

FabMaker Studio Certification

CTE For Middle School Creativity to Careers

Exam Objectives:

Individuals who earn Certification in FabMaker Studio have demonstrated the mastery of the following content and skills:

Domain 1: Demonstrate understanding of technology characteristics and scope

- Explain how technology is linked with creativity, which results in innovation
- Describe the development of technology as a human activity as a result of needs and the ability to be creative.
- Understand the influence of history on technology

Domain 2: Demonstrate an understanding of engineering career pathways

- Identify necessary skills required for a career in engineering
- Describe changes which will have an impact on employment trends and future training
- Understand the breadth of engineering roles and types of engineers

Domain 3: Understand engineering design and apply the design process

- Demonstrate an understanding of the attributes of design
- Demonstrate best practices in applying design as a creative planning process

Domain 4: Understand FabMaker Studio software

- Identify elements of the FabMaker Studio interface and demonstrate knowledge of their functions
- Define the functions of commonly used tools in 2D design and fabrication
- Demonstrate knowledge of

Domain 5: Create designs using FabMaker Studio software as a prototype to engineering solutions

- Create new projects
- Work with the weld tool to create to shapes
- Show how prototypes model future production