



# Evaluation of Electrical Engineering

## **Program Mission**



Kingdom of Saudi Arabia Ministry of Education

NORTHERN BORDER UNIVERSITY College of Engineering Department of Electrical Engineering



### I. Mission of Electrical Engineering Program:

The mission of the Electrical Engineering (EE) Program is to prepare electrical engineering graduates that compete in the labor market, sustain self-learning and professional development, and contribute to scientific research and community service.

Table 1. The Domains of The Mission of Electrical Engineering Program

| Keywords from the developed program mission<br>through which consistency is achieved | Teaching and<br>Learning | Research and<br>Innovation | Community<br>Engagement |
|--|--------------------------|----------------------------|-------------------------|
| To prepare electrical engineering graduates  |                          |                            |                         |
| that compete in the labor market, sustain  | ~                        |                            |                         |
| self-learning and professional development,  |                          |                            |                         |
| and contribute to scientific research  |                          | <b>~</b>                   |                         |
| and community service  |                          |                            | ~                       |

## II. Objectives of Electrical Engineering Program:

Table 2. The Program Objectives of The Electrical Engineering Program

| Code | Program Objectives (POs)  |
|------|---|
| PO1  | Serve competently in the professional career and academia by demonstrating high-quality knowledge and skills in the Electrical Engineering field. |
| PO2  | Display self-learning, research, and critical thinking capability and take initiative in advancing their education and professional standing.     |
| PO3  | Function as a team member with the capability for leadership and effective communication.   |
| PO4  | Exhibit commitment to social responsibilities, ethical values, and meaningful community contributions.  |

#### Table 3. The Domains of The Objectives of The Program

| Program    |                       |                         |                      |  |
|------------|-----------------------|-------------------------|----------------------|--|
| Objectives | Teaching and learning | Research and innovation | Community engagement |  |
| PO1        | ✓                     |                         |                      |  |
| PO2        | ✓                     | ✓                       |                      |  |
| PO3        | ✓                     |                         |                      |  |
| PO4        |                       |                         | ✓                    |  |

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## III. Evaluation of Electrical Engineering Program Mission:

Table 4. Consistency of The Objectives of The Program with The Mission of The Program

|            |     | Program Mission  |   |                       |
|------------|-----|--|---|-----------------------|
|            |     | To prepare electrical engineering<br>graduates that compete in the labor<br>market, sustain self-learning and<br>professional development, |   | and community service |
|            | PO1 | ✓  |   |                       |
| Program    | PO2 | ✓  | ~ |                       |
| Objectives | PO3 | ✓  |   |                       |
|            | PO4 |  |   | ✓                     |

We have a consistency matrix (Table 4) that aligns the EE Program's mission with its objectives (POs). We also have Key Performance Indicators (KPIs) associated with each PO. A weighted average formula can be used to evaluate the mission based on the performance of the KPIs associated with the POs. This formula will consider the relative importance of each PO and the performance of its KPIs.

Formula to evaluate EE Program Mission:

$$Eval(EEP - Mission) = \frac{KPI_PO_1 + 2 \times (KPI_PO_2) + KPI_PO_3 + KPI_PO_4}{5}$$

Where:

- *Eval*(*EEP Mission*): The overall evaluation of the mission.
- *KPI\_PO<sub>i</sub>*: The evaluation of the Program Objective (PO) *i*.

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## Signature of the EE-QAAC President and Members (31/08/2023)

|                     | Name                           | Signature |
|---------------------|--------------------------------|-----------|
| Committee President | Dr. Abdulaziz Furreh Alanazi   | the       |
|                     | Dr. Ezzeddine Salah Touti      | ant       |
| Members             | Dr. Hady El-Said Abdel-Maksoud | No        |
|                     | Dr. Habib Abdallah Kraiem      | June      |