

## Robotics & Engineering

Project units are designed for members 8-18 years old.

### Unit 1-3 - Junk Drawer Robotics

#### Inspiring youth to:

- Use everyday items to master robotics skills
- Learn about robotic arms that can complete tasks
- Learn about robotic movement
- Learn about mechatronics, electricity, and computer programming.

## Unit 4-6 - Platform Robotics Inspiring youth to:

- Learn to use a robotics kits such as:
  - Ardunio
  - FV3
  - Brushbot
  - Hexy
  - Pushbutton Programming
  - Cubelets
  - Robotic Arm Edge
  - Spark Fun RedBot
  - WeDo
  - Multiplo
  - NXT
  - TETRIX



# Unit 7 - Robotic Teams Inspiring youth to:

- Participate on a robotics team
- Use skills learned in previous units to build a robot and compete

### **Project Tips:**

- Take part in at least two leadership experiences each year
- Be sure to include your e-record in a secure binder with your exhibit
- If you plan to take a unit for more than one year, make sure your exhibit is different each year
- Enter your exhibit in the county fair

#### **Resources:**

- Exhibit & Judging Requirements
- Record Books
- Manual Information

Located at: Colorado4h.org

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