**Kuwait University**

**College of Engineering and Petroleum**

**Rubric for Student Outcome 4 (SO4)**

**SO4**: an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **PI** | **4 (Exemplary)** | **3 (Meets Expectations)** | **2 (Developing)** | **1 (Beginning)** | **weight** | **Score** |
| **Recognition**  Identify ethical dilemma and responsibilities using an engineering code of ethics. | Correctly identify potential ethical conflicts using pertinent clause of an engineering code of ethics and articulate why certain actions or decisions may be unethical or unprofessional. | Identify some potential ethical conflicts and can articulate why certain actions or decisions may be unethical or unprofessional with limited reference to the correct clause of the engineering code of ethics. | Identify some potential ethical conflicts but may have difficulty articulating why certain actions or decisions may be unethical or unprofessional with limited/no reference to the engineering code of ethics. | Unable to identify potential ethical conflicts or articulate why certain actions or decisions may be unethical or unprofessional without any reference to the engineering code of ethics. |  |  |
| Identify professional responsibilities related to the engineering profession | Understands correctly and accurately the engineering professional and ethical standards in dealing with public safety, welfare, intellectual property rights, employer obligations and client confidentiality. | Shows satisfactory understanding of engineering professional and ethical standards in dealing with public safety, welfare, intellectual property rights, employer obligations and client confidentiality. | Shows limited understanding of engineering professional and ethical standards in dealing with public safety, welfare, intellectual property rights, employer obligations and client confidentiality. | Fails to demonstrate an understanding of engineering professional and ethical standards in dealing with public safety, welfare, intellectual property rights, employer obligations and client confidentiality. |  |  |
| **Context**   |  | | --- | | Identification of the global, economic, environmental, and societal context of an engineering solution | | Relates well to contemporary local, national, regional, and global issues in engineering. | Shows satisfactory commitment to contemporary local, national, regional, and global issues in engineering. | Shows limited understanding to contemporary local, national, regional, and global issues in engineering. | Fails to recognize contemporary local, national, regional, and global issues in the engineering discipline |  |  |
| Recognize the impact of engineering solutions in environmental contexts. | Shows satisfactory commitment to recognize the impact engineering solutions in environmental contexts. | Shows limited commitment to recognize the impact engineering solutions in environmental contexts. | Fails to demonstrate commitment to recognize the impact engineering solutions in environmental contexts. |  |  |
| Recognize the impact engineering solutions in societal contexts. | Shows satisfactory commitment to Recognize the impact engineering solutions in societal contexts. | Shows limited commitment to Recognize the impact engineering solutions in societal contexts. | Fails to demonstrate commitment to recognize the impact engineering solutions in societal contexts. |  |  |
| **Judgment**   |  | | --- | | Consider the impact of engineering solutions when making informed judgement. | | Demonstrates a comprehensive understanding of the situation and consider multiple perspectives, including those of the employer, the profession, and the society. | Demonstrates a proficient understanding of the situation and incorporating the perspectives of various stakeholders, including the employer, the profession and the society. | Acknowledges the existence of multiple perspectives on the issue and present and articulate the case from different but not all required viewpoints. | Failure to consider multiple perspectives with limited understanding of the broader context. Biased or incomplete interpretation of the situation. |  |  |
| Analyze the impacts from multiple perspectives and stakeholders and can identify potential conflicts / risks and propose a creative middle ground. | Propose a resolution that considers the potential risks to public safety and the concerns of other relevant stakeholders. | Identify some potential unintended consequences and analyze some of the risks and uncertainties associated with the engineering solutions but may not fully consider all relevant factors. | Referring to rules as the proposed resolution, without adequately considering the unique circumstances of the situation, and potentially applying them inappropriately or without context. |  |  |
| Correctly apply ethical and professional principles and codes of conduct to engineering situations to reach a sound judgment. | Apply ethical and professional principles and codes of conduct in a reasonable manner to engineering situations but the judgement is incomplete/incorrect. | Apply some ethical and professional principles and codes of conduct to engineering situations but may not always do so in an appropriate manner and reach an incomplete/incorrect judgement. | Struggle to apply ethical and professional principles and codes of conduct to engineering situations and provides no/incorrect judgement. |  |  |

11/2023