

Task: Robot Actuator Analysis

Students will be provided with one video based on their assigned set.

Objective of the Task

The objective of this task is to help students develop:

- Observation and analysis skills.
- Understanding of robotic mechanisms.
- Identification of actuators and degrees of freedom.
- Functional analysis of robotic systems.

Instructions for Performing the Task

Watch the assigned video carefully and answer the following:

A robot is shown performing a specific task.

- Determine the number of actuators used by the robot.
- Identify the possible type of actuators.
- Justify your answer based on:
 - Motion observed
 - Independent movements
 - Degrees of freedom
 - Sequence of operations performed by the robot

Marks will be awarded based on the quality of analysis and justification.

Requirements for Submission

Students must submit:

- Separate PDF report containing the analysis for Question 5.
- Supporting sketches or screenshots (if required).

Mandatory Submission

- Screenshot showing successful login to Autodesk Viewer using the College Domain Email ID. (click on the left three horizontal lines on the left of screen that will make your email visible, take a screenshot and submit.)