Joint Action Taken Report (ATR) – 2024

Department of Civil Engineering

1. Introduction

The Civil Engineering Department conducted a multi-stakeholder feedback analysis covering Program Outcomes (POs), Program Specific Outcomes (PSOs), and Program Educational Objectives (PEOs). The feedback was obtained from alumni (2020–2023 batches), current employers of graduates, and parents of current students. This joint ATR consolidates strengths, identifies key areas for improvement, and outlines remedial and strategic actions undertaken to align the department's educational delivery with academic, professional, and societal needs.

2. Key Strengths Identified

Area	Source	Highlights
Modern Tool Usage	Alumni, Employers, Parents	Alumni (4.67), Employers
		(3.91), Parents (4.33) show
		consistent satisfaction in
		tool exposure and lab
		infrastructure.
Project Management &	Alumni, Employers	Alumni rated Project
Innovation		Management at 4.67, and
		employers rated
		innovation at 4.91 – strong
		industry alignment.
Ethics & Sustainability	All	Ethics: Alumni (4.33),
		Parents (4.14);
		Environment: Alumni &
		Employers (4.25–4.35) –
		shows social responsibility
		focus.
Entrepreneurship	Employers, Alumni	High scores in PSOs (4.91
		Employers, 3.75 Alumni)
		reflect early efforts in
		fostering start-up culture.

Lifelong Learning	Parents, Alumni	Scores over 4.3 show
		effective inculcation of
		continuous learning
		mindset.

3. Key Weaknesses and Action Plan

A. Communication Skills (Lowest Scores: Alumni – 2.75, Employers – 2.20, Parents – 2.24)

Issues Identified:

- Lack of confidence in public speaking, documentation, and interviews.
- Limited soft skill engagement across curriculum.

Corrective Measures Taken:

- Mandatory Communication Courses added in 2nd and 4th semesters.
- Communication Lab established with modern tools.
- Appointed an Anglo-Indian professor as department head for global perspective.
- Structured assessments covering verbal, written, and listening skills.
- Regular seminars, debates, mock interviews initiated.

B. Interdisciplinary and Design Exposure (Low PEO and PO ratings)

Issues Identified:

- Insufficient exposure to real-world, cross-disciplinary problems.
- Moderate ratings in "Design/Development of Solutions" (Parents 3.57, Employers 3.76).

Remedial Measures:

- Inclusion of interdisciplinary final-year projects and industry-linked design challenges.
- Creation of Design Studio with CAD, STAAD Pro, BIM tools.
- Launch of Hackathons and internal design competitions.
- Curriculum now includes cross-department electives.

C. Entrepreneurial Readiness and Innovation

Issues Identified:

- Parents and Alumni reported mid-level satisfaction (3.71, 3.75) despite employers reporting high satisfaction.

Actions Taken:

- Departmental Incubation Cell created.
- Regular startup bootcamps, alumni entrepreneur sessions.
- Launch of Construction Bidding & Business modules.

D. Project Management and Finance

Issues Identified:

- Parents gave a low score (3.00), indicating weak business readiness.

Actions Taken:

- New course on "Finance for Engineers" added.
- Introduced MS Project, Primavera tools in practical labs.
- Mini-projects with budgeting components included from 3rd year.

4. Strategic Implementation Phases

Phase	Duration	Key Actions
Phase I	0–3 Months	Baseline audit, lab setup,
		curriculum inclusion,
		department coordination.
Phase II	3–6 Months	Pilot programs (seminars,
		design contests), industry
		outreach, online platform
		tie-ups.
Phase III	6–12 Months	Policy integration, fund
		allocation, mentoring,
		outcome-based evaluation.

5. Continuous Monitoring and Review

- Alumni Panels review progress on entrepreneurship and interdisciplinarity.
- Parent and Employer Feedback used annually in curriculum reviews.
- IQAC and Department Review Committee ensure systematic improvement tracking.

6. Conclusion

The joint stakeholder feedback has significantly guided our improvement roadmap. By addressing communication gaps, boosting interdisciplinary learning, and strengthening project and entrepreneurial skills, the department has laid a foundation for producing globally competent, socially responsible civil engineers. The corrective actions have been implemented in a phased and structured manner, with an emphasis on sustainability and feedback-driven evolution.