كليـــة الهندســـة
Faculty of Engineering

2006
جامعة تبوك
University of Tabuk

Electrical Engineering Department

Bachelor of Science in Electrical Engineering

Quality Assurance Manual

Developed By: Quality Committee

August 2024

Contents

List of Tables

List of figures

Introduction

Purpose of the Manual

The purpose of this Quality Assurance Manual is to outline the comprehensive framework and processes that ensure the continuous improvement and maintenance of high standards within the B.Sc. Program in the Electrical Engineering Department. This manual serves to:

- Define the principles and practices of quality assurance as they apply to the program.
- Establish clear procedures for the development, delivery, assessment, and review of the curriculum.
- Promote a culture of continuous improvement and accountability among faculty, staff, and students.
- Ensure alignment with institutional goals, accreditation standards, and industry expectations.
- Provide a reference document for all stakeholders involved in the program, including faculty, students, administrative staff, and external partners.

By following the guidelines set forth in this manual, the Electrical Engineering Department aims to deliver a high-quality educational experience that equips students with the knowledge, skills, and competencies required for success in their professional careers.

Scope and Applicability

This Quality Assurance Manual applies to all aspects of the B.Sc. Program in Electrical Engineering, including but not limited to:

- Program Governance and Administration: Roles and responsibilities of faculty and administrative staff, decision-making processes, and communication protocols.
- Curriculum Design and Implementation: Development and approval of course content, teaching methodologies, and integration of learning outcomes.
- Student Admission and Support: Admission criteria, academic advising, student services, and support mechanisms.

- Faculty and Staff Development: Recruitment, professional development, performance evaluation, and workload management.
- Facilities and Resources: Availability and maintenance of laboratories, libraries, IT infrastructure, and other learning resources.
- Assessment and Evaluation: Methods for evaluating student performance, program outcomes, and overall effectiveness.
- Quality Assurance and Improvement: Internal and external review processes, feedback mechanisms, and continuous improvement initiatives.
- Compliance and Accreditation: Adherence to institutional policies, national standards, and accreditation requirements.

This manual is intended for use by all members of the Electrical Engineering Department, including faculty, staff, and students, as well as external stakeholders such as industry partners and accrediting bodies.

Abbreviations:

Bachelor of Science (BSc)
Electrical Engineering (EE)
Electrical Engineering Program (EEP)
Bachelor of Science in Electrical Engineering Program (BSc EEP)
University of Tabuk (UT)
Faculty of Engineering (FoE)
Head of the Department (HoD)
National Qualifications Framework (NQF)
Accreditation Board for Engineering & Technology (ABET)
Education & Training Evaluation Commission (ETEC)
National Centre for Academic Accreditation and Evaluation (NCAAA)
Program Goals (PG)
Operational Plan (OP)
Key Performance Indicators (KPIs)
Program Specifications (PS)
Annual Program Report (APR)
Course Specifications (CS)

Program Learning Outcomes (PLOs)

Student Outcomes (SOs)

Self-Study Report (SSR)

Self-Study Report for Program (SSRP)

Action Plan for Improvement (API)

Program Development Plan (PDP)

Quality Assurance (QA)

Not Available / Not Applicable (NA)

Assessment and Evaluation Committees (AEC)

Overview of the BSc program in EE

In this section, we provide a comprehensive introduction about the BSc EE program.

1.1 Visions of the University, Faculty, Department

University of Tabuk Vision

A university that is educationally and academically distinguished which cooperated in community service.

Faculty of Engineering Vision

A distinguished and pioneering college locally and internationally in the field of engineering education, innovative research, and building a knowledge society.

Department of Electrical Engineering (BSc EEP) Vision

To become a leading department that produces ethical and professional leaders who are equipped with the skills and knowledge to drive societal and economic growth through innovative research and development.

Alignment of the Visions

The following table gives the alignment of the visions by mapping the keywords of the University of Tabuk with the Faculty of Engineering and Electrical Engineering Department (BSc EEP).

Table 1 Alignment of the Visions

Keywords	University of Tabuk	Faculty of Engineering	Department of the Electrical Engineering
Institution	A **university** that is **educationally** and academically **distinguished** which cooperated in **community** service	A **distinguished** and pioneering **college** locally and internationally in the field of **engineering education**, innovative **research**, and building a knowledge **society**	To become a **leading department** that produces ethical and professional leaders who are equipped with the **skills** and knowledge to drive **societal** and economic growth through innovative **research** and development.
Distinguished			
Education			
Community			
Research			

1.2 Mission of the University, Faculty, and BSc EEP

University of Tabuk Mission

To offer a distinguished university education that meets the needs of society and the job market through an attractive educational, administrative, and technical environment that supports research and innovation.

Faculty of Engineering Mission

To graduate qualified engineers in accordance with the International Academic Standards and prepare them to meet the changing needs of society. These graduates will be able to compete locally and internationally. The Faculty of Engineering is committed to providing excellent education and pursuing relevant scientific research and partnership with industry and governmental societies.

B.Sc. in Electrical Engineering Program (BSc EEP) Mission

To offer a comprehensive education in Electrical Engineering that equips students with technical and professional skills, instills moral values and ethical behavior, and motivates and prepares them to engage in research and community service.

Alignment of the Missions

The following table gives the alignment of the missions by mapping the keywords of the University of Tabuk with the Faculty of Engineering and BSc EEP.

Table 2 Alignment of the Missions

Keywords	University of Tabuk	Faculty of Engineering	BSc EEP
Needs of society	To offer a distinguished university education that meets the **needs of society** and the job market through an **attractive educational**, administrative, and technical environment that supports **research** and innovation.	To graduate qualified engineers in accordance with the International Academic Standards and prepare them to meet the changing **needs of society**. These graduates will be able to compete locally and internationally. The Faculty of Engineering is committed to providing **excellent education**	To offer a **comprehensive education** in Electrical Engineering that equips students with technical and professional skills, instills moral values and ethical behavior, and motivates and prepares them to engage in
Excellent education			
Research			

		and pursuing relevant scientific **research** and partnership with industry and governmental societies.	**research** and **community service.**

1.3 Goals of the University, College, and Program

University Goals

UG1: To provide a distinguished university education that meets the needs of the labor market.

UG2: To support innovative research to contribute to building a knowledge economy.

UG3: To promote social responsibility and community partnership.

UG4: Sustainability of infrastructure and technology for an attractive educational environment.

UG5: Effective governance and management.

UG6: Diversify innovative financing sources and achieve expenditure efficiency.

Faculty of Engineering Goals

CG1: To deliver distinguished academic education that meets the needs of the labor market.

CG2: Providing creative research to contribute to building the knowledge economy of society.

CG3: Effective contribution to sustainable development and community service.

CG4: Offer a stimulating and attractive learning environment.

CG5: Develop an effective administrative and organizational environment in the college.

CG6: Providing innovative financing sources.

BSc EE Program Goals

- PG1: Produce Competent Electrical Engineers:

  This goal focuses on the primary educational mission of your EE program, which is to provide students with the knowledge, skills, and expertise required to become competent electrical engineers. It emphasizes that graduates should have a strong foundation in electrical engineering principles, problem-solving abilities, and technical proficiency.

- PG2: Inculcate Moral Values and Professionalism Among Students:

  This goal extends beyond technical competence and emphasizes the importance of ethics and professionalism in the education of future electrical engineers. It underscores the need

to instill ethical values, integrity, and a sense of responsibility among students, preparing them not only as skilled engineers but also as individuals who prioritize ethical conduct in their professional lives.

- PG3: Engage Students in Community Services:

  This goal highlights the program's commitment to social responsibility and community engagement. It seeks to encourage students to apply their engineering knowledge and skills to benefit their communities through service projects and initiatives. Engaging in community services helps students develop a broader perspective and a sense of civic duty.

- PG4: Empower Graduates to Contribute Towards Economic Prosperity of the Country

  This goal emphasizes the broader societal impact of the EE program. It aims to empower graduates with the capabilities, innovation, and entrepreneurial mindset needed to make meaningful contributions to their country's economic development. Graduates are expected to use their engineering expertise to drive technological advancements, create job opportunities, and stimulate economic growth.

- PG5: Enhance students' ability to engage in research.

  This goal focuses on developing students' research skills and methodologies. It aims to foster critical thinking, innovation, and problem-solving abilities, enabling students to contribute to advancements in electrical engineering and pursue further academic endeavors in electrical engineering or related fields.

Mapping the goals and the mission of BSc EEP

The goals of the BSc EEP are formulated based on its mission, and the alignment between the program objectives and the mission is outlined in the table below.

Program Goals	Alignment with Program Mission
PG1: Produce competent Electrical Engineers	Aligns with the mission's emphasis on comprehensive education and technical skills development.
PG2: Inculcate moral values and professionalism among students	Directly aligns with the mission's focus on instilling moral values and ethical behavior.
PG3: Engage students in community services	Corresponds with the mission's objective of motivating students to engage in community service.
PG4: Empower graduates to contribute towards economic prosperity	Indirectly aligns with the mission through comprehensive education and preparation for research and innovation.
PG5: Enhance students' ability to engage in research.	Corresponds with the mission's objective of motivating students to engage in research.

Alignment of Goals

The following table gives the alignment of the goals of the University of Tabuk with the Faculty of Engineering and BSc EEP.

BSc EEP Goals	Faculty of Engineering Goals						University of Tabuk Goals					
	CG1	CG2	CG3	CG4	CG5	CG6	UG1	UG2	UG3	UG4	UG5	UG6
PG1	✓						✓				✓	
PG2				✓	✓					✓	✓	
PG3			✓						✓			
PG4		✓				✓		✓				✓

PG5		✓						✓				

1.4 Program Learning Outcomes of the BSc EEP.

The Program Learning Outcomes of the BSc EEP are clearly presented in the latest form required by the NCAAA, titled "Consistency with Specialized Academic Standards." as well as in the program specifications.

Table 3 Program Learning Outcomes

Code	Program Learning Outcomes (PLOs)
K	Knowledge and understanding
K1	Demonstrate knowledge and comprehension with both breadth and depth in the underlying theories, principles, and concepts of Fundamentals of Electrical Engineering and basic Science.
K2	Demonstrate knowledge and comprehension with both breadth and depth in the underlying theories, principles, and concepts of Communication Systems, Electronics, and Digital Systems.
K3	Demonstrate knowledge and comprehension with both breadth and depth in the underlying theories, principles, and concepts of Energy Engineering, Machines, and Control Systems
S	Skills
S1	Identify, formulate, and solve complex engineering problems by applying principles of electrical engineering, science, and mathematics.
S2	Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
S3	Develop and conduct appropriate experimentation relevant to electrical engineering, analyze and interpret data, and use engineering judgement to draw conclusions.
S4	Communicate effectively with a range of audiences.
S5	Create, select, adapt and apply appropriate techniques, resources and modern engineering and IT tools to solve complex engineering problems with understanding of the limitations

S6	Identify and evaluate the issues and constraints of sustainability, economy, environment, politics, health and safety, and society that are relevant to professional solving of complex engineering problems
V	Values, Autonomy, and Responsibility
V1	Recognize ethical and professional responsibilities in engineering situations and make informed judgements, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
V2	Function effectively on a team, whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
V3	Acquire and apply new knowledge as needed, using appropriate learning strategies.

Governance and Administration

Effective governance and administration are crucial for ensuring the quality and coherence of the Electrical Engineering Department at the University of Tabuk. This section outlines the organizational structure, roles and responsibilities, committees, boards, and communication and reporting mechanisms that support the program's mission and objectives.

1.5 Organizational Structure

The organizational structure of the Electrical Engineering Department is designed to facilitate

effective management, decision-making, and communication within the program. It encompasses hierarchical relationships, reporting lines, and the distribution of responsibilities among faculty, administrative staff, and support personnel. Figure 1 shows the EE Department organizational structure. The organizational structure aligns with the overall mission, vision, and strategic goals of the University of Tabuk, and supports and contributes to accomplish its

objectives. The considerations followed by the EE Department in building its organizational structure are:

- Alignment with UT Mission and Strategic Goals.
- Adherence to institutional policies.
- Alignment with Accreditation standards and Quality Assurance.
- Support the EE Department mission,
- Enhance the intended outcomes.
- Responsive to the stakeholders' needs.
- Clarity of Roles, Responsibilities and Accountabilities.
- Flexibility and Adaptability to the changing needs.

The establishment of the organizational structure for the EE Department involved a methodical process that began with identifying department components and defining outcomes aligned with institutional and industry standards. Faculty numbers and qualifications were assessed to ensure a balanced expertise mix. Consultations with internal and external stakeholders, including faculty, industry partners, and students, provided diverse perspectives crucial for program alignment. Essential support services such as academic advising, career services, and research support were identified to enhance student success. Committees and councils were established with defined purposes and responsibilities to govern decision-making effectively. Clear reporting relationships were defined, establishing hierarchical structures and lines of authority to facilitate efficient communication and accountability across the department.

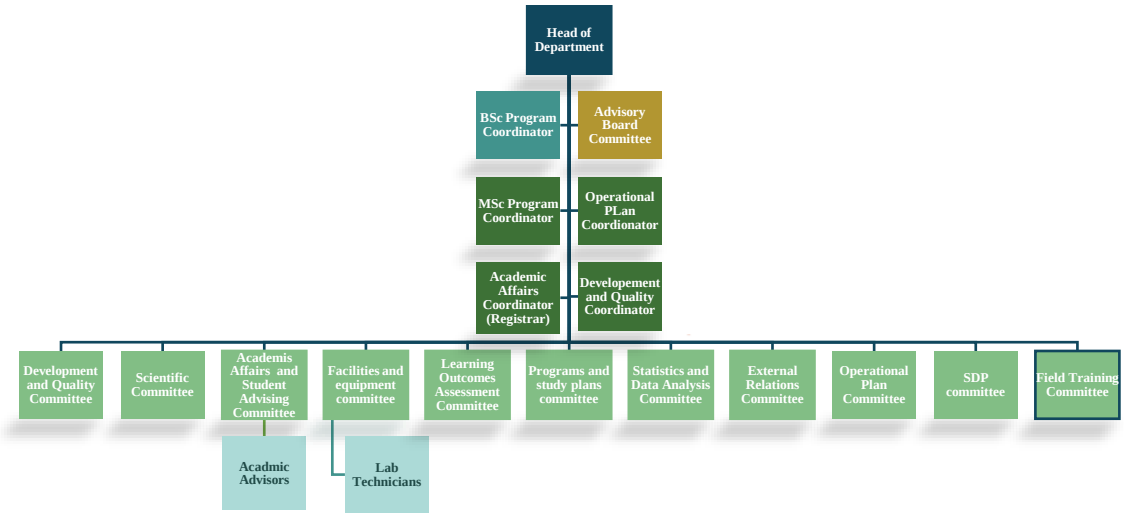

Figure 1 Organizational Structure of the EE Department

1.6 Roles and Responsibilities of the Programs Department Personnel

Head of the Department (HOD)

The HOD is among the faculty members distinguished by scientific and administrative competencies. Appointed by a decision of the University President based on the nomination of the Dean. His responsibilities include:

- Distribution of the academic load among faculty members.
- Assign a course coordinator for each course taught in the academic program if there are multiple sections taught by different faculty members.
- Approval of grades.
- Assign cross-checker to verify the accuracy and consistency of the primary grader's assessments of the final exam.
- Prepare faculty members' performance reports.
- Promote the department employees to attend training programs inside and outside the university.
- Supervise the progress of the educational process within the department, implementing study plans, and support the effort to develop them.
- Foster the academic and research development within the program.
- Supervise the achievement of quality and academic accreditation requirements.
- Representing the department in activities and meetings related to the department's work inside and outside the university in accordance with the granted authorities.
- Coordinate the department's partnership relations with relevant authorities inside and outside the university in accordance with the granted authorities.
- Submit reports to the dean regarding the department's progress, as well as any scientific or behavioral violations, or breaches of professional duties by any member of the department. Also, monitoring the implementation of directives issued by the dean regarding these matters.
- Prepare a comprehensive annual report on the study academic progress, research and administrative performance in the department and submit it to the Dean.
- Carry out any additional tasks within the authority of the HOD as assigned by the Dean.

Faculty Members

Faculty members in the Electrical Engineering Department play a crucial role in the educational, research, and service missions of the department. Their responsibilities include:

- Develop and deliver course materials, including lectures, labs, assignments, and exams following the program's policies and regulations.
- Supervise student projects, theses, and dissertations, providing guidance and mentorship.
- Prepare required course documentation such as Course Specifications and Course Reports following the program's policies and regulations.
- Participate in the assessment of student learning outcomes and program effectiveness.
- Implement feedback from assessments to improve teaching practices and course content.
-
- Help the program in providing an organizational climate and a supportive academic environment.
- Serve on departmental, college, and university committees, contributing to governance and decision-making processes.
- Participate in departmental meetings and activities, promoting a collaborative environment.
- Conduct original research and publish findings in peer-reviewed journals and conferences.
- Seek funding through grant proposals and collaborative projects.
- Engage in continuous professional development to stay current with advancements in the field.
- Participate in outreach activities to promote the program and inspire future engineers.
- Provide academic advising to students, helping them navigate their educational and career paths.
- Support students' professional development through mentorship and guidance.

Academic Affairs Coordinator (Registrar)

The Academic Affairs Coordinator is a faculty member selected by the Head of the Department (HoD) to oversee and manage the preparation, implementation, and monitoring of academic schedules and related activities for the department. After consultation with the head of the department, his responsibilities include:

- Prepare and manage comprehensive schedules for the program, ensuring the availability of professors and classrooms aligns with course requirements and departmental needs.
- Oversee the creation and dissemination of detailed course schedules, including timings, room numbers, and professor assignments, for all program courses.
- Continuously monitor and update schedules during the registration process to promptly address and resolve any registration-related issues or conflicts.
- Design and coordinate exam schedules, ensuring there are no conflicts and that all students have clear, conflict-free timetables for their exams.
- Assists students with course registration and resolves any issues they may encounter during the registration process.

Operational Plan Coordinator

The Operational Plan Coordinator is a faculty member selected by the Head of the Department (HoD) to oversee and manage the implementation of the department's strategic initiatives. His responsibilities include coordinating efforts, facilitating communication, and ensuring alignment with departmental goals and accreditation standards. His responsibilities include:

- Serve as the central point of contact for all activities related to the operational plan.
- Lead the development and continuous refinement of the B.Sc. EEP operational plan, ensuring alignment with program goals.
- Collaborate with the operational plan committee to identify initiatives and develop KPIs to track their progress.
- Facilitate regular meetings with the operational plan committee to discuss progress and address challenges.
- Ensure effective communication and collaboration between the operational plan committee and other stakeholders.

- Oversee the implementation of initiatives and monitor their progress against KPIs and milestones.
- Identify and address any issues that may impede the successful implementation of initiatives.
- Prepare and present regular reports on the status of the operational plan to leadership and stakeholders.
- Maintain comprehensive documentation of all initiatives, including objectives, KPIs, timelines, and outcomes.
- Conduct periodic evaluations of the operational plan to assess effectiveness and make data-driven recommendations for improvements.

Development and Quality Coordinator

The Development and Quality Coordinator in the BScEE program leads the Development and Quality Committee, providing guidance and oversight to ensure effective program development and quality assurance. He facilitates the committee's efforts in curriculum review, accreditation compliance, and assessment of student learning outcomes, ensuring that improvements are systematically implemented. By coordinating with faculty, students, and external stakeholders, he helps the committee gather feedback, monitor key performance indicators, and align the program with accreditation standards. Additionally, he supports faculty in adopting best practices in teaching and assessment, ensuring that quality initiatives are effectively managed and continuously improved.

Course Coordinator

The Course Coordinator is a faculty member selected by the Head of the Department (HoD) to oversee courses with multiple sections taught by different instructors. While this scenario is uncommon in the B.Sc. in Electrical Engineering Program (EEP), most responsibilities of the Course Coordinator align with those of a course instructor. His responsibilities include:

- Prepare the course specifications.
- Support new faculty members in preparing the course binder.
- Follow up the progress of the educational process and the faculty members' commitment to teaching strategies and course evaluation.
- Prepare the combined report for all sections.

- Organize and lead meetings with instructors to discuss issues related to the course, particularly regarding quality assurance management.

Academic Advisor

Almost all faculty members are appointed to advise students on academic matters. In addition to assisting the Academic Affairs and Student Advising Committee, the responsibilities of an academic advisor include:

- Providing guidance on course selection.
- Assisting with academic planning.
- Monitoring academic progress.
- Offering resources and support.
- Addressing academic concerns.
- Giving career guidance.
- Encouraging personal development.
- Handling documentation and reporting.
- Providing mentorship.

1.7 Department Committees and their responsibilities

In this section, we present all department committees, their roles and responsibilities, and their alignment with NCAAA standards and criteria.

Committees Alignment with Program Goals and NCAAA Standards

Table 4 provides a comprehensive overview of the various committees within the Electrical Engineering department, detailing their meeting schedules. It aligns each committee's activities with the relevant program goals and the National Commission for Academic Accreditation and Assessment (NCAAA) standards and criteria.

Table 4 Committees Scheduling and Alignment with Program Goals and NCAAA Standards

SN	Committee	Related Program Goal	Related NCAAA standard and criteria	Meeting Timeline	Expected Outcomes/ Documents	Notes
1.	Department Council	Supervise all Program Goals	Supervise All standards	Once a month Week 1, 3, 7, 11,	MoM	Meets in the first week to announce and communicate important information, and also convenes after committee meetings to discuss their

SN	Committee	Related Program Goal	Related NCAAA standard and criteria	Meeting Timeline	Expected Outcomes/ Documents	Notes
				15		reports.
2.	Program Context Committee	Supervise all Program Goals	1-1-1, 1-1-2, 1-1-3 1-1-8 Administrative & Service 1-1-9, 1-2-1, 1-2-3 2-3-1, 2-3-5, 4-0-6	Once a month Week 2, 6, 10, 14	MoM, Plan, Summary of activities report	Members are chosen in their official capacity, not their personal capacity as follows: Head of the Department Q&D Coordinator Operational Plan Coordinator Program coordinator
3.	Advisory Board committee	Supervise all Program Goals	1-1-6	Once a year Week 4	MoM	
4.	Development and quality committee	Supervise all Program Goals	Supervise All standards	Once a month Week 3,7,11, 15	MoM, Action or Improvement Plan	Members are chosen in their official capacity, not their personal capacity as follows: Q&D Coordinator Operational Plan Coordinator Head of the following committees Assessment Statistics
5.	Scientific committee	PG5	1-1-8 Research 2-3-2, 2-3-4, 4-0-1 4-0-2, 4-0-3, 4-0-5	Once a month or upon request by the chairman	MoM, Plan, Summary of activities report	
6.	Academic Affairs and Students	PG2	1-1-5	Once a month	MoM,	The committee can seek information from

SN	Committee	Related Program Goal	Related NCAAA standard and criteria	Meeting Timeline	Expected Outcomes/ Documents	Notes
	Advising Committee	PG4	1-1-8 Academic 2-3-3, 2-3-6 3-0-1, 3-0-2, 3-0-3 3-0-4, 3-0-5 Cooperate with statistics committee in 3-0-7	Week 3,7,11, 15 Use other time slots for meeting with students	Plan, Summary of activities report	academic advisors. The Statistics Committee conducts the necessary surveys, analyzes the data, and cooperates with the Academic Affairs Committee in preparing necessary actions. The Academic Affairs Committee follows up on the actions, their implementation, and their impact.
7.	Facilities and equipment committee		Standard 5 Cooperate with statistics committee in 5-0-1 and 5-0-5	Once a month Week 3,7,11, 15	MoM, Plan, Summary of activities report	The Statistics Committee conducts the necessary surveys, analyzes the data, and cooperates with the Facilities Committee in preparing necessary actions. The Facilities Committee follows up on the actions, their implementation, and their impact.
8.	Learning Outcomes Assessment Committee		2-1-1, 2-1-3, 2-1-4 Cooperates with study plan committee in 2-1-2, 2-1-5, and 2-2-4	Once a month Week 3,7,11, 15	PLO assessment plan PLO assessment report Summary of recommendations in the CR Modification report about recommendations	Suggest having the same members as the Program and Study Plan Committee.
9.	Program and study plan committee.	PG1 PG2	2-2-1, 2-2-2. 2-2-3 2-2-5, 2-2-7	Once a month Week 3,7,11, 15	MoM, Plan, Summary of	Suggest having the same members as the Learning Outcomes Assessment Committee.

SN	Committee	Related Program Goal	Related NCAAA standard and criteria	Meeting Timeline	Expected Outcomes/ Documents	Notes
			Cooperates with LO Assessment committee in 2-1-2, 2-1-5, and 2-2-4		activities report Forms related to curriculum update	
10.	Statistics and Data Analysis Committee		1-2-2 Cooperate with Academic Affairs committee in 3-0-7 Cooperate with Facilities committee in 5-0-1, 5-0-5	Once a month Week 3,7,11, 15	MoM Surveys analysis report KPIs analysis report	
11.	External Relations Committee	PG3	1-1-6 1-1-7 3-0-6 4-0-4	Once a month Week 3,7,11, 15	MoM especially plan report and summary of activities report	Alumni Community Guest Speaker Advisory Board Website
12.	Operational Plan Committee	Supervise all Program Goals	1-1-4	Once a month Week 3,7,11, 15	Annual operation Plan (At the beginning of the year) Report on the execution of the operational plan ()At the end of the year or beginning of the following year MoM about progress	Members are chosen in their official capacity, not their personal capacity as follows: Chairman Q&D Coordinator Operational Plan Coordinator Head of the following committees: Study Plan External Relations Scientific Academic Affairs
13.	APR			Whenever the APR	APR	Members are chosen in their official capacity, not

SN	Committee	Related Program Goal	Related NCAAA standard and criteria	Meeting Timeline	Expected Outcomes/ Documents	Notes
	Committee			need to be prepared or reviewed Meeting are called by the chairman		their personal capacity as follows: Chairman Q&D Coordinator Head of the following committees Assessment Statistics Scientific External Relations
14.	SDP committee	Upon request	Contribute in 2-1-4	Whenever necessary	Assessment Results of Professional Outcomes Report on workshops delivered SDP CR	Implementation of series of seminars and workshops especially for operational plan initiatives
15.	Field Training Committee	Upon request	2-2-6	Whenever necessary	Annual report about verifies the effectiveness of field training And action plan for improvement of Field Training	

In what follows, we present the detailed responsibilities and roles of each committee. These responsibilities are derived from alignment with NCAAA standards, departmental requirements, and informed by previous experience. This approach ensures that each

committee's activities make a meaningful contribution to departmental objectives and align with accreditation criteria effectively.

Advisory Board Committee

Goal	To provide strategic guidance and ensure the BSc EEP's alignment with industry standards. The committee advises on curriculum development, fosters industry relationships, and enhances educational and research opportunities.
Responsibilities	1. Provide developmental suggestions for the operational plan, focusing on education, scientific research, and community service to achieve the 2030 national vision. 2. Offer proposals for program and curriculum enhancement in line with professional standards, market demands, and outcome evaluations. 3. Review the annual program report, including beneficiary feedback, learning outcome measurements, training strategies, assessment methods, KPIs, improvement opportunities, recommendations, and implementation plans. 4. Discuss the alignment of graduates' skills with employment sector needs, considering the latest advancements in mathematics, applications, and societal requirements. 5. Help establish relationships with employers and businesses to offer students opportunities for volunteer work programs, enhancing their work experience and future employment prospects. 6. Promote the program's capabilities in education, scientific research, and community service to various employers.
Outcomes	Meetings minutes are submitted to the department council.

Scientific Committee

Goal	To ensures scientific integrity and excellence by promoting ethical standards, fostering innovative teaching practices, and supporting faculty research. Also, to facilitate professional development, integrate modern technologies, and oversee promotion processes to enhance educational quality and faculty advancement.
Related Program Goal	PG5: Enhance students' ability to engage in research.
Responsibilities	1. Participate in the preparation, implementation, tracking, and monitoring of operational plan initiatives for the program, focusing specifically on scientific research (PG5). 2. Promotes scientific integrity by ensuring adherence to values such as intellectual property rights, ethical practices, and proper conduct in research activities. 3. Organizes and facilitates necessary training for teaching staff on learning and teaching strategies, assessment methods, and the effective use of modern technology. 4. Develops mechanisms to support excellence in teaching, encouraging creativity and innovation among teaching staff. 5. Encourages teaching staff to participate efficiently in academic, research, and scientific production activities. 6. Oversees teaching staff participation in professional and academic development programs, aligning these with staff needs and performance development. 7. Ensures compliance with regulations and guidelines related to research activities within the department. 8. Assesses faculty research output and provides feedback to enhance the quality and impact of their work. 9. Promotes collaboration between faculty members, external research institutions, and industry partners. 10. Reviews promotion requests from faculty members according to university scientific Council rules.

	11. Evaluates faculty requests to attend scientific seminars and conferences based on scientific Council rules. 12. Identifies needs for faculty and similar positions, considering applicants for departmental roles in collaboration with relevant committees, using performance indicators. 13. Establishes and maintains a scientific research database, updating it regularly. 14. Creates and updates a database of research groups, published research, projects, and scientific supervision by faculty members. 15. Organizes and coordinates conferences, workshops, seminars, scientific and cultural events, and scientific competitions within the department, overseeing their execution.
Outcomes	1. An annual plan, designed based on the outlined responsibilities, must be submitted at the beginning of the year to effectively guide and coordinate the Committee's efforts. 2. A comprehensive plan for training teaching staff on learning and teaching strategies, assessment methods, and professional development. 3. Monthly Meeting Minutes: Documenting discussions, decisions, action items, and responsibilities assigned during committee meetings. 4. End of Semester Reports: Summarizing the committee's activities, achievements, challenges, and future plans on an annual basis. 5. Event Management Records: Keeping records of organized conferences, workshops, seminars, and scientific competitions within the department. 6. Complete the related section in the Annual Program Report

Academic Affairs and Students Advising Committee

Goal	To provide Academic support for students.
Related Program Goal	PG2: Inculcate Moral Values and Professionalism Among Students

	PG4: Empower Graduates to Contribute Towards Economic Prosperity of the Country
Responsibilities	**Academic Affairs:** 1. Participate in the preparation, implementation, tracking, and monitoring of operational plan initiatives for the program, focusing particularly on introducing necessary workshops for students (PG4). 2. Promote and uphold the values of scientific integrity, intellectual property rights, ethical practices, and proper conduct across all **academic activities related to students**. 3. Implement effective procedures to ensure academic integrity at the program level, verifying the authenticity of students' work and assignments. 4. Supervise the process of providing comprehensive information to students at the beginning of each course, including learning outcomes, teaching and learning strategies, assessment methods and dates, and expectations for student performance, with continuous feedback throughout the course. 5. Communicate essential information to students regarding study requirements and available support services. Provide detailed information about the academic integrity policy, including clear definitions of academic misconduct (such as plagiarism, cheating, and fabrication), the honor code, consequences of violations, and accessible tools for plagiarism detection, ensuring dissemination through accessible communication channels. 6. Offer extracurricular activities across various fields to enhance students' abilities, skills, and encourage their active participation and development. 7. Cooperate with the statistics committee to evaluate the adequacy and quality of services provided to students, measure their satisfaction, and utilize feedback for continuous improvement of student support services.

	8. Provide students with regular education and training on academic integrity, including workshops, seminars, and resources on how to avoid plagiarism and uphold ethical standards (PG2). 9. Supervise the process of preparing and reviewing academic schedules, identifying course and section needs, managing student registration and add-drop procedures, and overseeing the examination process, including handling excuses and developing invigilation schedules. 10. Provide relevant statistics for the preparation of the department's annual report. 11. Improve communication between program administration and students to enhance the educational process's success. **Student Advising:** 12. Supervise the process of providing comprehensive academic, professional, psychological, and social guidance and counseling services to students through qualified and adequate staff. 13. Supervise and monitor the performance of academic advisors, develop an annual academic guidance plan, and address academic issues raised by advisors in coordination with department administration. 14. Implement mechanisms to identify and support gifted, creative, talented, and underachieving students within the program, offering tailored programs to nurture each group. 15. Build a database of talented and struggling students in the department and develop specialized programs for them. 16. Monitor student absences in the department and identify students with high absenteeism in coordination with academic advisors. 17. Integrate students with special needs into activities and provide appropriate support in coordination with specialized faculty units.
Outcomes	1. An annual plan, designed based on the outlined responsibilities, must be submitted at the beginning of the year to effectively guide and coordinate the Committee's efforts. 2. A plan for Extracurricular activities.

	3. Monthly Meeting Minutes: Documenting discussions, decisions, action items, and responsibilities assigned during committee meetings. 4. End of Semester Reports: Summarizing the committee's activities, achievements, challenges, and future plans on an annual basis. 5. Event Management Records: Keeping records of organized workshops, seminars, and scientific competitions within the department.

Facilities and equipment committee

Goal	To oversee the adequacy, maintenance, and improvement of learning resources, facilities, and laboratory equipment supporting academic and research activities.
Responsibilities	**Learning Resources:** 1. Assess and ensure the adequacy and appropriateness of learning resources and services according to the program's needs and student numbers. 2. Periodically submit proposals to the department council for updating learning resources and services to meet current academic standards and requirements. 3. Organize and provide appropriate orientation sessions for teaching staff, students, and employees on the effective use of resources and learning tools, offering technical training and support as needed. 4. Ensure the program has the appropriate technologies, services, and environment for courses offered through distance or e-learning, adhering to specific standards to maintain quality and effectiveness. 5. Regularly evaluate the effectiveness and efficiency of all types of learning resources and facilities. 6. Use the evaluation results to make continuous improvements in learning resources and facilities. 7. Monitor the accessibility of learning resources and facilities for all students, including those with disabilities.

	Laboratory Equipment: 8. Implement safety, environmental conservation, and hazardous waste disposal standards efficiently and effectively. 9. Ensure that all educational and research equipment and facilities are up-to-date and functioning properly. 10. Develop comprehensive plans for the acquisition, maintenance, and upgrading of laboratory devices, technical equipment, and facilities to support the program's academic and research activities effectively. 11. Inspect incoming devices and ensure they meet the specifications before accepting them. 12. Prepare the department's annual requests for devices and evaluate offers for laboratory equipment.
Outcomes	1. An annual plan, designed based on the outlined responsibilities, must be submitted at the beginning of the year to effectively guide and coordinate the Committee's efforts. 2. A comprehensive plan for the acquisition, maintenance, and upgrading of laboratory devices, technical equipment, and facilities to support the program's academic and research activities effectively. 3. Monthly Meeting Minutes: Documenting discussions, decisions, action items, and responsibilities assigned during committee meetings. 4. End of Semester Reports: Summarizing the committee's activities, achievements, challenges, and future plans on an annual basis.

Learning Outcomes Assessment Committee

Goal	To ensure the continuous improvement and alignment of program learning outcomes with academic standards, stakeholder feedback, and labor market needs through effective assessment and implementation strategies.
Responsibilities	

	1. Identify and define the program's intended learning outcomes that are consistent with its mission, aligned with institutional academic standards, and publicly disclosed. 2. Regularly review and modify the program's intended learning outcomes based on feedback from stakeholders, changes in accreditation requirements, or other relevant factors. 3. Ensure that learning outcomes align with the National Qualifications Framework, academic standards, and labor market needs. 4. In cooperation with the Study Plan Committee, implement and maintain a clear and approved teaching, learning, and evaluation strategy that reflects the program's educational philosophy and ensures the achievement of intended learning outcomes. 5. Ensure alignment of learning outcomes in courses with program learning outcomes through strategies like alignment matrices. 6. Develop and implement mechanisms and tools for assessing learning outcomes and verifying achievement against specific performance levels and assessment plans. 7. Conduct and analyze Exit Surveys to indirectly assess Program Learning Outcomes (PLOs) for graduating students. 8. Coordinate with the Statistics Committee to obtain the results of the indirect assessment of Program Learning Outcomes (PLOs) from alumni and employers, and integrate these findings into the comprehensive assessment report. 9. Identify areas for improvement based on assessment results and feedback from stakeholders. 10. Develop and implement action plans to address identified areas of improvement. 11. Monitor and follow up on the implementation of action plans to ensure continuous improvement. 12. Document and report on continuous improvement efforts and their impact on achieving learning outcomes. 13. Collect and refine improvement actions from all course reports, which are based on assessments of course learning outcomes,

	course-level PLOs, and student grades, and present these actions to the department council for discussion. 14. Prepare a final list of improvement actions for all courses after discussion and approval by the department council and communicate these actions to faculty members for implementation the next time the courses are offered.
Outcomes	1. An annual plan, designed based on the outlined responsibilities, must be submitted at the beginning of the year to effectively guide and coordinate the Committee's efforts. 2. Monthly Meeting Minutes: Documenting discussions, decisions, action items, and responsibilities assigned during committee meetings. 3. End of Semester Reports: Summarizing the committee's activities, achievements, challenges, and future plans on an annual basis. 4. Comprehensive PLO assessment report with clear improvement plan. 5. Comprehensive Report on the Improvement Plan for Program Courses' CLOs. A comprehensive report listing all the collected and refined improvement actions from the course reports. 6. Comprehensive Follow-up reports tracking the implementation and impact of improvement plans. 7. Any forms related to PLOs and required for accreditation.

Program and study plan committee

Goal	Develop, review and update the curriculum.
Related Program Goal	PG1: Produce Competent Electrical Engineers: PG2: Inculcate Moral Values and Professionalism Among Students:
Responsibilities	1. Participate in the preparation, implementation, tracking, and monitoring of operational plan initiatives for the program, with a specific focus on curriculum development aimed at producing

	competent Electrical Engineers and emphasizing the integration of moral values and professionalism (PG1 and PG2). 2. Develop the curriculum for programs in the department in accordance with the standards set by both the University and the Faculty of Engineering. 3. Conduct periodic evaluations of study plans, gathering comprehensive feedback and recommendations from stakeholders and reviewers. Implement appropriate suggestions and actions to ensure alignment with program goals, learning outcomes, and advancements in the field of specialization, encompassing educational, scientific, technical, and professional developments. 4. Review and update program and course specifications when necessary. 5. Review and update the course learning outcomes when necessary. 6. Ensure Program learning outcomes align with the requirements of the National Qualifications Framework, academic standards, and labor market needs. 7. Develop and implement a clear and approved teaching, learning, and evaluation strategy that reflects the program's educational philosophy and ensures achievement of intended learning outcomes. 8. Establish and maintain a matrix for aligning learning outcomes of courses with program learning outcomes to ensure consistency and coherence across the curriculum. 9. Adapt teaching and learning strategies, as well as assessment methods, to the nature and level of the program, ensuring alignment with program learning outcomes and fostering effective learning experiences.
Outcomes	1. An annual plan, designed based on the outlined responsibilities, must be submitted at the beginning of the year to effectively guide and coordinate the Committee's efforts. 2. Policies for teaching strategies and students learning assessment methods(Grading Policy)

	3. Monthly Meeting Minutes: Documenting discussions, decisions, action items, and responsibilities assigned during committee meetings. 4. End of Semester Reports: Summarizing the committee's activities, achievements, challenges, and future plans on an annual basis. 5. Any forms related to curriculum change or curriculum-related accreditation forms.

Statistics and Data Analysis Committee

Goal	The Statistics and Data Analysis Committee ensures data-driven decision-making by collecting, analyzing, and utilizing survey data and key performance indicators. It collaborates with other committees to develop action plans, monitor improvements, and enhance program quality and student services.
Responsibilities	1. Design and manage surveys to collect data from students, faculty, and other stakeholders. 2. Collaborate with other committees to identify key areas for data collection and analysis. 3. Analyze survey data to identify trends, areas for improvement, and stakeholder needs. 4. Collaborate with other committees to create an action plan for improvement. 5. Prepare and present comprehensive reports on survey findings to the department council and relevant stakeholders. 6. Develop and implement strategies for the continuous improvement of data collection and analysis processes. 7. Monitor the effectiveness of implemented actions based on survey feedback and recommend adjustments as needed. 8. Maintain a database of survey results and ensure data integrity and confidentiality.

	9. Analyze key performance indicators (KPIs) and evaluation data annually, using the results in planning, development, and decision-making processes. 10. Implement effective mechanisms to evaluate the adequacy and quality of services provided to students and measure their satisfaction, using the results for continuous improvement. 11. Ensure the adequacy and appropriateness of learning resources and services provided according to the program's needs and student numbers, and update them periodically based on data analysis. 12. Evaluate the effectiveness and efficiency of learning resources, facilities, and equipment, and use the results for ongoing improvement. 13. Prepare follow-up reports on the implementation of actions derived from survey findings and other data analyses, ensuring accountability and effectiveness in addressing identified areas for improvement.
Outcomes	1. Annual Survey Plan: A detailed annual plan outlining the surveys to be conducted, key areas for data collection, and strategies for data analysis, to be submitted at the beginning of the year. 2. Surveys Analysis Report: A comprehensive report analyzing the results of all surveys conducted throughout the year, identifying trends, areas for improvement, and stakeholder needs. This report should provide actionable insights and be presented to the department council and relevant stakeholders. 3. KPIs Analysis Report: A focused report analyzing key performance indicators (KPIs) and their implications for program development and quality assurance. This report should provide actionable insights and be presented to the department council and relevant stakeholders.

	4. Follow-up Action Reports: Reports detailing the actions taken based on survey results and data analyses, including their implementation, effectiveness, and any adjustments needed. 5. Contribution to the Annual Program Report (APR): Completion of the relevant sections in the Annual Program Report, incorporating survey results, data analysis, and evaluation outcomes.

External Relations Committee

Goal	To foster effective engagement with stakeholders, including alumni, community members, guest speakers, advisory boards, and through the department's website, ensuring alignment with industry needs and enhancing the program's visibility and reputation.
Related Program Goal	PG3: Engage Students in Community Services
Responsibilities	1. Participate in the preparation, implementation, tracking, and monitoring of operational plan initiatives for the program, focusing particularly on engaging Students in Community Services (PG3). 2. Manage the department's website, ensuring it accurately represents the program's activities, achievements, and relevant information for stakeholders. 3. Provide reliable and publicly disclosed information to the community about the program description, performance, and achievements that meet stakeholder needs, through various communication channels including printed materials, newsletters, official reports, and other forms of communication beyond just the website. 4. Establish and maintain effective communication channels with alumni, involving them in program events and activities, seeking their feedback, and leveraging their expertise and support. Maintain updated and comprehensive databases about alumni. In other words (Actively engage with the alumni and develop an effective mechanism to benefit from their expertise.)

	5. Coordinate guest speaker engagements, ensuring they align with program goals and provide valuable insights to students and faculty. 6. Facilitate interactions with the advisory board, including organizing meetings, setting agendas, preparing meeting minutes, and compiling a list of recommendations based on the advisory board's expertise to advise on program improvements and alignment with industry needs. 7. Organize and facilitate community partnership activities for teaching staff, integrating these engagements into their professional development and evaluation processes. 8. Organize field trips for students (two trips per semester) 9. Engage with professionals and experts in the program's specialization to gather feedback and insights for program evaluation, development, and improvement. 10. Maintain comprehensive records of partnerships with industrial organizations and companies 11. Utilize, leverage, and maintain comprehensive records of partnerships with industrial organizations and companies to benefit program students and faculty, recommending new partnerships where necessary to enhance industry relevance and support for departmental initiatives.
Outcomes	1. An annual plan, designed based on the outlined responsibilities, must be submitted at the beginning of the year to effectively guide and coordinate the Committee's efforts. 2. A comprehensive plan for community service and field trips activities involving both teaching staff and students. 3. Monthly Meeting Minutes: Documenting discussions, decisions, action items, and responsibilities assigned during committee meetings. 4. End of Semester Reports: Summarizing the committee's activities, achievements, challenges, and future plans on an annual basis. 5. Complete the related section in the Annual Program Report

Program Context Committee

Goal	To manage and ensure the BSc EEP's compliance with institutional standards and promote a supportive academic environment. The committee oversees program integrity, staff qualifications, ethical practices, and quality assurance systems.
Members official capacity	Members are chosen in their official capacity, not their personal capacity as follows: 1. Head of the Department (Chair). 2. Program Coordinator. 3. Operational Plan Coordinator. 4. Development and Quality Committee Coordinator.
Responsibilities	7. Promote and uphold the values of scientific integrity, intellectual property rights, ethical practices, and proper conduct across all **administrative and service fields and activities**. 8. Ensure the program mission and goals are consistent with the mission of the institution/college and guide all operations and activities. 9. Ensure the program has a sufficient number of qualified staff to perform its administrative, professional, and technical tasks, with defined tasks and authorities. 10. Provide an organizational climate and a supportive academic environment. 11. Make sure about the application of the systems, regulations, and procedures approved by the institution/college, including those related to grievances, complaints, and disciplinary cases. 12. Implement an effective quality assurance and management system consistent with the institution's quality system. 13. Manage conducting periodic, comprehensive evaluations and prepare plans for improvement, following up on their implementation.

	14. Monitor the commitment of the teaching staff to learning and teaching strategies and assessment methods included in the program and course specifications through specific mechanisms. 15. Implement clear and publicized procedures to verify the quality and validity of assessment methods and ensure the level of student achievement. 16. Regularly assess the performance of the teaching staff according to specific and published criteria; provide feedback to them; and use the results to improve performance.
Outcomes	MoM

Development and Quality Committee

Goal	Managing quality work, developing plans, formulating policies, and developing methodologies in accordance with the faculty and the university quality assurance management policies.
Members official capacity	Members are chosen in their official capacity, not their personal capacity as follows: 1. Development and Quality Committee Coordinator (Chair) 2. Operational Plan Coordinator 3. Chair of the Learning Outcomes Assessment Committee 4. Chair of the Statistics and Data Analysis Committee
Responsibilities	1. Supervise the Implementation of Quality Assurance Measures: Ensure that quality assurance measures are being implemented across the program. 2. Monitor Compliance with NCAAA Standards: Ensure that departmental activities align with NCAAA standards and criteria. 3. Coordinate Accreditation Activities: Oversee the preparation and submission of accreditation documents and reports. 4. Review and Finalize Proposed Actions from Analysis Reports: Review, modify, enhance, and finalize proposed actions based on analysis reports prepared by other committees.

	5. Aggregate Proposed Actions for Comprehensive Improvement Plans: Collect and compile proposed actions from various sources such as KPIs analysis, PLO assessments, surveys, Operational Plan KPIs, and recommendations from the advisory board to build comprehensive improvement plan. 6. Monitor Implementation of Improvement Plans: Ensure that improvement plans are being implemented effectively and track their progress. 7. Report to Department Leadership: Provide regular updates and reports to the department head and other relevant committees on quality and development activities. 8. Ensure Consistency in Quality Practices: Ensure that quality practices are consistently applied across all courses and programs within the department. 9. Supervise the Preparation of Self-Study Reports for Accreditation: Oversee the preparation of self-study reports required for both national and international accreditation processes.
Outcomes	1. Meetings minutes are submitted to the department council. 2. Annual Comprehensive improvement plan 3. Comprehensive Follow-up reports tracking the implementation and impact of improvement plans.

Operational Plan Committee

Goal	To monitors the achievement of the program goals through specific performance indicators and actions are taken for improvement.
Related Program Goal	All Goals
Members official capacity	Members are chosen in their official capacity, not their personal capacity as follows: 1. Head of the Department (Chair) 2. Operational Plan Coordinator

	3. Chair of the Program and Study Plan Committee 4. Chair of the External Relations Committee 5. Chair of the Scientific Committee 6. Chair of Academic Affairs and Student Advising Committee
Responsibilities	1. Develop and maintain the BSc EE program operational plan outlining strategic initiatives, operational goals, and Key Performance Indicators (KPIs) closely aligned with each program goal. 2. 2. Collaborate with program committees to implement action plans and initiatives aimed at achieving program goals. 3. Monitor and evaluate progress towards achieving program goals and KPIs defined in the operational plan. 4. Identify areas requiring improvement or adjustment based on performance assessments and stakeholder feedback. 5. Develop action plans and recommendations to address identified areas for improvement, ensuring alignment with program goals. 6. Review and revise the operational plan as needed to adapt to changing goals, external factors, or institutional requirements. 7. Provide regular updates and reports on progress, achievements, and challenges to departmental leadership and relevant stakeholders. 8.
Outcomes	1. An annual plan, designed based on the outlined responsibilities, must be submitted at the beginning of the year to effectively guide and coordinate the Committee's efforts. 2. An annual operational plan with initiatives, operational goals, and KPIs aligned with program goals. 3. Monthly Meeting Minutes: Documenting discussions, decisions, action items, and responsibilities assigned during committee meetings. 4. End of Semester Reports: Summarizing the committee's activities, achievements, challenges, and future plans on an annual basis.

	5. Comprehensive Follow-up report tracking the implementation initiatives and evaluation of KPIs 6. Improvement plans.

APR Committee

Goal	To Prepare the Annual Program Report
	Members are chosen in their official capacity, not their personal capacity as follows: 1. Head of the Department (Chair) 2. Q&D Coordinator 3. Chair of the Statistics and Data Analysis Committee 4. Chair of the Learning Outcomes Assessment Committee 5. Chair of the External Relations Committee 6. Chair of the Scientific Committee
Responsibilities	Aggregate the components of the annual program report
Outcomes	Annual Program Report and its Attachments

SDP committee

Goal	Coordinate and evaluate Graduation Projects
Responsibilities	1. Gathering Senior Design Project (SDP) proposals from faculty members. 2. Forming student teams and assigning them to faculty projects. 3. Creating forms to track and evaluate graduation project progress. 4. Preparing schedules for exams of graduation projects. 5. Developing guides and templates for the preparation of graduation project proposals, reports, and presentations. 6. Preparing the course binder for the graduation project. 7. Evaluating students' performance after exams and reporting grades to the department chair. 8. Assessing the learning outcomes related to the project. 9. Supervising the coordination of workshops and seminars aimed at enhancing students' professional skills.
Outcomes	1. Meeting Minutes: Documenting discussions, decisions, action items, and responsibilities assigned during committee meetings.

	2. SDP Course Binder

Field Training Committee

Goal	A
Responsibilities	1. Identify and secure training opportunities by collaborating with the External Relations Committee and industry partners. 2. Coordinate student placements in suitable field training positions, ensuring alignment with their academic and career goals. 3. Organize orientation sessions to prepare students for field training, covering expectations, responsibilities, safety, and professional conduct. 4. Supervise and support students during training, addressing issues and ensuring adherence to ethical and safety standards. 5. Monitor and evaluate training effectiveness through structured assessments, feedback from students, supervisors, and industry partners. 6. Ensure compliance with institutional and industry standards, including monitoring training operators' commitments. 7. Develop and implement assessment tools to evaluate student and supervisor performance, using feedback for continuous improvement. 8. Prepare and maintain documentation such as field training guides, course binders, and reports for quality assurance and accreditation. 9. Organize workshops and seminars to enhance students' skills and readiness for field training. 10. Regularly review and improve the field training program based on industry trends, stakeholder feedback, and evaluation outcomes.
Outcomes	1. An annual plan, designed based on the outlined responsibilities, must be submitted at the beginning of the year to effectively guide and coordinate the Committee's efforts. 2. Monthly Meeting Minutes: Documenting discussions, decisions, action items, and responsibilities assigned during committee meetings.

	3. End of Semester Reports: Summarizing the committee's activities, achievements, challenges, and future plans on an annual basis. 4. Comprehensive reports on field training activities, outcomes, surveys analysis, and areas for improvement, and present these to the department council 5. Field Training Course Binder

1.8 Administration and Management Schedule

Department Council Meeting Schedule:

1. First meeting: Thursday of the first week of the semester.
2. Subsequent Meetings: Scheduled for Tuesday of Weeks 1, 4, 7, 11, and 15.

First Week Meeting Agenda:

Communicate the following information to faculty members:

1. Updates on the curriculum, PLOs, mission, and program goals, if any.
2. What program operational plan is.
3. Status of the accreditation process.
4. Quality Assurance Manual and its contents.
5. Composition of committees, members, responsibilities, and meeting schedule.
6. Committees should start working immediately and prepare plans for activities based on the list of responsibilities.
7. All improvement plans.
8. Outline of the faculty schedule.
9. Provide students with comprehensive course information at the beginning of each term, including learning outcomes, teaching and learning strategies, assessment methods and dates, course expectations, and feedback mechanisms.
10. Provide students with the university's policies on academic integrity, including definitions of plagiarism, cheating, and academic misconduct.
11. Discuss with students the consequences of violating academic integrity policies and the importance of upholding ethical standards.

Weekly schedule of Main Tasks

Week	First Semester Tasks	Second Semester Taks
1	1. Departmental council meeting 2. HoD and External Relations Committee Should start forming the advisory board committee. The formation should be discussed in the department council in Week 4.	1. Departmental council meeting
2	1. All committees should start meeting to prepare their annual activity plans and any other related plans. These plans must be submitted to the department council by Week 4. 2. Under supervision of Academic affairs and students advising committee, Faculty members Should Provide students with comprehensive course information. 3. The Academic affairs and students advising Committee should start preparing an annual plan for Extracurricular activities. 4. The Operational plan committee should start preparing the annual operational plan. The plan must be submitted to the department council by Week 4. 5. LO assessment committee should review and update the assessment plan for the current academic year. The plan must be submitted to the department council by Week 4. 6. The LO assessment committee should start preparing the PLO assessment report for the previous academic year. The report must be	1. Committee meetings 2. Under supervision of Academic affairs and students advising committee, Faculty members Should Provide students with comprehensive course information. 3. LO assessment committee should start Collecting and refining improvement actions from all course reports of the 1st semester of the current academic year. The report must be submitted to the department council by Week 4. 4.

	submitted to the department council by Week 4. 7. LO assessment committee should start Collecting and refining improvement actions from all course reports of the 2nd semester of the previous academic year. The report must be submitted to the department council by Week 4. 8. The APR committee should start preparing the APR. The report must be submitted to the department council by Week 4. 9. The Statistics and Data Analysis Committee should start preparing the KPIs analysis report. The report must be submitted to the department council by Week 4. 10. The Statistics and Data Analysis Committee should collect results of course evaluation surveys from faculty members for the two semesters of the last year. Results should be analyzed and added to the surveys analysis report, APR, KPIs report. The reports must be submitted to the department council by Week 4. 11. The Scientific Committee should start preparing an annual plan for faculty members training. The plan must be submitted to the department council by Week 4. 12. The External Relations Committee should start preparing an annual plan for community services and field trips. The plan must be submitted to the department council by Week 4. 13. Program Context Committee should start preparing plan for monitoring faculty	

	adherence to teaching, learning, and assessment methods in the program and course specifications. The plan must be submitted to the department council by Week 4.	
3	1. Academic Affairs and Students Advising Committee Communicate essential information to students (See responsivities for more details) 2. Field training committee should Collect, analyze, and evaluate feedback from students and industry partners, gathered through both discussions and surveys, to monitor, evaluate, and improve the effectiveness of field training and supervision. The report must be submitted to the department council by Week 4. 3.	1. Academic Affairs and Students Advising Committee Communicate essential information to students (See responsivities for more details)
4	1. Departmental council meeting 2. Before the meeting of the department council, the following should be submitted 2.1 Activities plan for all committees 2.2 Operational plan 2.3 PLO assessment report 2.4 A comprehensive report listing all the collected and refined improvement actions from the course reports. 2.5 KPIs analysis report 2.6 APR 2.7 Surveys Analysis Report 2.8 Plan for faculty training 2.9 Plan for community services activities 2.10 plan for Extracurricular activities.	1. Departmental council meeting

	2.11 LO assessment plan 3. After the department meeting, The Development and Quality Committee should start reviewing and compiling actions to build a comprehensive improvement plan. 4. Approval of the advisory board committee 5. The HoD should call the advisory board to meet next week.	
5	1. HoD should send the approved report of actions collected course reports to all faculty members. 2. Committee and Department MoM for approval of the comprehensive improvement plan. 3. After approval, the D&Q Committee should start distribution and implementation of the improvement plan. 4. External Relations Committee should start working on updating the website by Publishing program information, including performance data and achievements. Should be finished by meeting of the department council scheduled on week 7.	
6	1. Committee meetings 2. Facilities and equipment committee should start conducting surveys to: • Evaluate the adequacy and appropriateness of learning resources and services, update them as needed, and use feedback to improve them. • Ensure appropriate technologies, services, and learning environments for distance or e-learning courses.	1. Committee meetings

	• Evaluate the effectiveness of learning resources, facilities, and equipment, using results for improvement.	
7	1. Departmental council meeting	6. Departmental council meeting
8	1. Based on the survey's results, Facilities and equipment committee should start preparing an analysis report that identifies areas of improvement and propose actions for improvement. The report should be approved from the committee in week 10 and from the department in week 11.	
9		
10	1. Committee meetings	1. Committee meetings 2. Statistics Committee should start conducting stakeholders Surveys and start preparing Surveys analysis Report. Report must be submitted to the department council by Week 15. 2.1 Student Experience Survey (SES) is the same as Program Evaluation Survey (PES). 2.2 Alumni Evaluation Survey (AES). 2.3 Employer Evaluation Survey (PES). 2.4 Academic staff satisfaction survey (SSS-AC). 2.5 Administrative staff satisfaction survey (SSS-AD).
11	1. Departmental council meeting 2. Facilities and equipment committee should start implementation of improvement plan based on the conducted surveys.	1. Departmental council meeting
12	1. The Academic Affairs and Students Advising Committee conducts a survey for students about academic advising and	1. Comprehensive Operational plan report must be submitted to the department council by Week 15.

	prepares a survey analysis report. The report should identify areas for improvement and propose an action plan to be implemented in the second semester. The report must be submitted to the department council by Week 15. 2. The External Relations Committee conducts a survey about community services and prepares a survey analysis report. The report should identify areas for improvement and propose an action plan to be implemented in the second semester. The report must be submitted to the department council by Week 15.	2. All committees should start preparing comprehensive follow up and end of year Reports and must be submitted to the department council by Week 15.
13	1. Faculty members should start working on their Course Binder submissions, which include CS, CR, Assessment Excel File, and SOAR. These submissions should be completed and ready by the end of the semester. 2. Operational plan report and must be submitted to the department council by Week 15. 3. All committees should start preparing End of Semester Reports and must be submitted to the department council by Week 15. 4.	1. Faculty members should start working on their Course Binder submissions, which include CS, CR, Assessment Excel File, and SOAR. These submissions should be completed and ready by the end of the semester.
14	1. Committee meetings 2. The program context committee should prepare a report about faculty adherence to teaching, learning, and assessment methods in the program and course specifications and submit it to the department meeting in week 15.	1. Committee meetings 2. HoD assess faculty performance based on established criteria and provide feedback for improvement. 3. D&Q committee should start collecting follow up reports on the improvement plans

		and submit it to the department council of week 15.
15	1. Departmental council meeting	1. Departmental council meeting

1.9 Controlling and monitoring the committee's work

1. At the beginning of each academic year, each committee prepares a comprehensive work plan that outlines operational initiatives and all assigned tasks, including those referred to them by the department.
2. Each committee is assigned specific actions from the program's improvement plan aligned with the department's objectives.
3. The work plan is presented to the Department Council for discussion and recommendation for approval.
4. The Committee Chair is responsible for managing operational initiatives, executing improvement plan actions, and completing other assigned tasks.
5. The Committee Chair and the HOD jointly monitor committee activities through regular progress reports or MoM's, which are presented to the Department Council on a monthly basis.
6. At the end of the academic year, the committees submit a comprehensive report that includes implemented initiatives, completed improvement plan actions, outcomes, and recommendations for further development.
7. The comprehensive report serves as a key reference for the HOD to evaluate the committee's performance and effectiveness, particularly in contributing to continuous improvement and operational goals.

The BSc EEP Quality Management System

The B.Sc. in Electrical Engineering program at University of Tabuk is committed to maintaining and enhancing the quality of its educational offerings through a structured Quality Management System (QMS). This section outlines the policies, procedures, and activities that ensure the program meets academic standards, stakeholder expectations, and accreditation requirements.

1.10 Quality Assurance Policy

The B.Sc. EEP Quality Assurance Policy emphasizes maintaining the highest standards in academic quality, research excellence, student experience, faculty development, administrative efficiency, and stakeholder engagement. We are dedicated to continuously evaluating and improving our programs, ensuring they meet national and international standards.

The Quality Management System (QMS) is guided by principles of continuous improvement, accountability, collaboration, evidence-based decision making, a student-centered approach, and innovation and flexibility. These principles ensure that our quality assurance processes are robust, transparent, and effective.

We are committed to a culture of continuous improvement and stakeholder satisfaction. This includes regularly reviewing and updating our programs, engaging in ongoing professional development, collecting and acting on feedback, implementing robust monitoring and evaluation systems, fostering a culture of excellence, and ensuring transparency and accountability in all our processes.

1.11 Continuous Improvement Through the PDCA Cycle

The PDCA (Plan-Do-Check-Act) cycle shown in Figure 2 is a fundamental framework used to manage and improve the quality of the BSc Electrical Engineering (EE) program. It provides a structured approach to problem-solving and continuous improvement, ensuring that all aspects of the program are systematically evaluated and enhanced. The PDCA cycle serves as an alternative representation of the essential steps in quality management, encompassing quality planning, assurance, control, and improvement. This iterative cycle begins with the Plan phase, which involves setting goals, defining quality standards, and developing action plans that is essentially aligning with quality planning. The Do phase corresponds to quality assurance, as

it focuses on implementing the plans and ensuring that processes are carried out systematically. The Check phase embodies quality control, where outcomes are monitored and evaluated against the established standards to ensure conformance. Finally, the Act phase represents quality improvement, wherein areas for enhancement are identified and recommendations are proposed to refine and elevate the quality management system. Through this cyclical process, the PDCA cycle ensures continuous improvement and the closing of the loop, thereby maintaining and enhancing the overall quality of the BSc Electrical Engineering program.

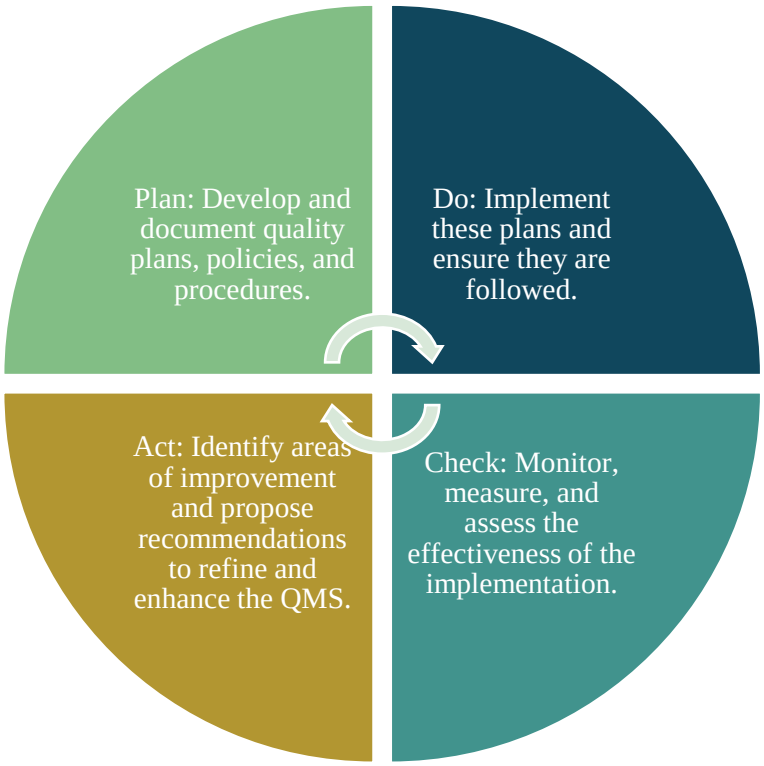

Figure 2 PDCA cycle for BSc EEP QMS

Plan (Quality Planning)

The “Plan” phase involves defining quality objectives and processes to achieve desired outcomes. This phase is crucial for setting the stage for continuous improvement by establishing foundational goals and processes and identifying areas for future enhancement. Quality planning can occur at two crucial points: initially, where it establishes the foundational objectives and processes for the program, and subsequently, where it sets actions based on the recommendations from the Do phase. This dual nature of planning ensures that the program not only starts with a solid framework but also continuously adapts and improves based on

ongoing assessments and feedback. Examples of quality planning include, but are not limited to: developing and aligning Program Learning Outcomes (PLOs) with national standards, planning teaching and learning strategies to achieve these outcomes, designing effective assessment methods, structuring the curriculum to ensure comprehensive coverage of essential knowledge and skills, aligning the program's mission with institutional goals, planning staffing needs, developing operational plan, setting performance indicators, and developing strategies for integrity, fairness, and stakeholder communication.

Do (Quality Assurance)

In the "Do" phase, the planned processes and procedures are implemented. This phase involves applying the established strategies and ensuring that all processes are executed systematically. Continuous improvement is supported by incorporating mechanisms to capture real-time data and feedback during implementation. It involves applying the established teaching, learning, and evaluation strategies, ensuring alignment with learning outcomes, providing necessary training, and ensuring that course and program information is available and accurate, etc.

Check (Quality Control)

This phase focuses on monitoring and measuring the effectiveness of the implemented processes. Examples of activities in this phase include, but are not limited to, checking performance against established standards, evaluating learning outcomes, measuring key performance indicators (KPIs), and assessing the quality of field training. It also involves reviewing student performance data, evaluating faculty performance, and assessing the adequacy and quality of student services. Additionally, feedback is gathered from stakeholders such as students, faculty, alumni, and employers to identify areas for improvement and ensure the program meets their needs and expectations.

Act (Quality Improvement)

The "Act" phase is where continuous improvement is explicitly driven. Based on insights from the "Check" phase, corrective and preventive actions are taken to address identified issues. This phase involves updating processes, resources, and policies based on feedback and performance data. It includes conducting periodic evaluations and making adjustments to enhance the program's quality continuously. By systematically implementing these improvements, the PDCA cycle ensures that the quality management system evolves and improves over time.

Through this cyclical process, the PDCA cycle not only supports quality management but also ensures that continuous improvement is embedded in the BSc Electrical Engineering program, leading to ongoing enhancements and increased stakeholder satisfaction.

1.12 Internal Quality Assurance Processes

Internal Quality Assurance (IQA) involves systematic processes designed to ensure the ongoing quality and effectiveness of the BSc Electrical Engineering (EE) program. Examples of IQA activities include, but are not limited to, regular curriculum reviews, feedback mechanisms from students and faculty, performance monitoring through key performance indicators (KPIs), and faculty development programs. These activities ensure that the program continually meets and exceeds established quality standards. Detailed procedures and processes for implementing IQA will be provided in the subsequent section to give a comprehensive view of how these practices are integrated into the program's quality management framework.

1.13 External Quality Assurance Processes

External Quality Assurance (EQA) processes play a critical role in validating and enhancing the quality of the BSc Electrical Engineering (EE) program by providing an objective assessment from outside the institution. These processes ensure that the program meets national and international standards and remains relevant in the academic and professional landscape. Key components of the EQA processes include:

Accreditation and Certification:

Pursuing accreditation from recognized accrediting bodies, such as the National Commission for Academic Accreditation and Assessment (NCAAA) and internationally from the Accreditation Board for Engineering and Technology (ABET), to validate the program's adherence to established quality standards and criteria. Accreditation provides an external benchmark for program quality and ensures that the program meets rigorous educational and professional criteria.

Stakeholder Engagement:

Consulting with industry partners, employers, and alumni to gather feedback on the program's relevance and effectiveness. This external input helps in adjusting the curriculum and program features to better meet market demands and enhance graduate employability.

Benchmarking:

Comparing the program's performance and practices with those of both internal and external programs helps pinpoint areas for innovation and improvement, ensuring that it remains aligned with crrent academic and industry standards.

Compliance with Regulatory Requirements:

Ensuring that the program complies with national and international regulatory requirements and standards is a key aspect of maintaining its quality and credibility. This includes alignment with the Specialized Academic Standards developed by the Education and Training Evaluation Commission (ETEC) under the title "Key Learning Outcomes." These standards establish the minimum curriculum requirements for specific disciplines through cooperation with various entities, including government bodies, the private sector, and academia. Additionally, compliance with the National Qualifications Framework in Saudi Arabia (NQF-KSA) is ensured, providing a comprehensive structure for organizing and categorizing qualifications into levels based on learning outcomes. This framework bridges recognized national or international qualifications with the levels of the NQF-KSA, ensuring relevance and standardization of the program's qualifications.

Through these external quality assurance processes, the BSc Electrical Engineering (EE) program benefits from objective evaluations, industry insights, and adherence to high standards, which contribute to its ongoing improvement and recognition.

1.14 Documentation, Reporting, and tools for Quality Assurance Continuous Improvement

To maintain and enhance the quality of the BSc Electrical Engineering program, several tools and processes are employed for documentation, reporting, and records management. These tools help in monitoring, evaluating, and improving various aspects of the program, ensuring that it meets both internal and external standards. The primary tools used include:

Course Reports

Course reports provide a comprehensive analysis of each course, covering essential aspects such as student results, grade distribution, comments on student grades, course learning outcomes, and course learning outcomes assessment results. They also include recommendations, topics not covered, and a course improvement plan, if necessary. This

detailed documentation helps in identifying strengths and areas for improvement within each course.

Annual Program Report

The annual program report compiles data and evaluations to provide an overview of the program's performance over the academic year. It includes program statistics and assessments, such as the program learning outcomes assessment and analysis according to the PLOs assessment plan, evaluation of courses, students' evaluation of program quality, scientific research and innovation during the reporting year, community partnership, other evaluations (if any), program key performance indicators (KPIs), challenges and difficulties encountered by the program, and the program development plan. This comprehensive report ensures that the program continuously evolves and adapts to meet academic and industry standards.

Standardized Exam Cover Page

All instructors are required to use a standardized exam cover page designed and approved by the EE department. This cover page records critical data, including the course learning outcomes (CLOs) that will be assessed in the exam, mapping between the questions and the CLOs, the maximum grade for each question, and the student's grade for each question. This ensures consistency and clarity in the assessment process.

CLO-PLO Mapping

Course learning outcomes (CLOs) for each course are prepared and mapped to the program learning outcomes (PLOs). The CLOs and the mapping are approved by the EE department and included in the course specifications. This alignment ensures that each course contributes effectively to the overall program learning outcomes.

Assessment Excel File

To streamline calculations, the BSc EE program has developed an assessment tool using Microsoft Excel. This tool is employed by the instructor to compute the assessment results for the PLOs associated with the course under evaluation. The Excel file takes the data from the exam cover page (Question-CLO mapping) and CLO-PLO mapping as input, generating the percentage of PLO attainment in the course. This efficient tool aids in precise and consistent assessment across courses.

Student Outcome Assessment Report (SOAR)

The instructors of the courses considered in the assessment process use the data obtained from the Excel sheet to prepare the SOAR form. This form can be considered the course-level assessment of PLOs. The SOAR form includes the following data: course information, summary of assessment results, instructor's comments and recommendations for improvement of the assessment process, instructor's comments on the assessment results, and recommendations for improvement of student outcome attainment. The SOAR form is incorporated into the course binder, and the information it contains is integrated into the course report. This form simplifies the process for the assessment committee to gather assessment data from individual courses.

PLO Assessment Report

The PLO assessment report serves the purpose of data aggregation and can be viewed as the program-level assessment of PLOs. This comprehensive report aids in understanding the overall attainment of program learning outcomes and identifies areas needing improvement.

End of Semester Reports

At the end of each semester, program committees prepare comprehensive reports to summarize the activities, achievements, challenges, and future plans. These reports ensure that all efforts and outcomes are documented and reviewed for continuous improvement.

Comprehensive Follow-Up Reports

These reports track the implementation of operational plan initiatives, improvement plans from different components such as KPIs report, PLO assessment report, surveys analysis report, etc. Regular follow-up ensures that the plans are executed, and necessary adjustments are made promptly.

Surveys and Feedback Forms and Analysis Reports:

Surveys and feedback forms are vital tools for gathering input from students, faculty, alumni, and employers. These insights are then analyzed to create comprehensive reports that identify program strengths and weaknesses. These reports serve as the foundation for developing actionable improvement plans, ensuring the program continuously enhances student experiences, aligns curriculum with industry needs, and strengthens its reputation for graduate success.

Key Performance Indicators (KPIs) Reports:

Key Performance Indicators (KPIs) are essential metrics used to evaluate the program's performance relative to target, internal, and external benchmarks. These metrics include, but are not limited to, student learning experiences as assessed through course evaluations, program completion rates, first-year student retention, employability rates, postgraduate enrollment, the student-to-teaching staff ratio, and faculty research productivity.

The report provides a comprehensive analysis of these KPIs to pinpoint areas of strength and identify opportunities for improvement. This analysis informs the development of actionable improvement plans aimed at driving continuous enhancement of the program.

Assessment Rubrics for Professional PLOs

Rubrics provide clear criteria for evaluating professional program learning outcomes. They help ensure consistency and objectivity of the assessment process.

Self-Study Report

The Self-Study Report (SSR) serves as a critical self-assessment of our BSc Electrical Engineering Program (BSc EEP). It allows us to analyze the program's strengths and weaknesses against accreditation standards set forth by NCAAA and ABET. This report will demonstrate how our program's mission, goals, curriculum, learning outcomes, and assessment methods all work together to deliver a high-quality educational experience that aligns with best practices in engineering education. By providing evidence-based data on student achievement, faculty expertise, and program processes, the SSR fosters transparency and accountability. This allows the NCAAA and ABET to thoroughly evaluate the program's effectiveness in achieving its stated goals and its commitment to continuous improvement.

1.15 Closing the Loop

"Closing the Loop" is a pivotal component of the Quality Management System (QMS) for the BSc Electrical Engineering Program. It ensures that feedback and evaluation results are effectively translated into actionable improvements. This systematic process transforms insights gathered from various program components into concrete actions aimed at enhancing the program's quality assurance practices and overall stakeholder satisfaction. The process is structured as follows:

1. **Identifying Areas for Improvement:** Conduct a thorough analysis of evaluation results from learning outcomes assessments, KPIs, surveys, operational plan reports, advisory board meetings, and program committee findings to pinpoint specific areas requiring attention and change.
2. **Developing Action Plans:** Create detailed and actionable plans to address identified issues. These plans should outline specific steps, assign responsibilities, and set clear timelines for implementation.
3. **Implementing Actions:** Put the developed action plans into practice within the relevant areas, ensuring that all proposed changes are executed effectively.
4. **Monitoring and Evaluation:** Continuously monitor the impact of the implemented actions to verify that they are achieving the intended outcomes. Regular evaluation ensures that the actions are effective and contributing to overall improvement.
5. **Feedback and Adjustment:** Collect feedback on the success of the implemented actions and make necessary adjustments based on this feedback. This iterative process helps in optimizing results and further refining quality assurance practices.

1.16 The BSc EEP Review Cycles

The review cycles are integral components of the Quality Management System (QMS) of the BSc Electrical Engineering (EE) program, ensuring the continuous enhancement of academic and administrative practices. These cycles provide structured timelines and methodologies for systematically evaluating and improving various aspects of the program. By adhering to these review cycles, the program can effectively monitor its performance, align with institutional and accreditation standards, and respond proactively to emerging challenges and opportunities.

Review Cycles and PDCA Cycle

The review process of the BSc EEP primarily belongs to the "Check" phase of the PDCA (Plan-Do-Check-Act) cycle provided in Section 1.11, though it spans elements of other phases as well. Here's how it integrates into each phase:

Plan: Establish objectives and processes necessary to deliver results in accordance with the expected output. This includes setting criteria, defining performance indicators, and developing review plans.

Do: Implement the plan by executing academic and administrative activities. This phase focuses on carrying out the processes and tasks according to the established plan.

Check: Monitor and evaluate the implemented processes by comparing the results against the planned objectives. The review process involves collecting data, analyzing key performance indicators, conducting surveys, and comparing outcomes against benchmarks and goals. This phase includes identifying areas of strength and weakness through periodic and comprehensive evaluations.

Act: Apply actions to improve the process based on the review results. Action plans are developed and implemented to address identified issues and enhance overall performance based on findings from the review process.

Thus, while the review process is an integral part of the Check phase, involving monitoring, evaluating, and analyzing results to ensure objectives are met and areas for improvement are identified, it also plays a crucial role in the other phases of the PDCA cycle to ensure continuous improvement and effective quality management.

In the BSC EEP, the review process is categorized into two distinct cycles: the annual review cycle and the comprehensive review cycle, each with its specific focus and scope to maintain the highest standards of quality and excellence.

BSc EEP Annual Review Cycle

The annual review cycle is a critical component of the continuous improvement process for the BSc Electrical Engineering (EE) program. This cycle focuses on the regular monitoring and evaluation of key performance indicators (KPIs), learning outcomes, and other essential metrics on a yearly basis. The annual review involves collecting data from course evaluations, student feedback, faculty performance assessments, and administrative reports. These data points are analyzed to identify trends, areas of success, and opportunities for improvement. The insights gained from the annual review inform the development of short-term action plans aimed at addressing any immediate concerns and enhancing the overall quality of the program.

The results of the annual review cycle, along with the actionable improvement plan, are documented and presented in the Annual Program Report (APR). This report includes a summary of findings and outlines the steps for addressing identified areas for improvement. Accompanying the APR are separate, detailed reports: the KPIs Analysis Report, the Surveys Analysis Report, the PLO Assessment Report, and the Operational Plan Report. Each of these

attachments provides in-depth analysis and comprehensive data relevant to their respective areas. The KPIs Analysis Report details performance metrics and trends, the Surveys Analysis Report captures stakeholder feedback, the PLO Assessment Report evaluates student learning outcomes, and the Operational Plan Report reviews the progress and effectiveness of implemented initiatives. By presenting these reports separately, the APR ensures clarity and facilitates a focused review of each critical aspect of the program's performance. Table 5 provides an overview of the annual review cycle. It outlines the key activities that take place throughout the cycle, along with the corresponding committees responsible for each activity. The table also details the resources available to support these activities, including any assisting tools, documentation, or evaluation materials.

Table 5 Annual Review Cycle Activities Committees

SN	Activity	Responsibility	Tools/Documentation
2.	Assessment of Course Learning Outcomes	Course Instructor	Assessment Excel File Course Report
3.	Preparing Course report (CR)	Course coordinators and Course Instructor	Course Report
4.	Course evaluation survey	Course instructors, Course coordinators, and Statistics and Data Analysis Committee	Surveys Analysis Report Annual Program Report
5.	Course-level assessment of technical PLOs	Course instructors and Course coordinators	SOAR
6.	Course-level assessment of professional PLOs	SDP Advisors and SDP Committee	Professional Outcomes Assessment Excel File
7.	Program-level assessment of professional PLOs according to the PLO assessment Plan	Learning outcomes assessment committee	PLO assessment report
8.	Stakeholders Surveys:	Statistics and Data Analysis Committee	Surveys Analysis Report

	• Student Experience Survey (SES). • Program Evaluation Survey (PES). • Alumni Evaluation Survey (AES). • Employer Evaluation Survey (PES). • Academic staff satisfaction survey (SSS-AC). • Administrative staff satisfaction survey (SSS-AD).		
9.	Academic advising survey	Academic Affairs and Students advising committee	Analysis Report, Committee MoM, or the committee end of semester report
10.	Effectiveness of Field Training	Field Training Committee	Analysis Report, Committee MoM, or the committee end of semester report
11.	Community Services Survey	External Relations Committee	Analysis Report, Committee MoM, or the committee end of semester report
12.	Facilities Surveys: • Evaluate the adequacy and appropriateness of learning resources and services, update them as needed, and use feedback to improve them. • Ensure appropriate technologies, services, and learning	Facilities and equipment committee	Analysis Report, Committee MoM, or the committee end of semester report

	environments for distance or e-learning courses. • Evaluate the effectiveness of learning resources, facilities, and equipment, using results for improvement.		
13.	Evaluation of Operational plan KPIs and implementation of its initiatives	Operational Plan Committee	Operational Plan Report
14.	Analysing Program KPI report	Statistics and Data Analysis Committee	
15.	Preparing the Annual program report (APR)	APR Committee	APR
16.	Annual program report revision	Deanship of Development and quality	
17.	Collecting and refining improvement actions from all course reports	Learning outcomes assessment committee	Comprehensive Report on the Improvement Plan for Program Courses' CLOs
18.	Monitoring faculty adherence to teaching, learning, and assessment methods in the program and course specifications.	Program Context Committee	Report on the adherence to teaching, learning, and assessment.
19.	Updating the Website	External Relations Committee	Program Website
20.	Meeting with the program advisory board	HoD and the External relations Committee	MoM
21.	Summarizing the committee's activities, achievements, challenges, and future plans	All program committees	End of semester report

22.	Reviewing and compiling actions from all program committees to build a comprehensive improvement plan.	Development and Quality Committee	Comprehensive improvement plan. APR
23.			
24.	Preparing comprehensive follow up for actions proposed in the program improvement plan	Q&D committee collects reports from relevant committees	Comprehensive Follow-up report
25.	Evaluation of faculty performance	HoD	Assessment Forms

BSc EEP Comprehensive Review Cycle

The comprehensive review cycle of the BSc EE program is conducted every five to six years or as required by institutional or accrediting bodies. It provides a thorough evaluation of the BSc EE program. This cycle involves an extensive review of all program components, including curriculum design, teaching strategies, faculty qualifications, and resource allocation. During this period, the program implements and applies all planned activities, processes, and procedures. Some activities, however, are evaluated periodically rather than annually due to workload and time constraints or the nature of the action plans. This approach ensures the sustainability of the continuous improvement process. For instance, modifications to the program's mission, goals, program learning outcomes (PLOs), or major changes to the curriculum, such as adding or removing compulsory courses, often require more time to develop and implement. These significant adjustments are typically evaluated within the comprehensive review cycle to ensure that changes are effectively integrated and align with long-term strategic objectives.

Through its comprehensive review cycle, the BSc EEP ensures adherence to both national (NCAAA) and international (ABET) accreditation standards and criteria. To achieve this, the program prepares NCAAA and ABET self-study reports that align with the requirements of these accreditation bodies. The criteria are distributed among the program committees, each tasked with preparing their respective sections of the self-study report (SSR). These committees are responsible for presenting policies, procedures, and practices, as well as gathering

information, data, and any other necessary documentation to demonstrate compliance with the specified criteria. Additionally, they organize, collect, and provide the necessary evidence to support the program's adherence to these standards. Table 6 illustrates the Mapping of NCAAA Criteria to Responsible Committees, while Table 7 presents the Mapping of ABET Criteria to Responsible Committees.

Table 6 Mapping of NCAAA Criteria to Responsible Committees

Criteria Code	Criteria Statement	Responsible Committee
1-1-1	The program mission and its goals are consistent with the mission of the institution/college, and guide all its operations and activities.	Program Context Committee
1-1-2	The program has the sufficient number of qualified staff to perform its administrative, professional and technical tasks, and they have defined tasks and authorities. *	Program Context Committee
1-1-3	The program provides an organizational climate and a supportive academic environment.	Program Context Committee
1-1-4	The program management monitors the achievement of its goals through specific performance indicators and actions are taken for improvement.	Operational Plan Committee
1-1-5	The program management applies mechanisms ensuring integrity, fairness, and equality in all its academic and administrative practices, and between the male and female student sections and branches (if any).	Academic Affairs and Students Advising Committee
1-1-6	The program builds on the views of professionals and experts in the program specialization, to contribute to its evaluation, development, and performance improvement.	External Relations Committee
1-1-7	The program management provides reliable and publicly disclosed information to the community about the program description, performance, and achievements that suits the needs of the stakeholders.	External Relations Committee

1-1-8	The program management is committed to activating the values of the scientific integrity, intellectual property rights, rules of ethical practices, and proper conduct in all academic, research, administrative, and service fields and activities. *	Academic Affairs and Students Advising Committee, Scientific committee, Program Context Committee
1-1-9	The program management applies the systems, regulations, and procedures that are approved by the institution/college, including those related to grievance, complaints, and disciplinary cases.	Program Context Committee
1-2-1	The program management implements an effective quality assurance and management system that is consistent with the institution quality system.	Program Context Committee
1-2-2	The program analyzes the key performance indicators and the evaluation data annually and results are used in planning, development, and decision-making processes. *	Statistics and Data Analysis Committee
1-2-3	The program conducts a periodic, comprehensive evaluation and prepares plans for improvement; and follows up its implementation.	Program Context Committee
2-1-1	The program identifies its intended learning outcomes that are consistent with its mission, and aligned with the specialized academic standards and the graduate attributes at the institutional level; they are approved, publicly disclosed, and periodically reviewed.	Learning Outcomes Assessment Committee
2-1-2	The learning outcomes are consistent with the requirements of the National Qualifications Framework, academic standards and labor market needs. *	Learning Outcomes Assessment Committee, Program and study plan committee
2-1-3	The program identifies the learning outcomes for the different tracks (if any).	Learning Outcomes Assessment Committee

2-1-4	The program applies appropriate mechanisms and tools for measuring the learning outcomes, and verifying their achievement according to specific performance levels and assessment plans. *	Learning Outcomes Assessment Committee, SDP Committee
2-1-5	The Program implements a clear and approved teaching, learning and evaluation strategy that articulates its educational philosophy and ensures that the Program's intended learning outcomes are achieved.	Program and study plan committee, Learning Outcomes Assessment Committee
2-2-1	The curriculum design considers fulfilling the program goals and learning outcomes, and the educational, scientific, technical and professional developments in the field of specialization; and is periodically reviewed. *	Program and study plan committee
2-2-2	The study plan ensures the balance between the general and specialty requirements, and between theoretical and applied aspects; and it takes into account the sequencing and integration of the courses. *	Program and study plan committee
2-2-3	The construction of the program study plan considers the identification of exit-points requirements (if any) in accordance with international practices and similar programs.	Program and study plan committee
2-2-4	The learning outcomes in the courses are aligned with the program learning outcomes (e.g., Matrix for the alignment of the learning outcomes of the courses with program learning outcomes).	Learning Outcomes Assessment Committee, Program and study plan committee
2-2-5	Teaching and learning strategies and assessment methods in the program vary according to its nature and level, and are aligned with the learning outcomes of the program.	Program and study plan committee
2-2-6	The program verifies the effectiveness of field training and the quality of its supervision, and follows up on the commitment of its operators to their mandated tasks according to specific mechanisms.	Field Training Committee

2-2-7	The program ensures a unified application of its study plan as well as the program and the course specifications offered at more than one site (sections of male and female students and different branches). *	Program and study plan committee
2-3-1	The program monitors the commitment of the teaching staff to the learning and teaching strategies and assessment methods included in the program and course specifications through specific mechanisms. *	Program Context Committee
2-3-2	The necessary training is provided for the teaching staff on learning and teaching strategies and assessment methods identified in the program and course specifications, along with the effective use of modern and advanced technology; and their use is monitored.	Scientific committee
2-3-3	At the beginning of each course, students are provided with comprehensive information about the course, including learning outcomes, teaching and learning strategies, and assessment methods and dates, as well as what is expected from them during the study of the course and feedback on their performance is provided for them.	Academic Affairs and Students Advising Committee
2-3-4	The program applies mechanisms to support and motivate excellence in teaching, and encourages creativity and innovation of the teaching staff.	Scientific committee
2-3-5	The program implements clear and publicized procedures to verify the quality and validity of the assessment methods, and to ensure the level of student achievement.	Program Context Committee
2-3-6	Effective procedures are used to control academic integrity at the program level to verify that the work and assignments of students are their own. *	Academic Affairs and Students Advising Committee
3-0-1	The program applies approved and disclosed criteria and requirements for the admission, registration and graduation of students, the transition to another program and the equivalent of what students have previously learned, commensurate with the nature of the program and are applied fairly.	Academic Affairs and Students Advising Committee

3-0-2	The program provides basic information to students, such as study requirements, services, and financial fees (if any), through various means.	Academic Affairs and Students Advising Committee
3-0-3	Students are provided with effective academic, professional, psychological, and social guidance, and counseling services through qualified and sufficient staff. *	Academic Affairs and Students Advising Committee
3-0-4	Mechanisms are applied to identify gifted, creative, talented, and underachieving students in the program, and appropriate programs are available to care for, motivate, and support each group of them.	Academic Affairs and Students Advising Committee
3-0-5	Students in the program are offered extracurricular activities in variety of fields to develop their abilities and skills, and the program takes appropriate actions to support and motivate their participation.	Academic Affairs and Students Advising Committee
3-0-6	The program implements an effective mechanism to communicate with its alumni and involve them in its events and activities, explore their views, and benefit from their expertise and support; and provides updated and comprehensive databases about them.	External Relations Committee
3-0-7	Effective mechanisms are applied to evaluate the adequacy and quality of services provided to students and measure their satisfaction with them; and the results are used for improvement. *	Statistics and Data Analysis Committee, Academic Affairs and Students Advising Committee
4-0-1	The program has an adequate number of faculty members at all sites where it is offered and appropriate verification mechanisms are applied. *	Scientific committee
4-0-2	The teaching and adjunct staff in the professional programs include some experienced and highly skilled professionals in the field of the program.	Scientific committee
4-0-3	The teaching staff participate in academic, research, and scientific production activities efficiently and regularly, and	Scientific committee

	their participation in these activities is considered one of the criteria for their evaluation and promotion.	
4-0-4	Teaching staff participate in community partnership activities; and their participation in these activities is considered as one of the criteria for their evaluation and promotion.	External Relations Committee
4-0-5	Teaching staff participate in professional and academic development programs in accordance with a plan that meets their needs and contributes to the development of their performance.	Scientific committee
4-0-6	The performance of the teaching staff is regularly assessed according to specific and published criteria; feedback is provided to them; and the results are used in improving the performance.	Program Context Committee
5-0-1	The program ensure the adequacy and appropriateness of learning sources and services provided in accordance with its needs and student numbers, and updated them periodically.	Facilities and equipment committee, Statistics and Data Analysis Committee
5-0-2	The teaching staff, students, and employee of the program have the appropriate orientation and technical training and support for the effective use of resources and means of learning.	Facilities and equipment committee
5-0-3	Safety, environmental conservation and hazardous waste disposal standards are applied efficiently and effectively, with all public and occupational health and safety requirements available in facilities and equipment and educational and research activities. *	Facilities and equipment committee
5-0-4	The program has the appropriate technologies, services, and environment for courses offered through distance or e-learning according to their own specific standards.	Facilities and equipment committee
5-0-5	The program evaluates the effectiveness and efficiency of learning resources, facilities, and equipment of all types; and the results are used for improvement.	Facilities and equipment committee, Statistics

		and Data Analysis Committee

Table 7 Mapping of ABET Criteria to Responsible Committees

Criteria	Responsible Committee
Criterion 1. Students	Academic Affairs and Students Advising Committee
Criterion 2. Program Educational Objectives	Program Context Committee
Criterion 3. Student Outcomes	Learning Outcomes Assessment Committee
Criterion 4. Continuous Improvement	Quality and Development Committee, Learning Outcomes Assessment Committee, SDP Committee, Field Training Committee
Criterion 5. Curriculum	Program and study plan committee
Criterion 6. Faculty	Scientific committee
Criterion 7. Facilities	Facilities and equipment committee
Criterion 8. Institutional Support	Program Context Committee
Program Criteria	Quality and Development Committee, Program and study plan committee
Appendix A – Course Syllabi	Program and study plan committee
Appendix B – Faculty Vitae	Scientific committee
Appendix C – Equipment	Facilities and equipment committee
Appendix D – Institutional Summary	Program Context Committee

Workflow for Evaluation and Improvement Process

This subsection provides a visual representation of the evaluation and improvement process, illustrating how data collection, analysis, and implementation are systematically carried out to ensure continuous improvement in the BSc EE Program. The workflow complements the Annual Review Cycle and Comprehensive Review Cycle by clearly outlining the steps involved in transforming data into actionable improvements. It demonstrates how the program

ensures transparency, accountability, and systematic follow-through in its quality assurance processes.

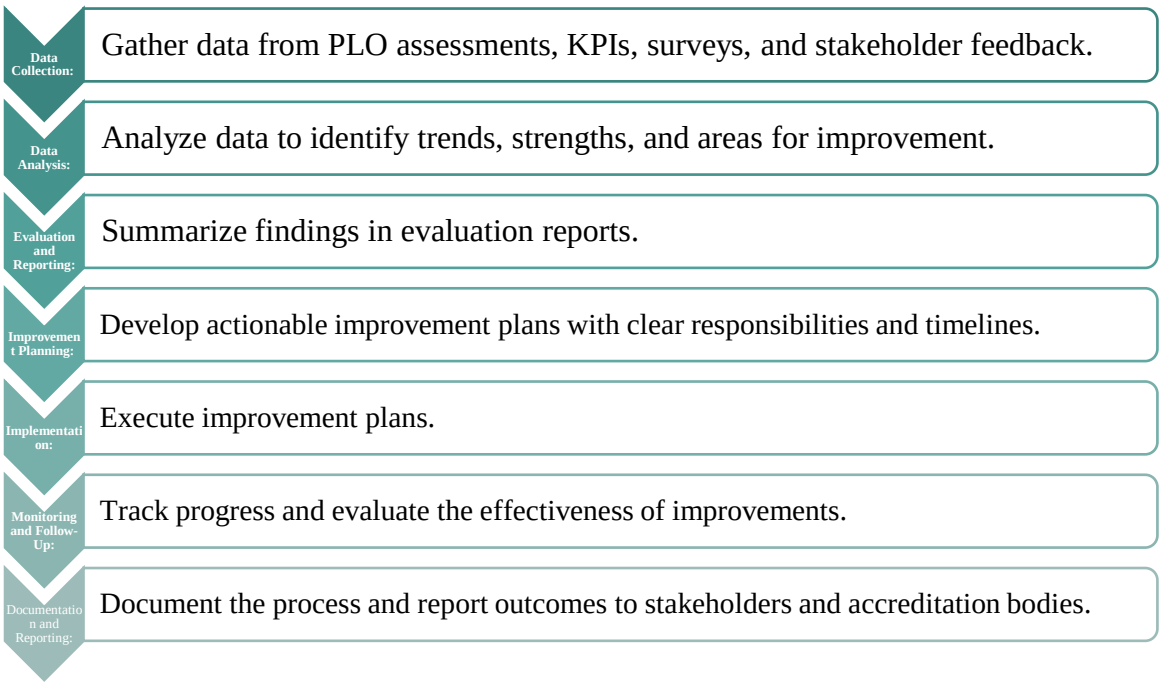

Figure 3 Workflow Diagram

Steps in the Workflow:

1. **Data Collection:**
    - Collect data from PLO assessments, KPIs, surveys (student, faculty, alumni, employer), and feedback from the Advisory Board Committee.
    - **Evidence:** Survey results, assessment reports, KPI report, meeting minutes.
2. **Data Analysis:**
    - Analyze the collected data to identify trends, strengths, weaknesses, and areas for improvement.
    - **Evidence:** Analysis reports, benchmarking results.
3. **Evaluation and Reporting:**
    - Prepare evaluation reports summarizing the findings and highlighting areas needing attention.
    - **Evidence:** Evaluation reports, annual program reports.
4. **Improvement Planning:**

- Develop actionable improvement plans based on the evaluation results. Assign responsibilities and set timelines for each action.
- **Evidence:** Improvement plans, meeting minutes.

5. **Implementation:**
    - Execute the improvement plans, ensuring that all actions are carried out as planned.
    - **Evidence:** Updated curriculum documents, new training programs, revised policies.
6. **Monitoring and Follow-Up:**
    - Track the progress of improvement actions and evaluate their effectiveness.
    - **Evidence:** Progress reports, follow-up meeting minutes, evaluation outcomes.
7. **Documentation and Reporting:**
    - Document the entire process, including evidence of improvements, and report outcomes to stakeholders and accreditation bodies.
    - **Evidence:** Final reports, accreditation documents.

Approval of modifications required by the action plan

The BSc EEP follows a structured process for identifying, evaluating, and approving modifications to the program. Table 8 outlines the different levels of approval required based on the nature of the modification.

Table 8 Approval Level of Modifications

Modifications	Final Level of Approval
Program Level	
Changes including a program's mission, objectives, title, program length (total number of years/levels/ hours), program learning outcomes, program specification, study plan, and adding co-requisites or prerequisites	UT Standing committee of programs and study plans
Changes in ordering of PLOs, program KPIs, course code	UT Management of Programs and study plans

Change in the facilities, operational plan, dropping program co-requisites or pre-requisites	Faculty Council
Course Level	
Changes in the title, credit hours, length of period for teaching, timing in the program plan, update of course specification affecting >25% of CLOs, language of teaching	Standing committee of programs and study plans at UT
Course code	Management of Programs and study plans at UT.
Changes in course policies and regulations	Faculty Council
Course teaching strategies, <25% change in CLOs, textbooks, reference materials, updates in medical knowledge in related topics, distribution of topics/weeks, methods for assessment; measurement and evaluation grading systems.	Department Council

Detailed Procedures for Quality Management System

In this section, we present the detailed procedures and processes that govern the development, modification, assessment, and continuous improvement of the BSc EE program's core components. Each subsection will outline specific procedures, roles, responsibilities, and mechanisms for feedback and review, adhering to the principles of the PDCA (Plan-Do-Check-Act) cycle to facilitate continuous improvement and "closing the loop" in quality assurance. This structured approach ensures alignment with the institution's mission and strategic goals, compliance with accreditation standards, and responsiveness to stakeholder needs, fostering a culture of continuous improvement within the BSc EE program.

1.17 Mission and Goal Development and Modification

Objective:

Establish a clear and concise mission statement and set of goals that reflect the program's purpose, direction, and aspirations.

Procedure:

1. Initial Planning and Research:
    - Conduct a situational analysis to understand the current state of the BSc EE program and the external environment.
    - Review the UT mission and strategic objectives to ensure alignment.
    - Engage stakeholders, including faculty, students, employers, and alumni, through surveys, focus groups, and/or consultations to gather input and expectations.
    - Review and analyze recommendations and observations from accreditation bodies related to the mission and goals during the BSc EE program comprehensive review cycle, ensuring alignment with quality standards and continuous improvement.

2. Drafting the Mission Statement and Goals:
    - Building upon the outcomes of the initial planning phase, the Program Context Committee and/or the Development and Quality Committee should commence drafting the program's mission and goals.
    - Ensure that the mission statement is concise, clear, consistent with UT mission, and reflects the program's attributes and contributions to the field of electrical engineering.
    - Develop goals that are specific, achievable, relevant, and aligned with BSc EEP mission and UT goals.

3. Review and Approval:
    - Present the draft mission statement and goals to the Program Advisory Board, stakeholders, and relevant committees for feedback.
    - Revise the mission and goals based on feedback and resubmit for approval by the EE Department Council, FoE Council, and UT Programs and Study Plans Committee.

4. Implementation and Communication:
    - Integrate the approved mission and goals into all program documentation, promotional materials, and strategic planning activities such as Program Specifications, Operational Plan, and Manuals and Handbooks.
    - Communicate the mission and goals to all stakeholders.

5. Ongoing Review and Modification:
    - Conduct periodic reviews, at least every five years, to assess the mission and goals' continued relevance and alignment with external demands and institutional priorities.
    - Implement changes as necessary, following the same consultative process to ensure stakeholder engagement and approval.

Feedback Mechanisms:

- Stakeholder surveys and focus groups
- Advisory Board meetings
- Periodic workshops.
- Accreditation Bodies During Program Comprehensive Revision

1.18 Program Learning Outcomes Development and Modification

Objective:

Define and continuously update program learning outcomes (PLOs) that specify the Knowledge and understanding, skills, and Values, Autonomy, and Responsibility students should acquire by the end of the program.

Procedure:

1. Benchmarking and Research:
    - Conduct a thorough analysis of existing PLOs against program mission, Graduate Attributes of UT, national qualifications frameworks (NQF), The specialized academic standards, developed by ETEC under the title “Key Learning Outcomes”, international accreditation standards (ABET), national accreditation standards (NCAAA), and industry expectations.
    - Review similar programs at peer institutions to identify best practices and innovative approaches.
    - Gather input from employers, alumni, faculty, and students to ensure outcomes meet labor market needs.
    - Review and analyze recommendations and observations from accreditation bodies related to the PLOs during the BSc EE program comprehensive review cycle, ensuring alignment with quality standards and continuous improvement.

2. Development of Learning Outcomes:

- Building upon the outcomes of the Benchmarking and Research phase, the Learning Outcomes Assessment Committee, Program Context Committee, and/or the Development and Quality Committee should commence drafting a set of learning outcomes that are comprehensive, measurable, and aligned with the program's mission and goals.
- Ensure outcomes cover the three learning domains: Knowledge and understanding, skills, and Values, Autonomy, and Responsibility.

3. Validation and Alignment:

- Map the proposed PLOs to program mission and goals.
- Map the proposed PLOs to the UT graduate attributes.
- Ensure alignment with NQF and the specialized academic standards, developed by ETEC under the title “Key Learning Outcomes”.
- Ensure Alignment with ABET standards.
- Conduct workshops with faculty and industry partners to validate the outcomes and ensure alignment with labor market.
- Revise outcomes based on feedback and finalize them for approval.

4. Curriculum Modification Based on PLOs:

- Identify Curriculum Changes: Evaluate the existing curriculum to identify necessary changes that align with the newly developed or modified PLOs.
- Update Course Content: Ensure that course content, activities, and assessments reflect the updated PLOs, incorporating relevant topics and skills.
- Align Courses with PLOs: Revise course learning outcomes (CLOs) to ensure consistency with the updated PLOs, ensuring each course contributes effectively to the program's overall educational objectives.
- The Curriculum Modification Procedure should be followed to complete this step.

5. Approval and Dissemination:

- Present the PLOs to the Program Advisory Board and relevant committees and councils for formal approval.

- Integrate the approved PLOs into all program documentation, promotional materials, and strategic planning activities such as Program Specifications, PLO-CLO mapping matrix, PLO Assessment Framework and Plan, and Manuals and Handbooks.
- Communicate the mission and goals to all stakeholders.

6. Reviewing and Continuous Improvement:

- Establish a schedule for periodic review and revision of PLOs to ensure they remain relevant and aligned with industry needs.
- Engage in regular dialogue with stakeholders to collect ongoing feedback and ensure that the PLOs continue to reflect the evolving educational and professional landscape.

Feedback Mechanisms:

- Employer and alumni surveys
- Advisory board consultations
- Faculty workshops and meetings
- Stakeholder feedback sessions
- Accreditation Bodies During Program Comprehensive Revision

1.19 Program Study Plan Development and Modification

Objective:

Design and continuously update a coherent and comprehensive study plan that aligns with the program's mission, goals, learning outcomes, and the educational, scientific, technical and professional developments in the field of Electrical Engineering.

Procedure:

1. Curriculum Benchmarking and Research:

- Conduct a curriculum mapping exercise to align existing courses with program learning outcomes and identify gaps or redundancies.
- Conduct a thorough analysis of existing Curriculum against
  - Program goals
  - National qualifications frameworks (NQF) requirements, especially, those related to required credit and contact hours of the program.

- Curriculum General Criteria (Essential Knowledge Units (EKU), General Knowledge Units (GKU), and Specialized Knowledge Units (SKU) developed by ETEC under the title “Key Learning Outcomes”.
- Program Criteria requirements of International accreditation standards (ABET)
- National accreditation standards (NCAAA) Requirements.
- Other educational, scientific, technical, and professional developments in the field of EE.
- Industry expectations.

- Review similar programs at peer institutions to identify best practices and innovative approaches.
- Review and analyze recommendations and observations from accreditation bodies related to the Curriculum during the BSc EE program comprehensive review cycle, ensuring alignment with quality standards and continuous improvement.
- Review and analyze comments, recommendations, and suggestions provided by the UT Programs and Study Plan Committee.
- Review the emerging technologies to ensure relevance and competitiveness.
- Gather input from faculty, industry partners, alumni, and students on potential areas for curriculum enhancement.

2. Study Plan Design:

- The UT Program and Study Plan Committee develops the part of BSc EE program study plan related to university requirements.
- The FoE Program and Study Plan Committee develops the part of BSc EE program study plan related to FoE requirements.
- The BSc EE program start drafting the study plan considering the following:
  - Outcomes of phase 1: Curriculum Benchmarking and Research
  - That balances foundational knowledge, advanced topics, and practical skills.
  - The balance between the general and specialty requirements.
  - The balance between theoretical and applied aspects.
  - The sequencing and integration of the courses in setting Prerequisites and Corequisites.
  - Guidelines and regulations set by the UT.

- Determine the core courses, prerequisites, and elective options based on the program's objectives and the needs of the students.
- Explore opportunities for specialization or concentration areas within the study plan.
- The inclusion of experiential learning opportunities, such as internships, projects, and lab work.

3. Review and Validation:

- Present the draft study plan to the Program Advisory Board, BSc EE program committees, FoE Program and Study Plan Committee, UT Program and Study Plan Committee, and EE Faculty members for feedback and alignment with standards and regulations.
- Revise the study plan based on feedback and finalize it for approval.

4. Approval and Communications

- The program adheres to the procedural guidelines outlined in the Program and Study Plan Procedural Guide developed by the UT Program and Study Plan Committee.
- The program complies with the authority framework established by the UT Program and Study Plan Committee.
- Submit the study plan for formal approval by the institution's academic council or relevant authority.
- Communicate the approved plan to faculty, students, and stakeholders through orientation sessions, handbooks, and digital platforms.

Feedback Mechanisms:

- Curriculum workshops and focus groups.
- Advisory board meetings.
- Student course feedback and stakeholders' surveys.
- Accreditation Bodies During Program Comprehensive Revision

1.20 Course Learning Outcomes Development and Modification

Objective:

Develop and modify Course Learning Outcomes (CLOs) to ensure they are clear, measurable, aligned with Program Learning Outcomes (PLOs), and responsive to industry trends and academic standards.

Procedure:

1. Initial Planning and Research

- The Program and Study Plan Committee conducts a workshop to train faculty members on establishing CLOs, emphasizing Bloom's Taxonomy, measurability, and the distinction of learning domains for each CLO.
- The Electrical Engineering (EE) Department conducts workshops to engage faculty in discussions about course objectives, content, and alignment with program learning outcomes.
- Establish committees for subspecialties within the EE Department, such as Electric Energy and Machines, Communications and Electronics, Control, and Digital Systems. These committees focus on the specific needs and developments within their areas of expertise.
- Relevant committees review the following aspects for courses related to their specialization:
    - Program Study Plan.
    - The program mission, goals, and PLOs.
    - Check alignment with the National Qualifications Framework and the specialized academic standards developed by ETEC under the title “Key Learning Outcomes.”
    - Review the Essential Knowledge Units (EKU), General Knowledge Units (GKU), and Specialized Knowledge Units (SKU) developed by ETEC under the title “Key Learning Outcomes.”
    - Ensure consistency with ABET accreditation standards.
    - Consider the program’s target audience, including students' backgrounds, prior knowledge, and intended career paths.

- Compare against national and international programs to identify best practices.
- Utilize the Procedural Guide developed by the UT Program and Study Plan Committee.
- Incorporate new educational, scientific, technical, and professional developments in the field of EE.

2. Drafting Course Learning Outcomes

- Courses are distributed among faculty members based on their specialization to leverage expertise and ensure focused development.
- Faculty members draft CLOs for each course, ensuring clarity, measurability, and alignment with PLOs. They specify the corresponding PLO and learning domain for each CLO.
- Faculty members propose teaching strategies and assessment methods tailored to the CLOs, considering innovative and effective pedagogical approaches.
- Subspecialty committees conduct workshops to discuss the drafted CLOs and make necessary adjustments for improvement. Consideration is given to the sequencing and integration of courses to ensure a coherent curriculum.

3. Review and Alignment

- The BSc EEP Program and Study Plan Committee reviews all course CLOs to ensure consistency, coherence, and alignment with overall program goals.
- Based on the drafted CLOs, the committee establishes a mapping matrix between BSc EEP courses and PLOs. This ensures that PLOs are sufficiently covered in the curriculum and identifies any gaps or overlaps that need addressing.
- The Faculty of Engineering (FoE) and UT Program and Study Plan Committees conduct a thorough review of course specifications during the revision process to ensure compliance with institutional standards.

4. Finalization, Approval, and Documentation

- The Subspecialty committees review and analyze comments received from Program, FoE, and UT program and study plan committees, making necessary changes to prepare the final version of the CLOs.

- The revised CLOs and alignment matrices are submitted to the department and faculty councils for approval. Subsequently, they are forwarded to the UT's Standing Committee for Programs and Study Plans for final approval.
- An audit report from the UT's Standing Committee for Programs and Study Plans is submitted to the program for further refinement, ensuring continuous quality improvement.
- Approved outcomes are documented in course syllabi, Course Specifications, handbooks, and online platforms, ensuring accessibility for students and stakeholders.

5. Assessment and Revision

- Implement regular assessments of CLO achievement through exams, assignments, projects, and other evaluation methods to gauge effectiveness and alignment with PLOs.
- Collect and analyze assessment data to identify areas for improvement. This data-driven approach helps in refining teaching methods and course content.
- Course instructors prepare assessment results, analysis, and actions for improvement, which are documented in course reports.
- Engage in ongoing dialogue with faculty and industry partners to refine and enhance CLOs based on assessment results and evolving industry trends, ensuring that the program remains responsive to changes in the educational and professional landscape.

Feedback Mechanisms:

- Course evaluations and student feedback
- Assessment data analysis of CLOs and PLOs
- Faculty and industry consultations
- Accreditation Bodies During Program Comprehensive Revision

1.21 Teaching Strategies and Assessment of Students' Learning Policies establishment

Objective

To establish a framework for developing and implementing effective teaching strategies and students learning assessment methods in the BSc Electrical Engineering program, aligned with the program's mission, goals, and learning outcomes.

Responsibilities

- Program and Study Plan Committee (PSPC): Develop and review teaching and assessment policies.
- Course Coordinators: Implement and monitor strategies at the course level.
- Teaching Staff: Deliver courses following policies and provide feedback.
- Quality Assurance Committee (QAC): Oversee policy effectiveness and compliance.

Procedure

1. Initial Planning and Research

- Research Best Practices: Study effective teaching and assessment methods in Electrical Engineering, considering academic literature and industry feedback.
- Identify Needs: Analyze current methods to identify gaps and improvements aligned with Program Learning Outcomes (PLOs).

2. Policy Development

- Draft Policies: PSPC drafts policies for teaching strategies and assessment methods aligned with standards like ABET and NCAAA utilizing the discussion occurred during establishing CLOs.
- Stakeholder Consultation: Gather input from faculty, students, and industry to refine policies.
- Integration: Align teaching strategies and assessments with course learning outcomes (CLOs) and PLOs.
- Review and Approval: QAC reviews policies, which are then approved by departmental councils.

3. Implementation

- Faculty Training: Conduct workshops for faculty on new strategies and assessments.
- Implementation: Roll out approved policies across the BSc EE program, monitoring adherence through audits.

4. Monitoring and Evaluation

- Data Collection: Collect data on student performance and feedback to assess policy effectiveness.
- Continuous Improvement: Update policies based on analysis and feedback.

1.22 Course Specifications Development and Modification

Objective:

To establish a clear process for developing and modifying course specifications in the BSc Electrical Engineering (EE) program, ensuring alignment with program learning outcomes, industry standards, and accreditation requirements.

Procedure:

1. Initial Planning and Research

- The Program and Study Plan Committee conducts a workshop to train faculty members on establishing Course Specifications.
- The Electrical Engineering (EE) Department conducts workshops to engage faculty in discussions about course objectives, content, and alignment with program learning outcomes.
- Establish committees for subspecialties within the EE Department, such as Electric Energy and Machines, Communications and Electronics, Control, and Digital Systems. These committees focus on the specific needs and developments within their areas of expertise.
- Relevant committees review the following aspects for courses related to their specialization:
  - Program Study Plan.
  - The program mission, goals, and PLOs.

- Check alignment with the National Qualifications Framework and the specialized academic standards developed by ETEC under the title “Key Learning Outcomes.”
- Review the Essential Knowledge Units (EKU), General Knowledge Units (GKU), and Specialized Knowledge Units (SKU) developed by ETEC under the title “Key Learning Outcomes.”
- Ensure consistency with ABET accreditation standards.
- Consider the program’s target audience, including students' backgrounds, prior knowledge, and intended career paths.
- Compare against national and international programs to identify best practices.
- Utilize the Procedural Guide developed by the UT Program and Study Plan Committee.
- Incorporate new educational, scientific, technical, and professional developments in the field of EE.

2. Drafting Course Specifications

- Courses are distributed among faculty members based on their specialization to leverage expertise and ensure focused development.
- Faculty members draft Course Specifications after reviewing the following:
  - The program’s mission and objective
  - Program specification.
  - Study plan of the program
  - Program Learning Outcomes
  - Course Learning Outcomes
  - Policies for Teaching Strategies and Assessment Methods
- Subspecialty committees conduct workshops to discuss the drafted Course Specifications and make necessary adjustments for improvement. Consideration is given to the sequencing and integration of courses to ensure a coherent curriculum.

3. Review and Alignment

- The BSc EEP Program and Study Plan Committee reviews all course Specifications to ensure consistency, coherence, and alignment with overall program goals.

- The Faculty of Engineering (FoE) and UT Program and Study Plan Committees conduct a thorough review of course specifications during the revision process to ensure compliance with institutional standards.

4. Finalization, Approval, and Implementation

- The Subspecialty committees review and analyze comments received from Program, FoE, and UT program and study plan committees, making necessary changes to prepare the final version of the Course Specifications.
- An audit report from the UT's Standing Committee for Programs and Study Plans is submitted to the program for further refinement, ensuring continuous quality improvement.
- Integrate the approved course specifications into the curriculum, ensuring all faculty adhere to the outlined objectives and strategies.

Feedback Mechanisms:

- Course evaluations and student feedback
- Assessment data analysis of CLOs and PLOs
- Faculty and industry consultations
- Accreditation Bodies During Program Comprehensive Revision

1.23 Program Learning Outcomes Assessment

The BSc EEP has developed a comprehensive document titled the PLO Assessment Framework, dedicated to the assessment of Program Learning Outcomes (PLOs). This document provides an in-depth exploration of the program's systematic approach to assessing and enhancing program learning outcomes. The following description offers a concise overview of the BSc EEP's PLO assessment strategy, highlighting its commitment to delivering quality education and fostering continuous improvement.

Concise Overview and Key Elements of the BSc EEP PLOs Assessment Framework:

1. Aligning ABET Student Outcomes with NCAAA PLOs:

- The NCAAA PLOs codes are mapped to the corresponding ABET SOs codes.
- This mapping is used to avoid redundancy and sometimes to utilize ABET-related terminology.

2. Aligning BSc EEP Courses with PLOs:

- Defines Course Learning Outcomes (CLOs) aligning with PLOs.
- Transparent documentation in course specifications.

3. Categorization of PLOs to Technical and Professional Outcomes:

- Divides PLOs into technical and professional sets, mostly, because distinction in the direct assessment methods.
- Technical outcomes assessed using CLOs-based assessment through coursework.
- Professional outcomes are assessed using performance indicators and rubrics through Senior Design Projects (SDPs).
- Framework Guarantees a detailed evaluation of both technical and professional skills.

4. Assessment Plan:

- The Guiding principles of the assessment process include focus on PLOs, multiple evaluation methods, faculty involvement, transparency, and continuous improvement.
- Direct and indirect assessment methods ensure a comprehensive understanding of PLO attainment.
- Involvement of instructors, SDP advisors, SDP examination committee, and Learning Outcomes Assessment Committee.

5. Expected Level of Attainment of PLOs:

- Student performance is categorized into five levels ranging from 5 to 1 with 5 corresponding to satisfactory.
- Percentage of students whose performance in a specific PLO or PI is in the 4^{th} and 5^{th} levels represent the actual attainment level.
- Target attainment level is updated according to the assessment results.

6. Detailed Procedure for Collecting Assessment Data:

- Divides PLOs into technical and professional outcomes.
- Uses direct assessment (CLOs-based and rubrics) and indirect assessment (exit surveys).
- Specific sampling methods for each assessment type.
- Detailed steps and tools for data collection, including controlled environment questions, rubrics, and assessment forms.

1.24 Exam Management and Grading

The Vice Dean for Academic Affairs, Head of the Electrical Engineering Department, Academic Affairs Coordinator (Registrar), and Academic Affairs and Students Advising Committee are responsible for the following:

- Establish exam policies, procedures, and guidelines to ensure fairness, security, and integrity.
- Set rules on academic integrity, exam conduct, and resource usage during exams.
- Communicate exam policies and procedures clearly to faculty and students.
- Work with faculty and administrators to develop exam schedules and timelines, ensuring they are communicated effectively.
- Provide students and faculty with information about exam dates, times, and venues.
- Coordinate with relevant departments to secure necessary resources and facilities for exams.
- Develop guidelines for accommodating students with special needs or disabilities during exams.
- Oversee exam venues to maintain a secure and controlled environment, minimizing the risk of cheating or misconduct.
- Address issues or irregularities that may arise during exams, such as student concerns or technical difficulties.

Exam Process

1. The Vice Dean for Academic Affairs sends the exam blueprint to course coordinators and instructors before the exam period.
2. For courses with multiple sections and instructors, course coordinators hold meetings with instructors to determine the exam format, duration, number of questions, weightage, and any specific rules. They also select exam questions that align with the exam blueprint, course content, and learning outcomes, considering difficulty level and cognitive skills to be assessed.
3. After the primary grader completes grading, a sample of graded exams is cross-checked by peers. The cross-checker verifies the accuracy and consistency of the primary grader's assessments. The primary grader and cross-checker discuss and resolve any discrepancies, consulting with the course coordinator or subject matter experts if needed.

4. The course instructor prepares a grade distribution Excel file that provides an analytical overview of student grades.
5. Finalized student grades are entered into the e-register system. The Head of the Department reviews the entered data and the Excel file for approval.
6. Final results are approved by the Vice Dean, and grades are released to students via their UT student accounts.
7. If a student wishes to dispute a grade, they submit a formal request for a grading revision to the department. The Head of the Department assigns an independent review committee to objectively assess the complaint. If necessary, the committee consults with the original grader or instructor regarding the grading decision.
8. The student's request and the reviewer's report are communicated to the Head of the Department. If the complaint is deemed valid, the Head contacts the primary grader to adjust the grade in the e-register accordingly. If the original grading decision is upheld, a detailed explanation is provided to the student, addressing their concerns.
9. After exams, the Examinations Committee identifies areas for improvement in exam design, content, or administration and makes necessary adjustments for future exams or courses.

1.25 Key Performance Indicators (KPIs) Analysis

Introduction

Key Performance Indicators (KPIs) are essential tools for assessing the quality and performance of BSc EE programs. They play a crucial role in continuous development and informed decision-making. The National Center for Academic Accreditation and Evaluation (NCAAA) has identified 11 core KPIs that align with the Program Accreditation Standards (2022) and must be regularly measured by the program. Additional KPIs related to the operational plan are utilized to ensure program quality.

Each KPI must be measured using appropriate tools such as surveys and statistical data, considering the following benchmarks:

- Actual Performance
- Targeted Performance Level
- Internal Benchmark (Internal Reference)
- External Benchmark (External Reference)
- New Target Performance Level

A detailed report is required to analyze the results of each indicator, focusing on performance changes, comparisons by site and gender, strengths, and areas needing improvement.

Procedure:

1. Committee Roles and Responsibilities: The Statistics and Data Analysis Committee is responsible for the annual KPIs analysis report. They may collaborate with other relevant committees as necessary. Ensure proper understanding of KPIs among all stakeholders involved in the analysis and reporting process.

2. Collection of Data: Gather data for each KPI using appropriate tools such as surveys, statistical data, and institutional records. Ensure data integrity and accuracy by verifying sources and applying consistent data collection methodologies.

3. Benchmarking: Analyze each KPI against internal and external benchmarks. Determine actual performance levels, targeted performance levels, and deviations from expected outcomes.

4. Data Analysis and Reporting: Analyze data to assess performance against each KPI. Identify strengths and areas needing improvement, noting any significant performance changes. Prepare a detailed analysis report. Highlight **trends (patterns or tendencies observed over time)**, potential causes of deviation, and opportunities for improvement.

5. Collaboration and Feedback: Engage with EE department and committees to gather insights and feedback on KPI performance. Conduct meetings to discuss findings, gather inputs, and collaboratively identify action plans for improvement.

6. Preparation of KPI Analysis Report: Compile the analysis findings into an annual KPI analysis report, ensuring clarity, accuracy, and comprehensiveness. Include detailed sections on performance indicators, benchmarking results, identified issues, and recommended actions.

7. Integration into Annual Program Report: Integrate the KPI analysis report into the Annual Program Report. Use insights from the analysis to inform strategic planning, policy formulation, and continuous improvement initiatives.

8. Development of Improvement Plan: Utilize the findings from the KPI analysis to develop a targeted improvement plan. Set realistic and achievable goals for enhancement based on identified weaknesses and opportunities.

9. Review and Approval: Submit the KPI analysis report and improvement plan for review by the Head of the Electrical Engineering Department and other relevant stakeholders. Obtain necessary approvals and finalize the documents for dissemination.

10. Dissemination and Implementation: Share the approved KPI analysis report and improvement plan with faculty, staff, and other stakeholders. Implement the improvement strategies and monitor progress periodically to ensure desired outcomes are achieved.

11. Continuous Monitoring and Evaluation: Continuously monitor the performance indicators throughout the year. Conduct periodic evaluations to assess the effectiveness of implemented improvement strategies and make necessary adjustments.

Key Performance Indicators for BSc EE Program (2022):

Students' Evaluation of Quality:

KPI-P-01: Overall rating of final-year students on the quality of the learning experience.

KPI-P-02: Students' evaluation of course quality.

KPI-P-03: Completion rate of students within the minimum time.

KPI-P-04: Retention rate of first-year undergraduate students.

KPI-P-05: Students' performance in professional and national examinations.

Graduate Outcomes:

KPI-P-06: Graduates' employability and enrolment in postgraduate programs.

KPI-P-07: Employers' evaluation of graduates' proficiency.

Teaching Staff and Research:

KPI-P-08: Ratio of students to teaching staff.

KPI-P-09: Percentage of faculty with publications.

KPI-P-10: Rate of published research per faculty member.

KPI-P-11: Citations rate in refereed journals per faculty member.

1.26 Operational Plan Development and monitoring

Guided by its mission, the BSc in Electrical Engineering program establishes an annual operational plan to systematically achieve its goals. This plan outlines specific performance indicators and actionable steps aimed at driving continuous improvement and ensuring the program’s success.

Objective:

The objective of this procedure is to outline the steps involved in preparing the BSc in Electrical Engineering (BSc EE) program's operational plan. This plan ensures alignment with the program’s mission and goals through specific initiatives, performance indicators, and actions.

Responsibilities

The Operational Plan Coordinator, the Operational Plan Committee, and the Head of the EE Department are responsible for developing, executing, and monitoring the operational plan.

Procedure:

1. Initial Planning and Coordination
    - Review the program's mission and goals to identify key focus areas, such as educational enhancement, social responsibility, and economic contribution.
    - Analyze previous operational plans and performance reports. Gather input from faculty, students, and stakeholders to identify areas for improvement.

2. Development of the Operational Plan
    - Based on the previous operational plan and program goals, the operational plan coordinator identifies the relevant committees.
    - Collaborate with program committees to propose initiatives aligned with program goals.
    - Define specific operational goals for achieving these initiatives.
    - Develop KPIs to measure progress and performance.
    - Outline initiatives, operational goals, and KPIs in the draft plan.
    - Distribute the draft plan to committee members and stakeholders for feedback.
    - Conduct a review meeting to discuss feedback and make necessary adjustments.

3. Approval and Implementation
    - Present the finalized operational plan to the Head of the Department and relevant authorities for approval.
    - Disseminate the approved plan to all stakeholders, including faculty, students, and administrative staff.
    - Clearly communicate roles and responsibilities related to the plan's implementation.
    - Assign tasks and responsibilities to relevant committees and individuals.
    - Monitor the implementation of initiatives and track progress against KPIs.

4. Monitoring and Evaluation

- Hold monthly meetings for the operational plan committee to discuss progress, challenges, and adjustments.
- Document meeting minutes, including action items and responsibilities.
- Analyze data related to each KPI to assess performance.
- Identify trends, strengths, and areas for improvement.
- Create end-of-semester and annual reports summarizing activities, achievements, challenges, and future plans.
- Develop a comprehensive follow-up report to track initiative implementation and KPI evaluation.

5. Continuous Improvement

- Based on evaluation reports, identify specific areas for improvement in the operational plan.
- Formulate action plans to address these areas, ensuring alignment with program goals.
- Revise the operational plan as needed based on feedback, performance assessments, and changing external factors.
- Develop an annual plan outlining responsibilities and initiatives for the upcoming year.

Documentation and Reporting

- Annual Operational Plan: A comprehensive document outlining initiatives, goals, and KPIs.
- Monthly Meeting Minutes: Records of discussions, decisions, and responsibilities from committee meetings.
- End of Semester Reports: Summaries of activities, achievements, and challenges.
- Comprehensive Follow-up Report: Detailed tracking of initiatives and KPI evaluation.
- Improvement Plans: Action plans for addressing areas needing enhancement.

1.27 Surveys Development, Administration, and Analysis

This section outlines the framework for developing, conducting, and analyzing surveys to collect feedback from stakeholders, ensuring continuous improvement in alignment with accreditation requirements and program goals.

*While **the Statistics and Data Analysis Committee** is responsible for conducting and analyzing surveys and identifying areas needing improvement, it is essential for the committee to **collaborate** with other relevant BSc EEP committees to finalize proposed actions, implement them, and track their effectiveness.*

Required Surveys

To fulfill accreditation requirements and support program development, the BSc in Electrical Engineering program conducts various surveys among key stakeholders, including students, alumni, employers, teaching staff, and employees. These surveys are essential for gathering insights into program performance, stakeholder satisfaction, and areas for enhancement. Below is an overview of the required surveys and how they align with specific reports.

Table 9 Survey Categories and Reports

Report Name	Survey	Related Section	Additional Comments
Surveys Analysis Report:(Stakeholders' Surveys)	Students (CES + PES or SES)	Eligibility Documents: Essential Requirements QA System 2-5	A report on the results of surveys stakeholders' surveys (students, alumni, employers, teaching staff, employees) for the last year.
	Alumni		
	Employers		
	Faculty		
	Employees		
Annual Program Report (APR)	Students Evaluation of Program Quality	Section B: Program Assessment Number 3	Same as KPI-P-01

	Students Evaluation of Courses	Section B: Program Assessment Number 2	Same as KPI-P-02
KPIs Analysis Report	Students' Evaluation of Quality of Learning Experience in the Program	KPI-P-01	Same as APR section B.3 Measures the average overall rating of final year students on the quality of learning experience and satisfaction with various services and learning sources. (Students Experience Survey (SES)). Read the KPIs document from NCAA for more description.
	Students' Evaluation of the Quality of the Courses:	KPI-P-02	Same as APR section B.2 Measures the average rating for the quality of courses on a five-point scale. (Take the average of all CES surveys)
	Employers' evaluation of the program graduates' proficiency.	KPI-P-07	Part from Employer Survey Average of the overall rating of employers for the proficiency of the program graduates on a five-point scale in an annual survey.
Other Surveys Based on NCAAA Criteria	Effectiveness of Field Training	NCAAA Criteria 2-2-6	Conducted by Field Training Committee
	Academic Advising Survey	NCAAA Criterion 3-0-0	

	Survey on the Adequacy and Effectiveness of Learning Resources	NCAAA Standard 5	
	NCAAA Criteria	All Standards	Make sure to cover all criteria

The table below highlights the current surveys received from UT.

UT Survey	Stakeholders	Comment
Student Experience Survey (SES)	Student	
Program Evaluation Survey (PES)	Student	
Alumni Evaluation Survey (AES)	Alumni	
Employer Evaluation Survey (PES)	Employer	
Academic staff satisfaction survey (SSS-AC)	Faculty	
Administrative staff satisfaction survey (SSS-AD)	Employee	

1.28 Procedure for Continuous Improvement

Objective

The objective of this procedure is to establish a systematic approach to continuous improvement within the BSc in Electrical Engineering (BSc EE) program. This procedure aims to enhance the quality of the program by identifying opportunities for improvement, implementing changes, and monitoring their effectiveness.

Scope

This procedure applies to all aspects of the BSc EE program, including teaching and learning, administrative processes, stakeholder engagement, and program evaluation.

Responsibilities

- Head of Department (HoD): Oversee the continuous improvement process and ensure alignment with strategic goals.
- Quality and Development Committee: Responsible for coordinating improvement activities, monitoring progress, and reporting outcomes.

- Program Committees: Implement improvement actions related to their specific areas.
- Quality Assurance Coordinator: Provide support and guidance in data collection, analysis, and reporting.

Procedure Steps

1. Identify Opportunities for Improvement

- Data Collection:
    - Gather feedback from stakeholders (students, alumni, faculty, employers) through surveys, interviews, and focus groups.
    - Collect performance data from assessments, exams, course evaluations, and PLO assessment.
    - Analyze Key Performance Indicators (KPIs) to identify trends and areas for improvement.
- Review and Analysis:
    - Conduct a review of program performance, curriculum, and processes.
    - Analyze survey results and feedback to identify common themes and issues.
    - Identify gaps between current performance and desired outcomes.
- Prioritize Improvement Areas:
    - Prioritize areas for improvement based on impact, feasibility, and alignment with strategic goals.
    - Develop a list of key focus areas for improvement, including short-term and long-term objectives.

2. Develop Improvement Plans

- Set Improvement Goals:
    - Define clear, measurable improvement goals for each focus area.
    - Ensure goals align with the program's mission, vision, and strategic objectives.
- Action Planning:
    - Develop specific action plans for each improvement goal, including tasks, responsibilities, timelines, and resources required.

- Assign responsibility for each action item to the relevant program committee or individual.

- Approval and Communication:

  - Submit the improvement plans to the Quality and Development Committee and the EE Department Council for review and approval.
  - Communicate the approved plans to all stakeholders, ensuring transparency and understanding of the objectives and actions.

3. Implement Improvement Actions

- Execution:

  - Implement the action plans according to the defined timelines and responsibilities.
  - Ensure collaboration and coordination among program committees.

- Monitoring and Support:

  - Monitor the progress of improvement actions regularly, providing support and resources as needed.
  - Address any challenges or obstacles that may arise during implementation.

- Documentation:

  - Document all actions taken, including progress reports, meeting minutes, and feedback received.

4. Evaluate and Monitor Progress

- Data Collection and Analysis:

  - Collect data and evidence to evaluate the effectiveness of implemented improvements.
  - Analyze performance against the set improvement goals and KPIs.

- Review and Assessment:

  - Conduct regular review meetings to assess the progress of improvement actions.
  - Identify any areas where further action is needed or where adjustments are required.

Documentation and Reporting

- Continuous Improvement Plan: A document outlining the goals, action plans, and responsibilities for each improvement area.
- Progress Reports: Regular updates on the status of improvement actions, including achievements and challenges.
- Final Improvement Report: A comprehensive report detailing the entire improvement process, outcomes, and lessons learned.

1.29 Procedure for Ensuring Academic Integrity

Procedure for Ensuring Academic Integrity

1. Introduction This procedure provides a comprehensive framework for maintaining academic integrity within the program. It defines measures for preventing academic misconduct, detecting violations, verifying the authenticity of student work, and handling incidents in alignment with the University of Tabuk Student Disciplinary Policy.

2. Preventive Measures

- **Student Education and Awareness:**
  - Conduct workshops on academic ethics, proper referencing, and plagiarism prevention.
  - Educate students on the use of plagiarism detection tools (e.g., SafeAssign) and proper citation methods.
- **Integration of Technology:**
  - Utilize Blackboard to enforce deadlines and monitor submissions.
  - Implement plagiarism detection software to assess student submissions (30% plagiarism threshold is allowed).

3. Detection Mechanisms

- **Plagiarism Detection Software:**
  - Use SafeAssign and similar tools to compare student submissions against online databases and highlight potential plagiarism.
- **Instructor Oversight:**
  - Review submissions for anomalies in quality, writing style, or approach.

- Compare student assignments, particularly lab reports and project work, to identify inconsistencies.

4. Verification Techniques

- **Interviews or Oral Examinations:**
  - Require students to present or discuss their work to confirm their understanding. (Applicable to Senior Design Projects, Mini-Projects, and Field Training)
- **Practical Tests:**
  - Conduct in-class exercises to ensure students can independently demonstrate knowledge and skills. (Applicable to Lab Reports)
- **Progress Documentation:**
  - Require students to maintain and submit logs, raw data, or step-by-step reports as proof of independent work. (Applicable to Senior Design Projects)
- **Customized Assignments:**
  - Design unique assignments tailored to each student to minimize outsourcing risks. (Applicable to Mini-Projects and Assignments)

5. Response to Violations

All incidents of academic misconduct are handled based on the University of Tabuk Student Disciplinary Policy.

A. Cheating in Examinations

1. **Documenting the Incident:**
   - The proctor must record the incident in detail on the same day.
   - The exam paper and any supporting evidence must be attached and submitted to the faculty dean.
2. **Investigation Process:**
   - The faculty dean or a designated investigator interrogates the student.
3. **Penalties if Proven:**
   - The dean imposes one of the following penalties based on severity: a. Exclusion of the exam paper, resulting in failure in that exam. b. Exclusion of the exam paper for the course and another course(s), resulting in failure in both. c.

Exclusion of all semester course examinations, resulting in failure in all subjects.

4. **Penalty Considerations:**
    - The severity of penalties considers factors such as past violations and any additional misconduct (e.g., disruption, refusal to comply, or assaulting the proctor).
5. **When Cheating is Not Proven:**
    - If the investigation does not confirm cheating, the student is awarded their earned grade.

B. Cheating in Reports, Research, and Projects

1. **Documenting the Incident:**
    - If cheating is suspected in reports, research, practical work, field training, or graduation projects, the instructor must document the incident in a detailed report and submit it to the faculty dean.
2. **Investigation Process:**
    - The faculty dean or a designated investigator interrogates the student.
3. **Penalties if Proven:**
    - The dean imposes one of the following penalties based on severity: a. Exclusion of the assignment, resulting in failure in that component. b. Exclusion of the assignment along with another course component, leading to failure in both. c. Exclusion of all semester course assignments, leading to failure in all.
4. **Penalty Considerations:**
    - The dean considers past violations and any additional misconduct (e.g., refusal to comply, disruption of academic processes, or misconduct towards faculty or peers).
5. **When Cheating is Not Proven:**
    - If the investigation does not confirm cheating, the student receives their earned grade for the work.