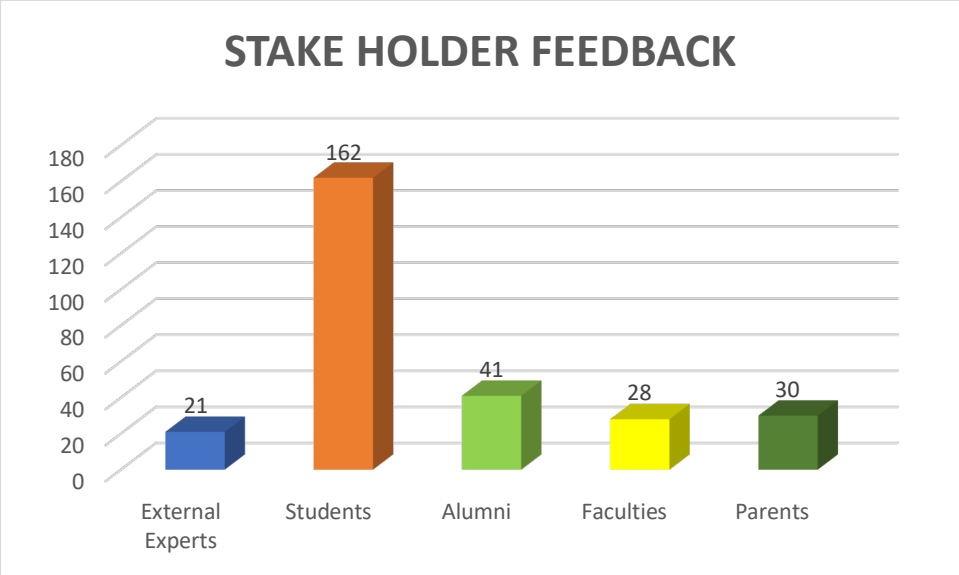
School of Engineering and Technology
Department of Mechanical and Automobile Engineering

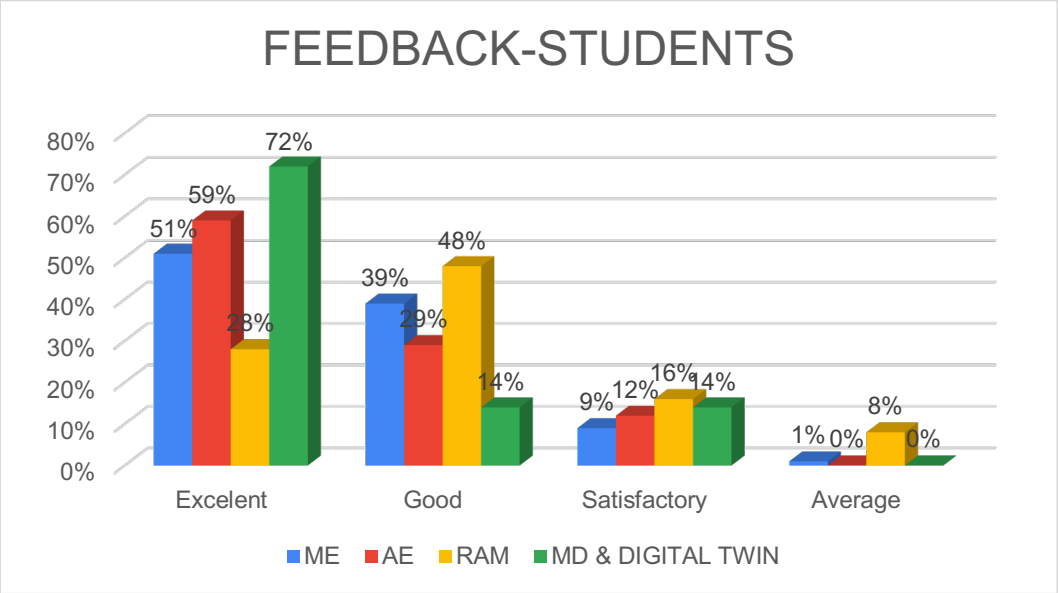
Curriculum Feedback Analysis 2025-26

The Department of Mechanical and Automobile Engineering undertakes annual curriculum revisions for its programmes to align with evolving industry trends and emerging technologies. These revisions are informed by comprehensive feedback collected from key stakeholders, including students, alumni, and faculty members. This report presents an analysis of the gathered feedback and will be submitted to the Department Curriculum Design and Development Cell (CDC) for consideration in the curriculum revision process.



This academic year feedback was collected from a total of 162 students, 28 faculty members, 41 alumni, 21 External experts and 20 parents. This feedback was analyzed and this report contains the analysis and recommendations to CDC based on the analysis carried out.

Students Feedback on Curriculum

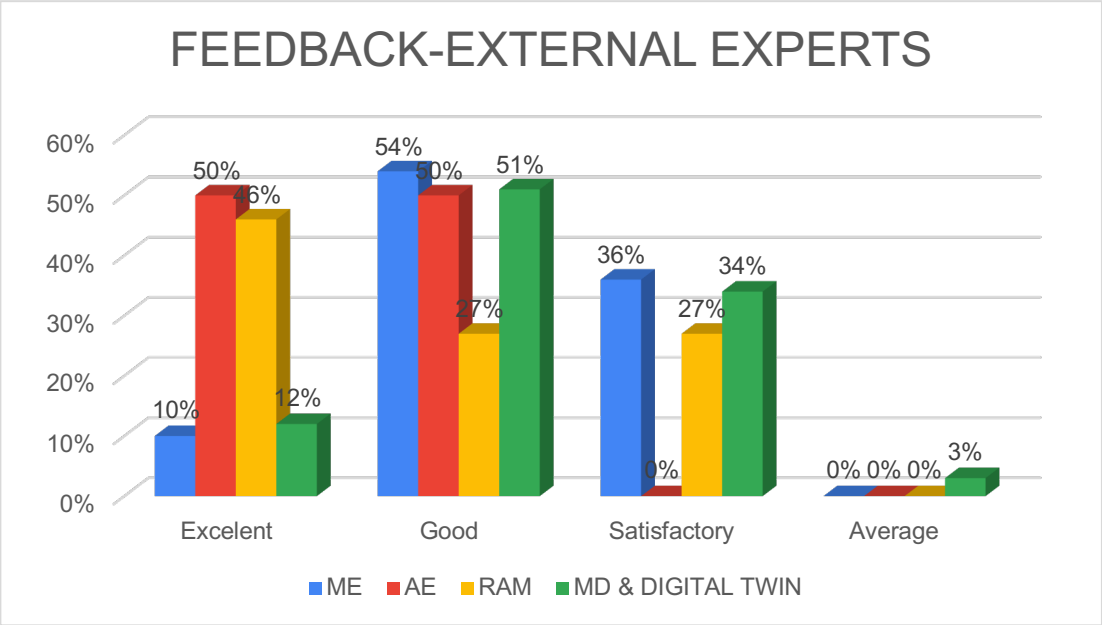


Student feedback on curriculum has been taken from 162 students. Out of 162 students 66 students from BTech Mechanical Engineering, 33 students from BTech Automobile Engineering ,61 students from BTech Robotics and Mechatronics and 02 students from MTech machine designe and Digital Participated. The questionnaire and the number of responses for each year of study was as follows

The current B.Tech Mechanical Engineering curriculum is well-balanced and effectively aligned with outcome-based education, supporting both academic and professional development.

- A more practically oriented and coherent approach is recommended, rather than predominantly focusing on theoretical or literature-based content.
- Increasing the number of practical sessions would significantly enhance hands-on learning and understanding.
- Incorporating more industrial visits will improve experiential learning and provide better exposure to real-world industry practices.

External Experts Feedback on Curriculum



• The curriculum is well-designed to align with current industry practices, incorporating appropriate practical sessions that provide valuable hands-on experience.

• It is expected to yield significant outcomes in terms of employability skills, while fostering entrepreneurship and a strong problem-solving attitude among students.

• The curriculum demonstrates a good balance with a clear focus on employability and interdisciplinary learning demands.

• The inclusion of multidisciplinary elements along with practical exposure is a positive aspect that enhances overall learning effectiveness.

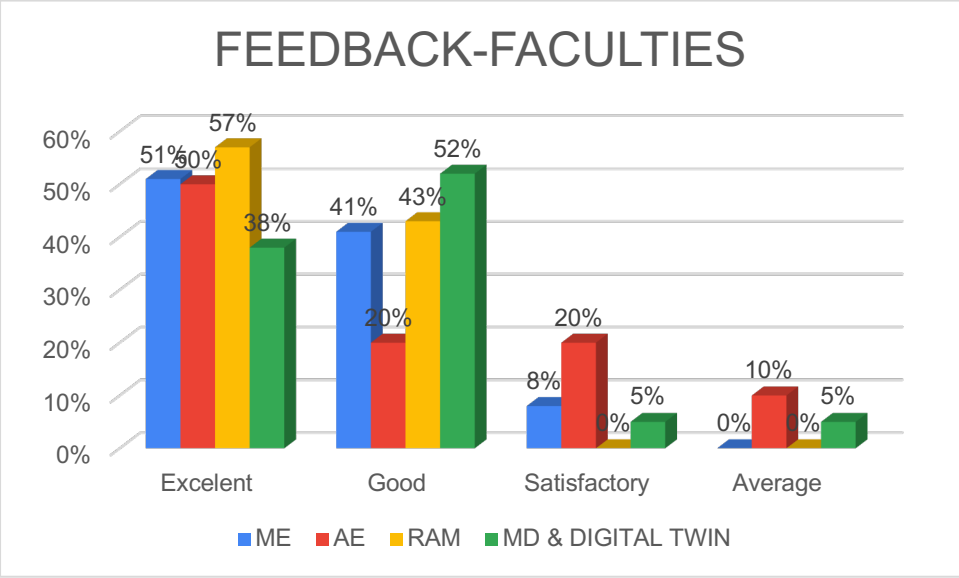
• Greater depth in manufacturing modules, particularly in areas such as Wire Cut EDM and EDM, along with their practical applications, is recommended to enhance technical proficiency.

• The Strength of Materials syllabus is well-structured and thoughtfully designed for B.Tech students.

• This balanced approach prepares students for both academic success and real-world engineering challenges.

- While the curriculum is comprehensive, it can be further strengthened by incorporating more core, specialized practical areas instead of generalized content.

Faculties Feedback on Curriculum



• The inclusion of modern tools, industry-linked projects, and interdisciplinary electives significantly enhances student learning and employability.

• The syllabus is well-structured, with adequate coverage of advanced subjects relevant to current technological trends.

• The curriculum demonstrates overall stability; however, it is recommended to avoid frequent changes in core and basic courses to prevent confusion among students, faculty, and the examination system.

• Upgradation of laboratory infrastructure is suggested, particularly for labs older than 10 years, by incorporating advanced equipment and modern methodologies.

• Greater emphasis can be placed on emerging areas such as sustainability, green technologies, and digital manufacturing to further improve industry relevance.

• Strengthening practical and hands-on learning components will enhance students' technical competencies and real-world problem-solving skills.

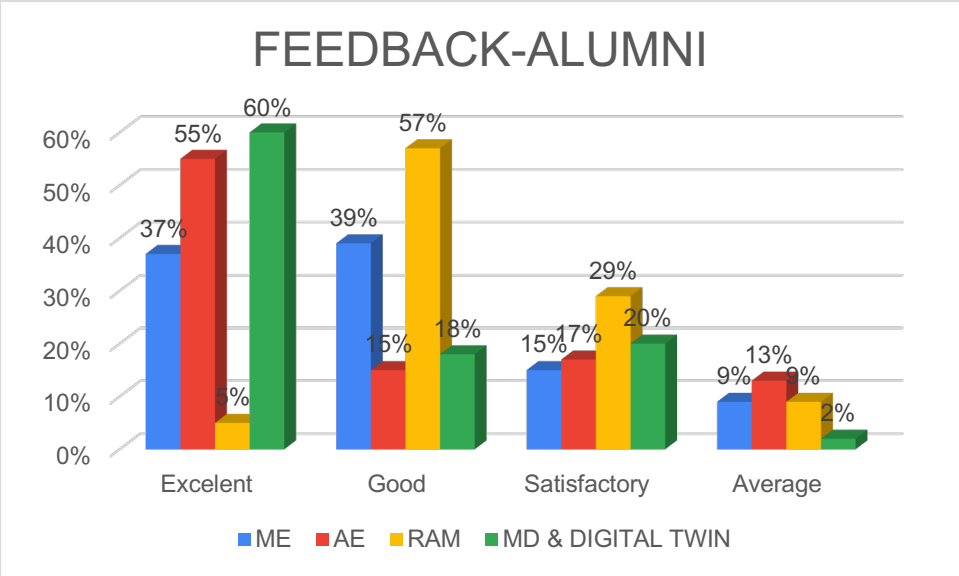
• Focus on skill development initiatives can further improve student employability and industry readiness.

• Continuous improvement in CO–PO mapping and outcome-based education practices is recommended to ensure effective attainment of learning outcomes.

• Reforms in assessment and evaluation methods can support more comprehensive and application-oriented learning.

• Encouraging interdisciplinary learning and research orientation will foster innovation and broaden students' academic exposure.

Alumni Feedback on Curriculum



• While the mechanical engineering fundamentals are well covered, there is a need to include management-oriented courses with higher credit weightage, enabling students to explore career paths in engineering, management, or a combination of both.

• Introducing mandatory management subjects in the 3rd and 4th years would enhance opportunities for higher studies abroad, placements, and entrepreneurial understanding.

• Students should be exposed to entrepreneurship concepts, business operations, and the integration of engineering with management practices.

• There exists a noticeable gap between the current syllabus and evolving industry requirements, which needs to be addressed.

• Greater emphasis should be placed on internships and industry work experience, with a stronger institutional push toward practical exposure and value-based placements.

• Continuity in teaching design and analysis software across multiple semesters is recommended to ensure proficiency and mastery.

• Increased focus on lab-based and practical learning will enhance students' technical competence.

• The department is making commendable efforts to improve curriculum standards, as observed over time.

• The curriculum should further incorporate employability-focused elements, including structured "on-the-job training" components.

• Inclusion of Geometric Dimensioning and Tolerancing (GD&T) in relevant subjects such as instrumentation is recommended.

• Students should be encouraged to gain expertise in at least two core software tools rather than having superficial knowledge of many.

• Greater emphasis on learning design software, alongside theoretical concepts, will improve industry readiness.

• The current curriculum, while strong, is relatively more focused on the automobile domain; a more balanced approach across diverse mechanical engineering fields is needed.

• Flexibility in offering electives should be improved, as minimum student requirements often lead to selection of less relevant subjects, impacting the overall learning experience.

School of Engineering and Technology
Department of Mechanical Engineering

Action Taken Report on Curriculum Feedback Analysis 2025-26

The Department of Mechanical and Automobile Engineering collects analyses and acts based on the feedback received from all the stakeholders as far as curriculum is concerned. The stakeholders from whom the feedback is collected are

1. Students
2. Teachers
3. Alumni
4. External Experts

The Curriculum Design and Development Cell (CDC) of the Department initiates this feedback collection, also analyses the same, and prepares a feedback analysis report on the curriculum every academic year. These are then proposed to the Department Board of Studies (BS) for their approval to be included in the curriculum for the subsequent academic year. This report highlights the action taken in the below mentioned courses which have been revised as per the feedbacks received from the stakeholders.

Stake Holder	Major Suggestions	Action Taken by CDC
External Experts	Curriculum should meet current industry standards	The curriculum has been revised in alignment with current industry requirements, incorporating Industry 4.0, Automation, Robotics, and AI-integrated courses.
	Need for practical design exposure	Additional design-oriented laboratory courses, project-based learning components, and capstone projects have been strengthened in the revised structure.
International Experts	Align curriculum with global benchmarks	The course structure has been benchmarked against leading international universities, and relevant global best practices have been incorporated.
	Strengthen robotics software skills	Courses on Robotics Programming, Python, ROS, Simulation Tools, and Industrial Automation have been included/enhanced.
	Address future-ready technologies	Emerging areas such as AI in Mechatronics, Industry 4.0, Smart Manufacturing, and Advanced Robotics have been integrated into the curriculum.

Stake Holder	Major Suggestions	Action Taken by CDC
Alumni	Need hands-on exposure to industrial tools	Practical sessions using industrial software tools, simulation platforms, and laboratory-based training have been increased.
	Improve job-oriented skill training	Skill-based electives, value-added courses, and industry-focused modules have been introduced to enhance employability.
	More exposure to simulation tools	Simulation-based courses and lab components have been incorporated across relevant semesters.
	Strengthen design capabilities	Advanced design courses, FEM, and project-based design components have been included to strengthen analytical and design skills.

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