



DAISIES TO SENIORS  
**GIRL SCOUT  
PROGRAMS**



**Marshall Steam Museum**  
*at Auburn Heights*

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education@auburnheights.org

# ABOUT US

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The Marshall Steam Museum features the world's largest collection of operating Stanley steam cars! Our collection also includes a 1914 Ford Model T, a 1916 electric car, and two 1930s Packards, plus the 1/8-size Auburn Valley Railroad with two coal-fired steam locomotives and a diesel-style train as well as Lionel electric trains display and so much more.

Nestled in the small town of Yorklyn, Delaware, the museum is operated by the Friends of Auburn Heights, Inc. a 501(c)3 non-profit.

### Email

[Education@auburnheights.org](mailto:Education@auburnheights.org)

### Phone Number

302-239-2385

### Website

[www.auburnheights.org](http://www.auburnheights.org)

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Friends of Auburn Heights  
P.O. Box 61  
Yorklyn, DE 19736

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Auburn Heights  
3000 Creek Road  
Yorklyn, DE 19736

# AUTOMOTIVE ENGINEERING BADGE DAISIES

Daisies looking to complete the Automotive Engineering badge series can do it in one day! You will get an introduction to car manufacturing, design, and engineering while among automobiles of the past. Components of the program include learning the parts of vehicles, how to sketch, design & test prototypes, creating engineering plans, and how to develop your own assembly lines!

Program length: 2 hours

Cost: \$20/scout participant; \$8/adult

Maximum group size (including adults): 20

Program features:

- Interactive tour of the Marshall Steam Museum
- Viewing antique autos
- Hands-on activities with recycled materials



*Assembly line game*

## BADGE INCLUDES:

### Automotive 1: Design

Buckle up and explore how automotive designers imagine and make plans for a new vehicle, like a car or truck. Then, design your own!

1. Choose special features for your vehicle.
2. Sketch your vehicle. Use our antique autos as inspiration!
3. Sculpt and share your vehicle.

When you've earned this badge, you'll know how people design cars.

### Automotive 2: Engineering

Discover how automotive engineers turn ideas into real cars! Then build, test, and improve a model of a vehicle.

1. Create your automotive engineering plan.
2. Build a vehicle prototype out of recycled materials.
3. Test your vehicle prototype.

When you've earned this badge, you'll know how automotive engineers work together to build cars and other vehicles.

### Automotive 3: Manufacturing

Fire your engines and find out how automotive manufacturers build, and test vehicles to make sure they're ready for the road.

1. Explore efficient manufacturing and assembly lines
2. Create an assembly line to manufacture vehicles by playing a fun game!
3. Examine and test your vehicles for quality

When you've earned this badge, you'll know how manufacturers assemble high-quality vehicles.

# AUTOMOTIVE ENGINEERING BADGE BROWNIES

Brownies looking to complete the Automotive Engineering badge series can do it in one day! For this badge, you will explore transportation and mobility, simple and compound machines, efficiency, and quality assurance. You will expand upon these lessons by building engineering plans and prototypes for emergency vehicles!

Program length: 3 hours

Cost: \$30/scout participant; \$8/adult

Maximum group size: 20

Program features:

- Interactive tour of the Marshall Steam Museum
- Hands-on activities with recycled materials



## BADGE INCLUDES:

### Automotive 1: Design

Find out how automotive designers come up with ideas for new vehicles. Then take the wheel and design your own!

1. Explore how people move from place to place, in the past and present.
2. Discover and choose your vehicle's design criteria. Be inspired by vehicles of the past!
3. Sketch a vehicle to meet your criteria.
4. Sculpt and share your vehicle.

When you've earned this badge, you'll know how to design, sketch, and sculpt a vehicle.

### Automotive 3: Manufacturing

Experience the importance of having a plan, and discover how manufacturers build lots of vehicles that are safe and well made!

1. Experience and learn about the manufacturing process by exploring our automobile collection.
2. Plan your own automotive manufacturing process and create a set of vehicles using recycled materials.
3. Set up shop and share your automotive manufacturing process.

When you've earned this badge, you'll know how vehicles are manufactured in a factory. You'll also know how to make and test products for people to buy.

### Automotive 2: Engineering

Get in gear and explore how automotive engineers build vehicles. Then engineer your own model of a vehicle to help people during an emergency!

1. Learn about simple machines through a fun activity.
2. Design a vehicle for safety based on criteria.
3. Build a vehicle prototype out of recycled materials.
4. Test and revise your vehicle prototype.
5. Share your vehicle prototype and testing results.

When you've earned this badge, you'll know how automotive engineers plan, build, test, and improve vehicles.

# AUTOMOTIVE ENGINEERING BADGE JUNIORS

Juniors looking to complete the Automotive Engineering badge series can do it in one day! If you're ready to take your car smarts to the next level, explore the future of mobility and automotive design. You will learn about specialized vehicles, market research, and environmental sustainability, culminating in an engineering plan for an alternative fuel vehicle!

Program length: 3 hours

Cost: \$30/scout participant; \$8/adult

Maximum group size: 20

Program features:

- Interactive tour of the Marshall Steam Museum
- Viewing antique autos
- Learn about historic figure Alice Ramsey



## BADGE INCLUDES:

### **Automotive 1: Design**

Do you want to take a ride in your dream car? Before you can do that, you need to design it! Discover how to create vehicles by sketching and sculpting a model.

1. Explore mobility across time. Learn about Alice Ramsey, the first woman to drive across the U.S. in a car!
2. Conduct automotive market research. Look at ads from the past as inspiration.
3. Create and sketch your vehicle's design criteria.
4. Sculpt and share your vehicle.

When you've earned this badge, you'll know about innovation and market research. You'll know how to create criteria, sketch, and sculpt a vehicle.

When you've earned this badge, you'll know how to design, sketch, and sculpt a vehicle.

### **Automotive 2: Engineering**

### **Automotive 2: Engineering**

Find out how automotive engineers fuel the future by building and testing vehicles. Then, create your own model of an alternative fuel vehicle!

1. Learn about simple machines in vehicles through a fun activity.
2. Engineer a vehicle that uses alternative fuel. Discover early gas, steam and electric cars in the museum!
3. Build a vehicle prototype out of recycled materials.
4. Test and revise your vehicle prototype.
5. Share your vehicle prototype and testing results.

When you've earned this badge, you'll know how to use the Design Thinking Process to plan, build, test, and improve prototypes.

### **Automotive 3: Manufacturing**

Explore how automotive manufacturers build lots of vehicles without wasting time and how they make sure the vehicles are ready for the road!

1. Experience the manufacturing process and discover how cars in the past were made.
2. Learn about the automotive manufacturing process and plan your own to manufacture a set of vehicles out of recycled materials.
3. Innovate your automotive manufacturing process and share the results.

When you've earned this badge, you'll know how high-quality vehicles are manufactured.

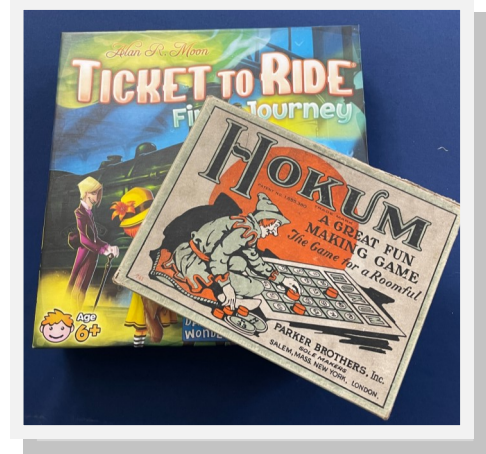
# MECHANICAL ENGINEERING BOARD GAMES

Get your game on! We'll take learning from "bored" to board game with these mechanical engineering badge requirements. You will also discover how they can use board game creation as a way to convey information and learn history. You'll play historical games, including ones inspired by the Auburn Heights collection, and try out modern ones. While doing so, discover the basics of game theory, the ins and outs of tabletop gaming and have a chance to design your own!

Program features:

- Interactive tour of the Marshall Steam Museum
- Chance to play historical and modern games
- Gaming theory and design

See Price List (page 9) for cost and capacity



## **Board Game: Daisy**

Create board games and engineer your own game spinner

1. Come up with an idea for your board game. Be inspired by historical ones in our collection or by modern ones!
2. Design a spinner for your game. We love using recycled materials here!
3. Using the engineering process, test your game and make it better. The best way to test it is to play it!

When you've earned this badge, you'll have created your own board game and learned what inventors and engineers do.

## **Game Visionary: Senior**

Use your creativity and imagination to invent unforgettable games:

1. Learn how to "break the ice" with a game.
2. Imagine all the world's a board. Use our collection as inspiration to create a game!
3. Get up and move! Create a physical challenge activity.
4. Get puzzled with different types of mind-bending games.
5. Make an ultra scavenger hunt for our site or your home.

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.

## **Making Games: Brownie**

Use your imagination to make up new games:

1. Try a scavenger hunt (and go one in the museum!)
2. Make up a mystery game...
3. Create a party game and learn how they can bring people together.
4. Change up the rules on a game. How does it alter how the game is played?
5. Invent a whole new sport or game!

When you've earned this badge, you'll know how to create new games and share them with others.

# FUN PATCH

## Fun Patch: A Cross Country Road Trip

What travel was like for the first woman to drive an automobile across the U.S. in 1909? Discover Alice Ramsey's story by going on a road trip! Unpack her travel suitcase, select a car for the journey and see if you can make the trip with a fun game. Join us for a cross-country adventure! Scouts who complete this will earn a fun patch.

### Virtual option:

Cost: \$5/scout

Capacity: Up to 30 participants

Length: 1 hour

### Program features:

- Historic artifact exploration
- Chance to play a “choose your own adventure” virtual game about Alice’s journey
- Activity packet and access to virtual game

### In-Person:

\$10/scout; \$8/adults

Capacity: Up to 20 participants

Length: 1 hour

### Program features:

- Includes admission and time to explore the Marshall Steam Museum
- Chance to play a “choose your own adventure” game
- Historic artifact exploration
- Hands-on activity



# COMING SOON

We are working to add more badges to our line-up! Here are a few badges we are looking to add by 2023:

## Mechanical Engineering badges

- Model Car (Daisies)
- Race Car (Brownies)
- Balloon Car (Junior)
- Car Care (Senior)

## Inventor badge

- Brownies

## Journey: Think Like an Engineer badges

- Daisy
- Brownie
- Junior
- Senior

Check our website for updates or let us know if you're interested in any of these!

Email: [education@auburnheights.org](mailto:education@auburnheights.org)

Website: [www.auburnheights.org/learn/scouting](http://www.auburnheights.org/learn/scouting)





# GET INVOLVED

At the Marshall Steam Museum, a 501c3 non-profit, we also offer volunteer opportunities for your troop! These opportunities can be one-time or ongoing. We are always looking for help and would love to have your troop involved. Please reach out to our Director of Public Programs ([education@auburnheights.org](mailto:education@auburnheights.org)) if you are interested or want to learn more.

## Steamin' Days

The signature event for our site! These happen the first Sundays June—November and attract over 300 people each time. At this event guests can experience what travel was like at the dawn of the automotive age by climbing into an antique automobile, taking a ride on our small-scale train, exploring the museum and more!

Potential roles for your scouts:

- Assisting with facilitating kids activities
- Helping park cars
- Street crossing and safety

## Egg Hunts

This annual event occurs on the Friday and Saturday of Easter weekend. Here guests can enjoy egg hunts with the backdrop of our picturesque site. This popular event sells out every time! Potential roles for your scouts:

- Stuffing plastic eggs with candy and toys (in advance of the event)
- Monitor age groups during the hunt; help hide eggs between groups.
- Sorting through returned plastic eggs (post-event)

## Reach Out!

We often have other opportunities that pop up throughout the year. Connect with us to discuss some possibilities!



# PRICE LIST

Please contact us to book your program or for more information:

**Office:** 302-239-2385

**Email** [education@auburnheights.org](mailto:education@auburnheights.org)

**Online Form:** [www.auburnheights.org/learn/scouting](http://www.auburnheights.org/learn/scouting)

**Website:** [www.auburnheights.org](http://www.auburnheights.org)

Automotive Engineering: All Three Badges	Program Length	Scout	Adult
Daisy Program	2 hours	\$20	\$8
Brownie Program	3 hours	\$30	\$8
Junior Program	3 hours	\$30	\$8

Mechanical Engineering: Board Games	Program Length	Scout	Adult
Daisy Program	2 hours	\$15	\$8
Brownie Program	3 hours	\$25	\$8
Senior Program	3 hours	\$25	\$8

# ADD-ONS

Make the most of your time with us by adding on something special. Please note that each add-on will extend your time with us by an additional 30–60 minutes.

- Tour of the historic Marshall mansion, home to three generations, and part of Auburn Valley State Park. Cost is \$8 per adult and \$4 per scout.
- Take a scenic train ride on our 1/8th-size railroad! Cost is \$280 for up to 30 participants.

*All rides are taken at the rider's risk and are weather-dependent. In case of heavy rain, thunder, etc., the Marshall Steam Museum staff has the right to cancel train rides.*

