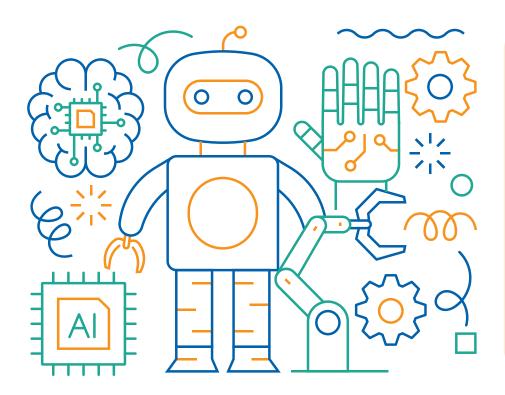


## MECHANICS

## **MECHANICAL DESIGN BASICS**

**CONCEPT** The design phase of a project is when all the important questions get asked and answered. Ask yourself: How should this part look, what will it be used for, and what should it do? This is where the creativity meets planning, so your project goes in the right direction.



## **BACKGROUND**

Mechanical Engineering has been around for thousands of years, along with it, the design stage. Robots performing tasks have been recorded as far back as 3,000 BC. with Egyptian water clocks. Human-looking figurines sounded the hour by striking the bells. These clocks had many moving parts and would have taken some time in the design phase.

## **REAL WORLD CONNECTIONS**

When designing a robot, you need to know exactly what task or tasks it will be performing. Once you have a clear picture of what it will need to do, you can begin to look for design solutions. Many design engineers look to nature for inspiration. Where can you see the actions you want to mimic being performed in nature? Take a look around.





