

Engineering Design Components & Evaluation Process

What is an Engineering Design Challenge?

An engineering design challenge is a problem-based task that approaches design problems using the manner. The EDP encourages open-ended problem solving and learning from failure. Learners engage with integrated concepts from multiple disciplines and use design thinking as a mechanism to design a solution for an authentic problem.

There are numerous engineering design process models; however, the models all share the foundational practices:

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| x Identifying questions or defining problems | x Planning | x Testing |
| x Imagining and brainstorming a solution | x Creating | x Improving |

determine if the solution meets the parameters of the challenge. The students will use their rubric design score to improve their solution before testing it again. The evaluation criteria can provide a framework of knowledge, skills, and performance related to a design problem. Throughout the process, students are engaged in the [STEMfluency skills](#) of



