# **ENGINEERING** OPTION 1

### INFRASTRUCTURE

Discuss the aspects that are taken into consideration when designing infrastructure. Include the process of project management.

### ASSIGNMENT

 Create the framework of a modern residential home with classroom materials (popsicle sticks, cardboard, legos, etc.)

### **ADDITIONAL RESOURCES**

- <u>https://www.thespruce.com/framew</u> ork-4127807
- <u>https://todayshomeowner.com/gen</u> <u>eral/guides/house-framing-2/</u>

## **ENGINEERING** OPTION 2

### AUTOMATION

Discuss the inner workings of the manufacturing industry with a focus on automatic machinery. Include the aspects engineers consider when designing a piece of machinery for a specific task

### ASSIGNMENT

 In groups, create a blueprint for an existing piece of machinery in any STEAM field.

### ADDITIONAL RESOURCES

- <u>https://www.monarch-</u> <u>innovation.com/machine-design-</u> <u>types-and-procedure</u>
- <u>https://www.edrawsoft.com/make-</u> <u>home-blueprints.html</u>
- <u>https://katanamrp.com/blog/how-</u> to-read-manufacturing-blueprints/