



a) An ability to apply knowledge of mathematics, science and engineering.

Criterion	Initial	Emerging	Developed	Excellence
The student based on the specifications of the problem identifies the type of problem. (Analysis and design).	The student does not recognize the specifications and fails to identify the type of problem.	The student identifies some of the specifications and cannot determine what type of problem is.	The student identifies all specifications and cannot determine the type of problem.	The student identifies all specifications and is able to determine the type of problem.
The student poses the problem appropriately.	The student does not pose correctly the mathematical equations that solve the problem.	EL student poses correctly some of the mathematical equations that solve the problem.	The student poses all mathematical equations that solve the problem but one of them is faulty.	The student correctly poses all equations that solve the problem.
The student solves the problem by using knowledge of mathematics / science and engineering.	The student fails to resolve the problem and cannot find solution.	The student applies a mathematical method and partially solves the problem.	The student applies a correct mathematical method and finds a solution that has error.	The student applies the correct mathematical method and finds one or more suitable solutions.