



Learning Labs, Inc.

# xArm Industrial Robotics

the most affordable industrial cobot available



## CURRICULUM

### Principles of Robotics

History, Education & Career Paths, Mathematical Concepts, Safety, System Platforms and Ethics.



### ACTIVITY Search of Local Industries

SECTION 4

02 Could they host an onsite tour or virtual tour of have a company representative speak to the class?

Search local industries in your area that use robotic robotic arms.

### SECTION 3 A. Programs of Certification

1. Research many educational institutions offer courses in various fields, such as electronics, programming, mechanical systems, safety, fluid systems, and others, which can help students acquire the necessary knowledge



### SECTION 16 Robotics Programming

1. Text-Based Programming  
Popular text-based programming languages used in robotics include Python, C++, and JavaScript. Learning the syntax of learning with text-based programming languages. It requires much discipline to learn the flow of programming, and to keep from making errors or forgetting when commands don't work.



### ACTIVITY Quick Search & Group Discussion

SECTION 11

01 Class discussion.

02 What was the first robotic hand or the first walking robot?  
What are some other famous historical robot?



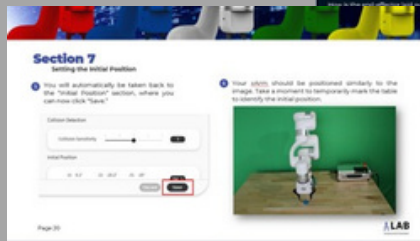
### SECTION 4 Careers in Robotics

As that can be pursued by those who are passionate learning or programming robots, there are numerous job will arise as a glowing light in determining your line of your degree or certification may not always be opportunities available in the field of robotics!



### Activity SECTION 13

Look up a machine drawing or blueprint of an end effector.



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### SECTION 2 The Many Fields of Robots

Across the globe, regardless of language or culture, it is common to see robotic arms performing various automated tasks. Nowadays, robotic arms are not just a novelty but a crucial production tool. Engineers, professors, researchers, and students constantly explore new ways to design or use robotic arms. Let's delve into how robotic arms are utilized in our society.



**Easy to Use**  
**Lightweight**  
**2 lbs Payload**  
**Powerful Joints**  
**Open-Source Platform**  
**ACCESSORIES**

mechanical gripper  
DC control module  
camera module  
vacuum gripper  
work-station  
bio gripper



ROS

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