



UBT
ENERGY ENGINEERING FACULTY

QUALITY IMPROVEMENT PLAN FOR ENERGY ENGINEERING
FACULTY
2024-2025

Quality Improvement Plan for Energy Engineering Faculty based on Student Evaluation

Objective:

- Enhance the quality of teaching and learning experience by addressing identified areas of improvement.

Tasks and Activities:

- Task: Improve Interactivity in Lectures/Exercises
 1. Activity 1.1: Implement technology tools like polls, quizzes, and discussion forums to make lectures more interesting
 2. Activity 1.2: Introduce case studies and role-play sessions relevant to the field of energy studies to motivate students to study harder
- Task: Enhance Clarity in Teaching Methods
 1. Activity 2.3: Encourage the use of visual aids, analogies, and real-life examples to give students the necessary and adequate materials for studies.
 2. Activity 2.4: Establish a mentorship program for professional development of the students

Milestones:

1. Complete implementation of at least two technology tools in lectures by the start of the next academic year.
2. Complete implementation of real case studies and role-play sessions by the next semester.
3. Complete implementation of real-life examples for the necessary and adequate study materials.
4. Establish a mentorship program by the start of the next academic year.

Key Performance Indicators (KPIs):

1. Engagement Metrics: A 20% increase in student participation in lectures and exercises, as measured through polls, quizzes, and discussion contributions.
2. Feedback Metrics: A 15% improvement in student feedback regarding the clarity of teaching methods in the next student evaluation.

Quality Improvement Plan for Energy Engineering Faculty based on Alumni Evaluation

The improvement actions:

The practical part of the curriculum in the Faculty of Energy Engineering is essential to ensure that students are well prepared for their careers in the energy sector. Here are the action steps in this area:

1. Collaboration with public and private Institutions

Internship: Partnership with public companies, other energy-related institutions to provide internships for students. This will provide them with real-world experience and networking opportunities.

Guest Lectures: Invite various energy experts and other professionals to give lectures on current energy issues, the regional energy market and share their practical experiences.

2. Enhance Practical Training Materials:

Case Studies: Incorporate more real-life case studies in the curriculum. Analyzing and discussing actual cases can provide valuable insights into the practical aspects of energy sector.

3. Feedback Mechanism:

Regular Feedback: After each practical session or course, gather feedback from students about their experiences, what they learned, and areas of improvement.

Alumni Feedback: Engage alumni to provide feedback on how the practical training at the faculty helped them in their careers and areas where they felt more training was needed.

4. Continuous Training for Faculty:

Professional Development: Ensure that faculty members are regularly updated with the latest practices from energy sector and are trained to impart practical knowledge effectively.

Faculty Internships: Encourage faculty members to take short internships or sabbaticals in energy companies or institutions to stay updated with current energy practices.

5. Expand Resources:

Modern laboratories: Create laboratories equipped with the latest research tools and databases. This will allow students to conduct research in a consistent real-world environment.

Workshops: Organize workshops that focus on specific practical skills, such as research, drafting, etc.

6. Review and Update Curriculum:

Curriculum Review: Regularly review the curriculum to ensure it aligns with current energy and environment practices and the needs of the industry.

Incorporate Feedback: Use feedback from students, alumni, and industry professionals to make necessary updates to the curriculum.

Qualitative Comments Analysis:

Some alumni emphasized, that the practical part of the curriculum at the Faculty of Energy Engineering has been useful for my career. this is also argued with the average answer of the respondents, which was high.

Areas of Improvement based on Qualitative Comments:

- According to the information from the questionnaire, the need to prepare students for the international market is emphasized.

Quality Improvement Plan of Energy Engineering Faculty based on industry survey

Table 1: Areas of Improvement and Action Plan

Areas of Concern	Mean Score	Action Plan
Overall employ ability of UBT Energy Engineering Faculty graduates after internship	Over 4	<ul style="list-style-type: none"> • Enhance internship programs by partnering with more diverse public and private energy institutions. • Introduce mentorship programs where experienced employers from industry guide students. • Organize career fairs and networking events to connect students with potential employers. • Offer workshops on resume writing, interview skills, and job search strategies.
Contribution of UBT Energy Engineering Faculty to the research valuable for private sector and community	Over 4	<ul style="list-style-type: none"> • Collaborate with private sector entities to identify areas of research interest. • Encourage faculty and students to undertake community-based research projects. • Organize research symposiums where findings can be presented to the community and private sector. • Establish a research fund to support projects that align with community and private sector needs.

Action Plan Details:

Enhance Internship Programs:

- Partner with a broader range of energy institutions, both local and international.
- Ensure internships offer a balance of practical experience and theoretical learning.

Introduce Mentorship Programs:

- Connect students with experienced employers from industry who can guide them through their internship and early career stages.

Organize Career Fairs and Networking Events:

- Facilitate opportunities for students to meet potential employers and learn about various career paths in energy.

Offer Workshops:

- Equip students with the necessary skills to navigate the job market successfully.

Collaborate with Private Sector Entities:

- Understand the research needs of the private sector and align faculty research projects accordingly.
- **Encourage Community-based Research:**
- Promote research projects that address community issues, ensuring the faculty's contribution is valuable and relevant.

Organize Research Symposiums:

- Create new platforms and continue with existing platforms, where lecturers and students can present their research findings, facilitating the exchange and collaboration of knowledge.

Establish a Research Fund:

- Provide financial support for research projects that align with the needs of the community and private sector, promoting impactful and valuable research.

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