

Name **Justin Millman**

### STUDY QUESTIONS FOR STEP 3

1. What is the function of the "Design Process"?

The design process is a systematic procedure used in industry to change ideas useable products for consumers or other manufactures that allows people to prepare a set of plans and specifications to guide builders and designers during the creation.

2. List in your own word the ten (10) steps involved in the design of a product or a structure:

1. Know and understand the issue at hand
2. Brainstorm plausible conclusions and complete freeform sketches of all ideas
3. Talk about the problem with other designers
4. Edit your ideas and your partners' ideas into a single, final sketch
5. Create a scale and begin preparations for a layout drawing
6. Prepare to draw all details and parts
7. Specify exact dimensions and attributes of all needed materials
8. Check each part for quality and accuracy and begin assembly
9. Test prototype for exhibitions of accuracy
10. Make any changes necessary

3. What is the "designer's" role in the "Design Process"?

The designer's role in the design process is to come up with possible solutions and to analyze the problem(s)

4. What is the "engineer's" role in the "Design Process"?

The engineer is responsible for selecting materials and making the prototype work properly.

5. What is the "technician's" role in the "Design Process"?

The technician is responsible for the 2D drawings and attention to detail

6. What is the "drafter's or detailer's" role in the "Design Process"?

Detailers and drafters are responsible for mathematics and physics principles as well as drawings of basic parts

7. What is the "illustrator's" role in the "Design Process"?

The illustrator is responsible for the highly detailed three-dimensional drawings

8. What is the "architect's" role in the "Design Process"?

The architect is responsible for planning and executing the construction of the prototype

9. A beginning drafter or cad operator is called a **novice** and can be promoted to an **apprentice** or a **designer**.

10. What is the purpose of a "Design Project Statement"?

The Design Project Statement is to provide basic information to the client about structure, site, cost, and estimated completion time

11. What is the purpose of a "Design Project Analysis"?

A Design Project Analysis is to detail the client's life style to determine specifics about the design