DEPARTMENT OF ELECTRICAL ENGINEERING COMPREHENSIVE ALUMNI FEEDBACK ANALYSIS REPORT PROGRAM OUTCOMES (POS), PROGRAM SPECIFIC OUTCOMES (PSOS), AND PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

---

1. Introduction

This report presents a detailed analysis of the alumni feedback gathered for the Department of Electrical Engineering. The evaluation focuses on Program Outcomes (POs), Program Specific Outcomes (PSOs), and Program Educational Objectives (PEOs), offering insights into strengths and weaknesses while suggesting actionable remedial measures and implementation strategies.

---

2. Alumni Feedback Summary

Program Outcomes (POs) Scores:

PO	Description	Score
PO1	Engineering Knowledge	4.27
PO2	Problem Analysis	4.00
PO3	Design/Development of Solutions	4.36
PO4	Conduct Investigations of Complex Problems	3.91
PO5	Modern Tool Usage	4.09
PO6	The Engineer and Society	4.36
PO7	Environment and Sustainability	4.45
PO8	Ethics	4.09
PO9	Individual and Team Work	4.09
PO10	Communication	2.45
PO11	Project Management and Finance	4.36
PO12	Life-long Learning	4.09

Program Specific Outcomes (PSOs):

PSO	Description	Score
PSO1	Practicing Engineer	4.27
PSO2	Collaborative Research	4.00
PSO3	Product Design	3.82

Program Educational Objectives (PEOs):

PEO	Description	Score
PEO1	Excel in Engineering & Technology	4.09
PEO2	Professional Ethics	4.36
PEO3	Innovation	4.09
PEO4	Entrepreneurship	4.09
PEO5	Research Skills	4.18

---

3. Analysis

Strengths:

- **High Ratings (4.0+)** for most POs and PSOs, indicating alumni perceive a strong foundational and professional preparedness.
- **Environment and Sustainability (PO7)** received the highest score (4.45), reflecting strong awareness and education in sustainable engineering practices.
- **Project Management (PO11)** and **Ethics (PO8)** are well-appreciated, indicating value alignment with industry standards.
- **PEO2 (Professional Ethics)** is the top performer among PEOs.

Weaknesses:

- **Communication (PO10)** received the lowest score (2.45), suggesting a gap in students' soft skills or industry-readiness in articulation.
- **Collaborative Research (PSO2)** and **Product Design (PSO3)** received relatively lower scores compared to other outcomes.
- **Conducting Investigations (PO4)** also slightly underperforms.

---

4. Remedial Measures

For Communication (PO10):

- Implement communication skill workshops every semester.
- Encourage participation in inter-college tech fests, paper presentations, and debates.
- Introduce peer-reviewed technical report writing assignments and assessments.

For Product Design (PSO3):

- Integrate more design-centric labs and mini-projects into the curriculum.
- Foster industry-academia design challenges.

For Collaborative Research (PSO2):

- Promote joint research with faculty and industry partners.
- Offer credit-linked research internships.

For PO4 (Investigations of Complex Problems):

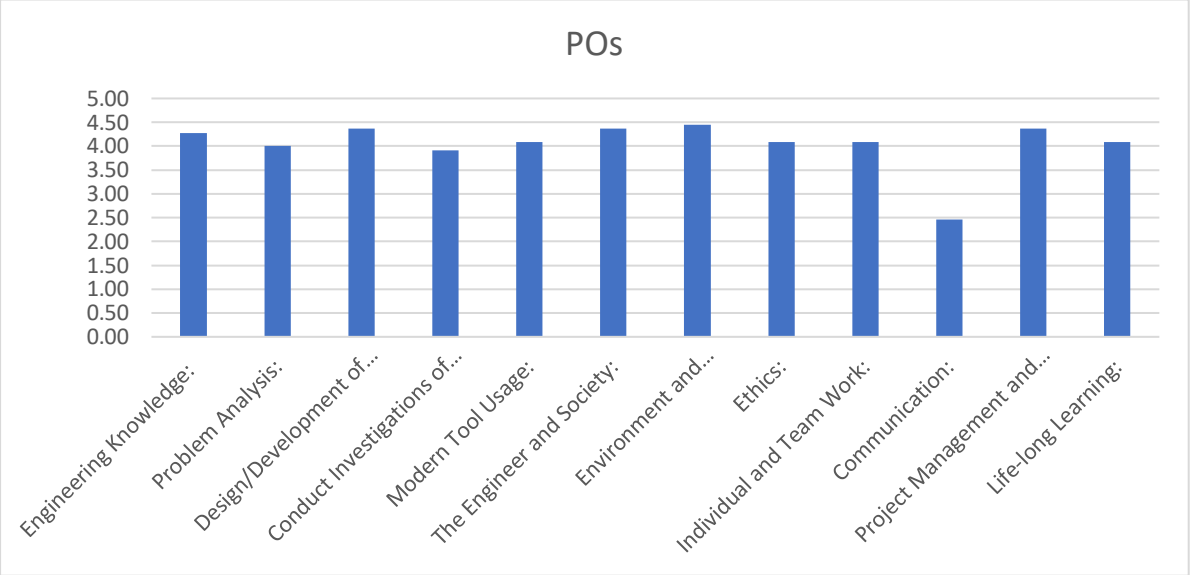
- Revamp final-year project criteria to include problem formulation, analysis, and iterative experimentation.
- Integrate simulation-based experimental modules.

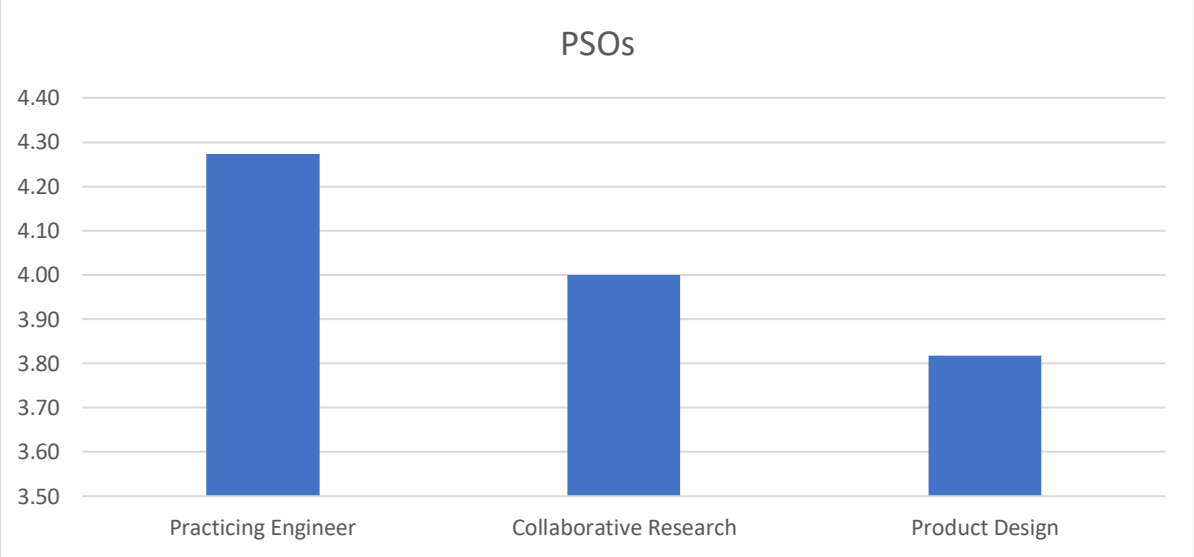
---

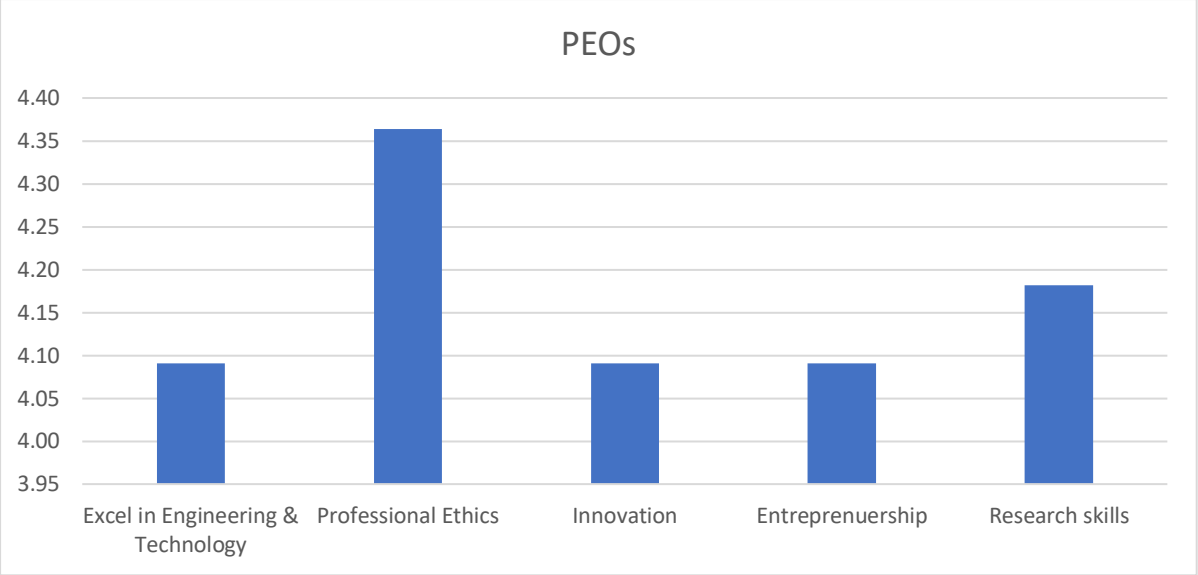
5. Implementation Strategy

Action	Timeline	Responsible	Outcome
Communication Workshop	Every Semester	Soft Skills Cell	Enhanced PO10 score
Product Design Challenges	Biannually	Dept. & Industry Partner	Boost PSO3 rating
Collaborative Research Internships	Summer/Winter	T&P Cell	Raise PSO2 score
Research Mentorship Program	Year-round	Senior Faculty	Improve PO4

6. Graphical Representation







7. Conclusion

The feedback indicates overall alumni satisfaction with the Department of Electrical Engineering's educational objectives and program outcomes. Nevertheless, strategic improvements are necessary in enhancing students' communication skills, design capabilities, and exposure to collaborative research. This report lays out the foundation for data-driven quality enhancement initiatives aligned with NBA accreditation goals.

8. STRATEGIC INITIATIVES ALREADY TAKEN TO STRENGTHEN COMMUNICATION AND EMPLOYMENT SKILLS

To address the gaps identified in communication and employability skills, the institute undertook a series of well-structured and impactful measures:

1. **Incorporation of Employment Skills into the Curriculum:**
   Employment skills were integrated into the academic credit structure, ensuring that students receive formal instruction and evaluation in this critical area. This strategic inclusion makes skill development an essential component of their academic journey.
2. **Creation of a Dedicated Department:**
   A specialized department was established to focus exclusively on communication and employability skills. This initiative ensures that the development of these competencies receives continuous attention and structured guidance.

3. **Appointment of an Experienced Anglo-Indian Professor as Department Head:**
   To lead the newly formed department, an Anglo-Indian professor with extensive expertise in communication and professional skill development was appointed. Their multicultural background and proven experience bring a global outlook and innovative approaches to the department.
4. **Adoption of a Robust Assessment System:**
   A refined assessment system, recommended by subject matter experts, was implemented to evaluate student progress effectively. This system emphasizes continuous improvement by identifying skill gaps and addressing them through targeted interventions.

These initiatives are designed to equip students with the necessary skills to excel in professional environments, ensuring they are well-prepared for the demands of the global workforce.

Prepared by: **Departmental NBA Coordination Committee** Electrical Engineering Department