



CERTIFICATE OF ACHIEVEMENT

BADGE KIT COMPLETION

This certifies that

Your Name

has completed every step of the badge kit

Program a robot arm

Girl Scouts Senior: Programming Robots

Stephen Souders

MYTEK LAB



October 30, 2026

DATE COMPLETED

SCOUT

Your Name

BADGE

Girl Scouts Senior: Programming Robots

Each step below was done with the kit **Program a robot arm**, finished October 30, 2026.

- ✓ Step 1: Learn about robots
- ✓ Step 2: Build a robot part: robot arm
- ✓ Step 3: Learn how robot systems work together
- ✓ Step 4: Learn about programming
- ✓ Step 5: Write a program for a robot

SAMPLE

For the troop leader

The troop awards the badge. Sign here when the scout has shown you the work.

LEADER SIGNATURE

DATE AWARDED

MY WORK

Your Name: Program a robot arm

Step 1. A robot arm I found, and the job it does:	(what the scout wrote)
Step 2. The joint that swings the arm around, and the one that bends it:	(what the scout wrote)
Step 2. What was hardest about placing the cube:	(what the scout wrote)
Step 3. Which part is the structure, the actuator, the sensor and the controller:	(what the scout wrote)
Step 3. What happens to the whole arm if one joint's motor fails:	(what the scout wrote)
Step 4. My task, and my flowchart as pseudocode:	(what the scout wrote)
Step 4. The inputs and outputs:	(what the scout wrote)
Step 4. The bug my partner found, and my fix:	(what the scout wrote)
Step 5. My program, in pseudocode or code:	(what the scout wrote)
Step 5. A bug I found and fixed:	(what the scout wrote)