

Week_1

08/09/2023

Welcome to Robotics, Electronics and Engineering

Wednesdays 1:00 pm

Instructor: Coach Arthur Alton

Introduction to Robotics

You are starting on a **Grand Adventure**!!

Many have traveled this before you, and many will follow after you..

What does the word ROBOTICS Mean?

- What does the word 'robotics' mean? - The science or study of the technology associated with the design, fabrication, theory, and application of robots.
- What about 'robot'? - Robots are any machine



The science or study of the technology associated with the design, creation, and application of robots

Automation

The method of making a machine, a process, or a system work without being directly controlled by a person.



Design Process

Used to develop solutions to a problem



Engineer

A person who designs and builds complex products, machines, systems, or structures



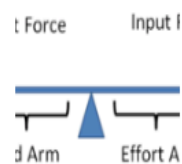
Engineering

The application of science to the goal of creating useful machines (like cars), structures (like bridges) or systems (like software)



Output

Result of input



Input

Information or event that causes something to happen



Sensors

A device that detects or measures a physical property and records, indicates, or otherwise responds to it



A Brief History of ROBOTICS

1 <https://www.youtube.com/watch?v=uoC2ZGRl8a8>

Activity:

-> Act like a Robot, Complete a walking course

Senses are very important for both humans and robots.

Our most important sense is vision. How can we complete a task using other senses than vision.

We need a few volunteers.

Teams of 2.

Work together to complete a course.

Blindfold

1<https://www.youtube.com/watch?v=uoC2ZGRI8a8>

Matching:

Questions:

A. Engineer

B. Input

C. Sensor

D. Automation

E. Design Process

F. Output

G. Engineering

1. The method of making a machine, a process, or a system work without being directly controlled by a human person
2. Used to develop solutions to a problem
3. A person who designs & builds complex products, machines, systems or structures
4. The application of science to the goal of creating useful machines (like cars), structures (like bridges) or system (like software)
5. The result of input
6. Information or event that causes something to happen
7. A device that detects or measures a physical property