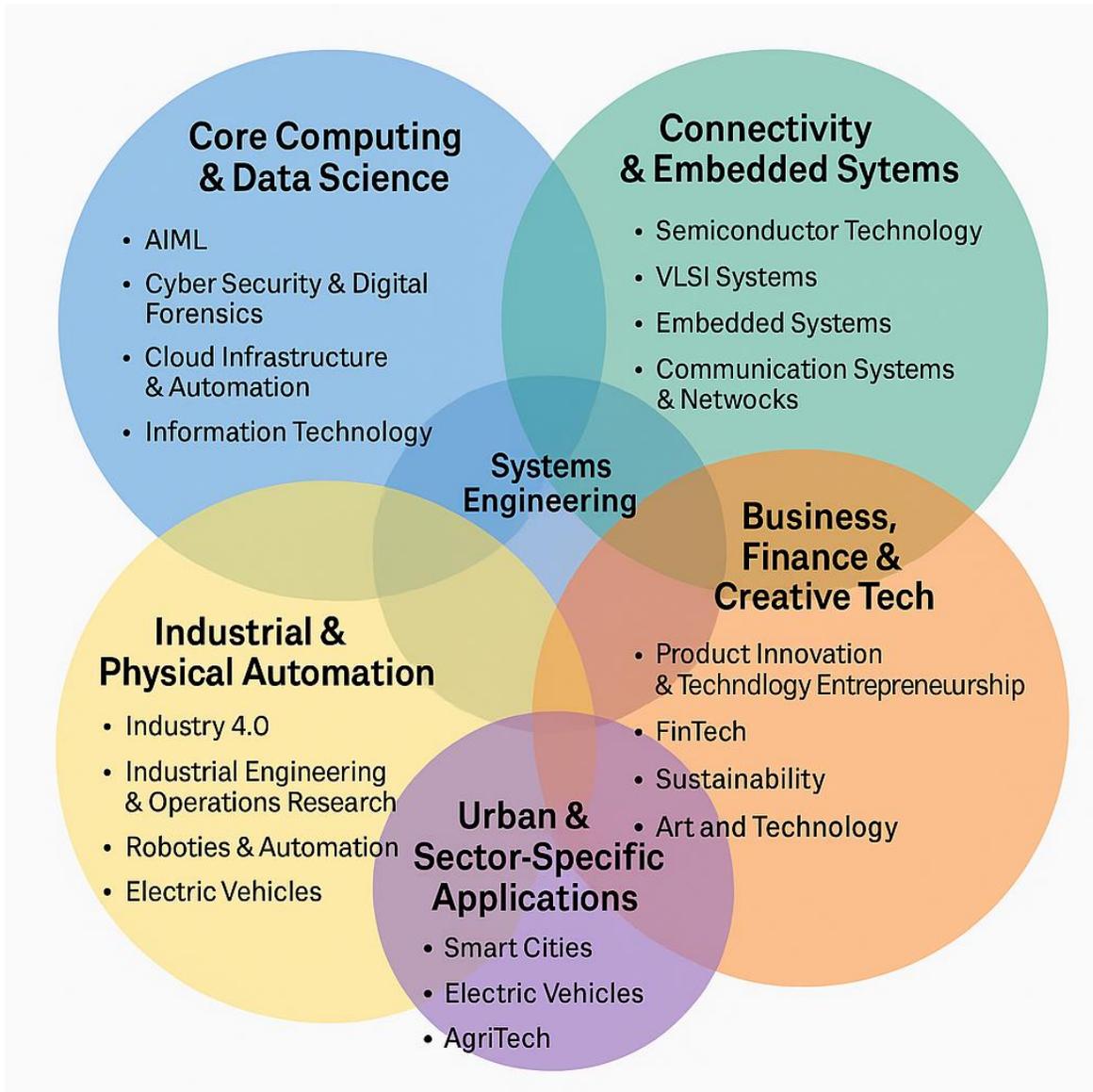
Revamping of MDM is carried out based on the following and is made applicable w.e.f. Even Semester AY 2025-26 even semester to Cycle 1 (VI semester) and Cycle 2 (IV semester).

**Revamping Rationale:**

- Increase in students' intake number and wide interests
- Need of domain expertise for local as well as global industry
- Need for interdisciplinary and collaborative problem solutions
- Focus on skill enhancement while using theoretical knowledge

<b>Sr. No.</b>	<b>Revamping Aspect</b>	<b>Core Focus</b>	<b>Key Outcome Expected</b>
1	Curriculum Relevance & Future Alignment	Updating of courses based on emerging technologies, industry demand, and future career opportunities	Future-ready graduates with higher employability
2	Structural Redesign (Learning Architecture)	Developing progressive learning environment	Skill competency through Activity Based Learning
3	Experiential & Industry Integration	Including application projects, case studies, tool-based labs, and industry mentoring	Expertise to analyse problems and use of modern tools
4	Assessment Reform	Shifting from memory-based exams to problem solving, demonstrations i.e. Activity based formative and continuous evaluation	Skill Assessment in psychomotor and affective domain in addition to the cognitive domain
5	Design thinking and experiential learning	Promoting innovation and entrepreneurship skills	Startup readiness and mindset

**MDM Verticals Titles at WCE:**



1. MDM in Communication Systems and Networks
2. MDM in Semiconductor Technology
3. MDM in VLSI Design
4. MDM in Embedded Systems and RTOS
5. MDM in Geomatics Engineering
6. MDM in Art and Technology
7. MDM in Cloud Infrastructure and Automation
8. MDM in Cyber Security and Digital Forensics
9. MDM in Artificial Intelligence and Machine Learning
10. MDM in AgriTech
11. MDM in Sustainability
12. MDM in Industry 4.0
13. MDM in Industrial Engineering and Operations Research
14. MDM in Construction and Project Management
15. MDM in Systems Engineering
16. MDM in Quantum Technology
17. MDM in Innovation and Entrepreneurship Development
18. MDM in Smart Cities
19. MDM in Electric Vehicles
20. MDM in FinTech
21. MDM in Robotics and Automation
22. MDM in Electronics Engineering
23. MDM in Information Technology
24. MDM in Mechanical Engineering
25. MDM in Civil Engineering
26. MDM in Computer Science and Engineering