

## **AWARD/BADGE**

### **DESCRIPTION**



# Coding for Good 1: Coding Basics

Senior (Grades 9-10) STEM Explore how computer programming can make a positive difference in the world and write code you can share with others.

- 1. Use functions to create a self-portrait
- 2. Write code to create a portrait
- 3. Learn about computer logic
- 4. Explore "IF" statements
- 5. Use computer logic to create a quiz show

When you've earned this badge, you'll know how to code images and how computers make decisions.

### **GET THIS BADGE**



## Coding for Good 2: Digital Game Design

Senior (Grades 9-10) STEM Explore narrative video game design and how video games can help people understand the world and its issues.

- 1. Brainstorm your "game for good" scenario
- 2. Create a character for your game
- 3. Develop a decision tree for your game
- 4. Design your game
- 5. Playtest and iterate your game

When you've earned this badge, you'll know how video games use a story to move the game along, how players make decisions, and how games can make a positive difference in the world.

### **GET THIS BADGE**



# **Coding for Good 3: App Development**

Senior (Grades 9-10) STEM Collect and visualize data to develop a prototype for an app that supports your community.

- 1. Learn to collect and visualize community data
- 2. Write objects to organize and store data
- 3. Design a community data collection plan
- 4. Analyze your community data
- 5. Develop a prototype for a social app

When you've earned this badge, you'll understand JavaScript syntax, how to use arrays with community and social data, how to store data, and how to display it.



## **AWARD/BADGE**

### **DESCRIPTION**



Cybersecurity 1: Basics

Senior (Grades 9-10) STEM Explore how cybersecurity professionals keep computer networks safe.

- 1. Find out how computers run multiple programs
- 2. Identify functions and privileges
- 3. Learn how computers hide information
- 4. Design a layered security system
- 5. Design a Rube Goldberg machine

When you've earned this badge, you'll know the major principles of cybersecurity and understand how they work in real-life and in the cyber world.

### **GET THIS BADGE**



Cybersecurity 2: Safeguards

Senior (Grades 9-10) STEM Find out how to keep your data and devices safe wherever you go.

- 1. Protect your travel documents
- 2. Protect your Wi-Fi
- 3. Protect your conversations
- 4. Protect your electronics
- 5. Protect your environment

When you've earned this badge, you'll know how to protect your travel documents, Wi-Fi, digital conversations, electronics, and environment.

### **GET THIS BADGE**



Cybersecurity 3: Investigator

Senior (Grades 9-10) STEM Investigate and respond to a fictional cyber crime.

- 1. Look for clues about a fictional hack
- 2. Learn how traceroutes work
- 3. Solve a cybercrime
- 4. Role-play how to handle the crisis
- 5. Play a life-sized version of Minesweeper

When you've earned this badge, you'll know about insider threats and other security vulnerabilities for companies and organizations.



## AWARD/BADGE

### **DESCRIPTION**



**Digital Leadership** 

Senior (Grades 9-10)

Explore how to use technology safely and effectively, inspiring and motivating others to action.

- 1. Discover your digital landscape
- 2. Examine digital advertising
- 3. Advocate for yourself and others online
- 4. Create content for change
- 5. Expand your reach

When you've earned this badge, you will know how to use technology for positive change.

You'll also know how to make the internet a better place for yourself and others.

#### **GET THIS BADGE**



### **Game Visionary**

Senior (Grades 9-10) STEM Entrepreneurship Use your creativity and imagination to invent unforgettable games.

- 1. Break the ice
- 2. Imagine all the world's a board
- 3. Create a physical challenge
- 4. Get puzzled
- 5. Make an ultra scavenger hunt

When you've earned this badge, you'll be able to design and organize games that will bring people together for creative and thoughtful fun.

This badge comes in a packet that includes the Traveler, Voice for Animals, Game Visionary, Social Innovator, and Business Etiquette badges.

### **GET THIS BADGE**



### **Journey: Sow What?**

Senior (Grades 9-10) STEM Journey In this Journey, you will:

- 1. Learn about food: how and where it's grown, harvested, processed, distributed, and consumed, and why it matters.
- 2. Plan a Take Action Project to share your knowledge with others-host a farmers market, inspire others to eat locally, or plan a community vegetable garden.
- 3. Earn the Harvest Award. If you're a Girl Scout volunteer, go to Volunteer Toolkit for complete meeting plans and activity instructions.

Learn more about how to earn your Take Action Award - and help your community - with the **Girl Scout Take Action Guide**. Then use your leadership skills to earn your Gold Award, the highest award for Girl Scout Seniors and Ambassadors!

**Get This Journey** 



## AWARD/BADGE

### **DESCRIPTION**





In this Journey, you will:

- 1. Find out how citizen scientists make observations, collect data, and help scientists conduct scientific research.
- 2. Do 3 citizen science activities: make observations about your environment, design a way to test a hypothesis, and a SciStarter project. More Details →

If you're a Girl Scout volunteer, go to Volunteer Toolkit for complete meeting plans and activity instructions.

Learn more about how to earn your Take Action Award - and help your community - with the Girl Scout Take Action Guide. Then use your leadership skills to earn your Gold Award!

## Journey: Think Like a Citizen Scientist

Senior (Grades 9-10) STEM Journey





In this Journey, you will:

- 1. Find out how programmers use computational thinking to solve problems.
- 2. Do 3 computational thinking activities: create rules for how to stack cards to share messages and learn about encoding information, develop an algorithm for building a simple block arrangement, and test whether an app will meet a user's needs to explore user-centered design. More Details →

## Journey: Think Like a Programmer

Senior (Grades 9-10) STEM Journey Learn more about how to earn your Take Action Award - and help your community - with the **Girl Scout Take Action Guide**. Then use your leadership skills to earn your Gold Award, the highest award for Girl Scout Seniors and Ambassadors!





In this Journey, you will:

- 1. Find out how engineers use design thinking to solve problems.
- Do 3 design thinking activities: design and build prototypes of a can holder that isn't harmful to animals, a kinetic sculpture, and an assistive device for the elderly. More Details →

# Journey: Think Like an Engineer

Senior (Grades 9-10) STEM Journey Learn more about how to earn your Take Action Award - and help your community - with the **Girl Scout Take Action Guide**. Then use your leadership skills to earn your Gold Award, the highest award for Girl Scout Seniors and Ambassadors!



### AWARD/BADGE

### **DESCRIPTION**



# Robotics 1: Designing Robots

Senior (Grades 9-10) STEM Build a prototype of a new kind of robot that helps or replaces people who work in difficult or dangerous situations. Decide on a challenge, brainstorm solutions, plan, build a prototype, and test it to see how well it meets the challenge.

- 1. Pick a challenge
- 2. Explore possible solutions
- 3. Plan your prototype
- 4. Build a prototype
- 5. Get feedback on your robot

When you've earned this badge, you'll know how to design a robot and build a prototype.

### **GET THIS BADGE**



# Robotics 2: Programming Robots

Senior (Grades 9-10) STEM To understand more about how robots work, explore the parts and systems that make up a robot, and then learn about different ways to control a robot, including computer programming.

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

When you've earned this badge, you'll understand how robots work and how to control them.

### **GET THIS BADGE**



## Robotics 3: Showcasing Robots

Senior (Grades 9-10) STEM After engineers build their robots, they show them to others and enter them into challenges and competitions. Now that you've built your robot prototype, it's time to share your design with others.

- 1. Create a presentation about your robot
- 2. Present your robot pitch to others for feedback
- 3. Hold a mini robotics competition
- 4. Explore robotics opportunities in high school, college, and beyond
- 5. See robot makers and robots in action

When you've earned this badge, you'll know how to share your robot designs with the world.



## **AWARD/BADGE**

### **DESCRIPTION**



### **Science of Style**

Senior (Grades 9-10) STEM Art Use the science of style to create and imagine your own products.

- 1. Test skin care and makeup
- 2. Examine the science behind fabrics and accessories
- 3. Explore the science behind hair products and perfume
- 4. Investigate the sociology of style
- 5. Formulate future style

When you've earned this badge, you'll know the science behind makeup, perfume, fashion fabrics, and skin care products.

### **GET THIS BADGE**



# Senior STEM Career Exploration

Senior (Grades 9-10) STEM Explore how you might want to impact the world and how STEM can help you do it. Then, take the next step towards your goal for the future and start to make your mark.

- 1. Explore how you want to make a difference
- 2. Discover your career possibilities
- 3. Learn about the day-to-day
- 4. Find your career pathway
- 5. Take the next step

When you've earned this badge, you'll know how STEM can support your goals for the future and help build a better world.

### **GET THIS BADGE**



### Sky

Senior (Grades 9-10) Outdoors STEM The sky is a masterpiece. Every day it graces us with living art, whether through a glorious sunset, shifting cloud formations, or the stunning display of night stars. No wonder we take every opportunity to spend time outdoors. Our world is a stage, and the sky performs with beauty, wonder, and mystery.

- 1. Watch the skies
- 2. Investigate the science of the skies
- 3. Explore the connection between people and flight
- 4. Help clear sky pollution
- 5. Create sky art

When I've earned this badge, I'll understand the sky -- from science to stars to stories.



## **AWARD/BADGE**

### **DESCRIPTION**



Social Innovator

Senior (Grades 9-10) STEM Entrepreneurship Find out how you can go from identifying a social problem to developing a social solution. Then, use what you learned to create Take Action projects that truly do change the world.

- 1. Explore the big picture
- 2. Make connections
- 3. Build empathy for people affected by the issue you've identified
- 4. Develop a solution from a specific point of view
- 5. Practice pitching ideas and getting feedback <u>More Details →</u>

When you've earned this badge, you'll know how to think like a social innovator.



Space Science Expert

Senior (Grades 9-10)
Outdoors
STEM

Explore light and discover what it teaches us about the Universe!

- 1. Uncover the stuff you're made of
- 2. Explore the brilliance of the stars
- 3. Discover telescopes as light collectors
- 4. Find the light in the darkness
- 5. Share your knowledge

When you've earned this badge, you'll understand more about the Universe-your place in it and how light is used to make discoveries about it.

### **GET THIS BADGE**



**Truth Seeker** 

Senior (Grades 9-10) STEM Life Skills Gain the skills you need to separate fact from fiction and judge sources on credibility, accuracy, reasonableness, and support for their claims.

- 1. Evaluate your sources
- 2. Investigate what the experts say
- 3. Be a wise consumer
- 4. Find truth in your everyday life
- 5. Become a citizen journalist <u>More Details →</u>

When you've earned this badge, you'll be able to figure out what is true in the media, online, and what you hear in your daily life.



## **AWARD/BADGE**

## **DESCRIPTION**



### **Website Designer**

Senior (Grades 9-10) STEM Art Build yourself a safe space online where you can show your readers what moves you.

- 1. Find a worthwhile subject for your website or blog
- 2. Be the host with the most
- 3. Build a blueprint
- 4. Create must-see content
- 5. Go live-then drive!

When you've earned this badge, you'll know how to design, build, and promote your own website.

This badge comes in a packet that includes the Website Designer, Women's Health, Troupe Performer, Science of Style, and Novelist badges.