**Rubric for Self-Assessment Processes**

**Student Outcome #2:** An ability to 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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Performance Indicators** | **Unsatisfactory** | **Developing** | **Meeting Expectations** | **Exceeding Expectations** |
| **State the requirements of a design project in the specific context of the application** | The student fails to state and identify the necessary requirements for the design | The student partially states and identifies the necessary requirements for the design | The student states and identifies the necessary requirements for the design, making only minor mistakes | The student correctly states and identifies the necessary requirements for the design with an appropriate justification |
| **Apply techniques, models, methodologies, and tools that enable the design of engineering projects for problem solving** | The student does not apply tools, methods, and methodologies for the design of engineering projects | The student partially applies tools, methods, and methodologies for the design of engineering projects | The student applies tools, methods, and methodologies for the design of engineering projects, making only minor mistakes | The student correctly applies tools, methods, and methodologies for the design of engineering projects and provides justification |
| **Propose solutions considering public health, safety, and welfare factors** | The student does not propose solutions considering public health, safety, and welfare factors | The student proposes solutions but considers only few factors | The student proposes solutions using all the factors, making only minor mistakes | The student correctly proposes solutions using all the factors and provides justification |
| **Propose solutions considering global, cultural, social, environmental, and economic factors** | The student does not propose considering global, cultural, social, environmental, and economic factors | The student proposes solutions but considers only few factors | The student proposes solutions using all the factors, making only minor mistakes | The student correctly proposes solutions using all the factors and provides justification |