

## Rubric for ABET Key Performance Indicators

<b>Outcome 1:</b> <b>An ability to identify, formulate, and solve complex engineering problem by applying principles of engineering, science, and mathematics</b>				
Criteria	Low (1)	Needs Improvement (2)	Good(3)	Excellent (4)
<b>1.1. Identify the problems and applicable theories and concepts.</b>	Fails to identify the problems and applicable theories and concepts. constraints	Shows limited and less than adequate ability to identify the problems and applicable theories and concepts.	Demonstrates satisfactory ability to identify the problems and applicable theories and concepts.	Understands and properly and accurately identify the problems and applicable theories and concepts.
<b>1.2. Formulate the problem using appropriate objectives, assumptions and constraints by applying principles of engineering, science, and mathematics.</b>	Fails to Formulate the problem using appropriate objectives, assumptions and constraints by applying principles of engineering, science, and mathematics.	Shows limited and less than adequate ability to Formulate the problem using appropriate objectives, assumptions and constraints by applying principles of engineering, science, and mathematics.	Demonstrates satisfactory ability to formulate the problem using appropriate objectives, assumptions and constraints by applying principles of engineering, science, and mathematics.	Understands and properly and accurately formulate the problem using appropriate objectives, assumptions and constraints by applying principles of engineering, science, and mathematics.
<b>1.3. Solve and evaluate problem solutions and adopt the optimum solution by applying principles of engineering, science, and mathematics.</b>	Fails to solve and evaluate problem solutions and adopt the optimum solution by applying principles of engineering, science, and mathematics.	Shows limited and less than adequate to solve and evaluate problem solutions and adopt the optimum solution by applying principles of engineering, science, and mathematics.	Demonstrates satisfactory ability to solve and evaluate problem solutions and adopt the optimum solution by applying principles of engineering, science, and mathematics.	Understands and utilize proper methodologies to solve and evaluate problem solutions and adopt the optimum solution by applying principles of engineering, science, and mathematics.