

# Outreach Through Merit Badges

Team 461

# Boy Scouts

---

- ✗ ~10 STEM related badges
  - ✗ Robotics
  - ✗ Programming
  - ✗ Engineering
  - ✗ Electronics
  - ✗ Space Exploration
- ✗ Get in contact with local troupes and have at public space or attend a jamboree
- ✗ Need a Boy Scout Accredited Merit Badge Provider



# Boy Scouts: Programming

---

- ✘ Boy Scouts Programming Badge Requirements
  - ✘ Safety
  - ✘ History
  - ✘ General Knowledge
  - ✘ Intellectual Property
  - ✘ Careers
  - ✘ Program in at least 3 languages



# Boy Scouts: Programming

---

## ✘ Activities

- ✘ Programming in Scratch
- ✘ Programming in HTML
- ✘ Programming in Python

## ✘ Materials

- ✘ Computers with internet access and text editors
- ✘ Scratch Software
- ✘ Python Software





# Boy Scouts: Robotics

---

## ✘ Activities

- ✘ Program robot to go in line, square, circle
- ✘ Program robot to respond to light
- ✘ Program robot to perform on Sumo mat
- ✘ Compete in Sumo competition

## ✘ Materials

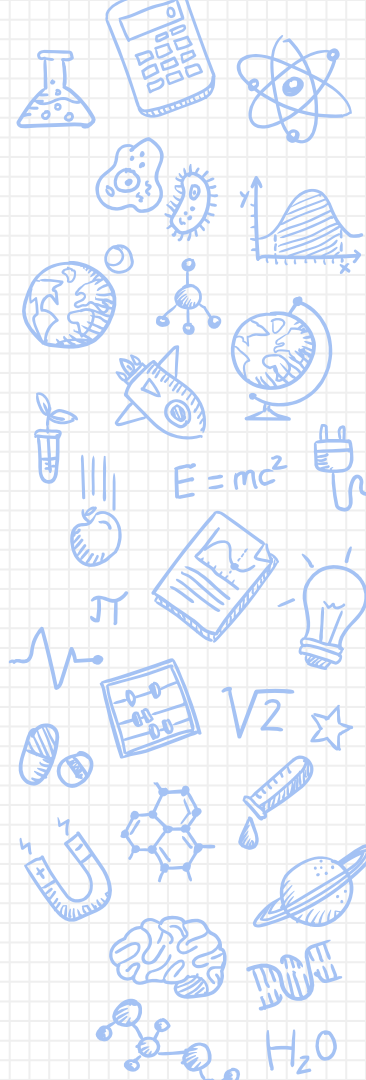
- ✘ NXT Mindstorms or EV3s
- ✘ Computers with NXT Mindstorms or EV3 Software



# Girl Scouts

---

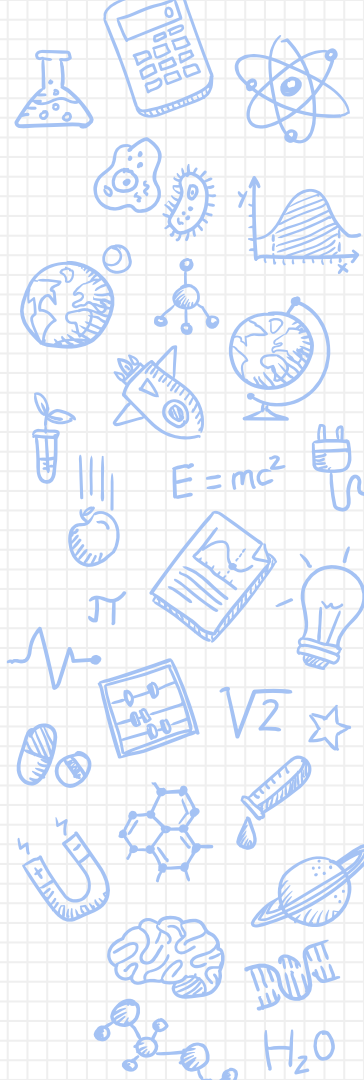
- ✗ Over 10 STEM related badges per age group
  - ✗ Programming, Designing, and Showcasing Robots
    - 3 hour combined 3 badge workshop
  - ✗ Cybersecurity Basics, Safeguards, and Investigator
- ✗ Get in contact with local troupes and use a local public space (library) or your meeting space
- ✗ Badges cost \$3 each



# Girl Scouts: Designing Robots

---

- ✗ Designing Robots Requirements
  - ✗ Explore how robots imitate nature
  - ✗ Learn about the parts of a robot
  - ✗ Plan your robot
  - ✗ Create a prototype
  - ✗ Get feedback on your robot









# Girl Scouts: Programming Robots

---

Programming Robots Badge Requirements:

- ✘ Learn how robots work
- ✘ Discover the robot brain
- ✘ Learn about programming
- ✘ Try simple programming
- ✘ Code a robot





# Girl Coders

---

- ✘ 2-Hour long Workshops
- ✘ [girlcoders.net](http://girlcoders.net)
- ✘ Free badges
- ✘ Over 15 different badges for grades K-12







Questions?





**For downloadable resources go to  
[boilerinvasion.org/documents](https://boilerinvasion.org/documents)**

