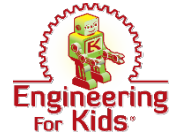


Engineering For Kids

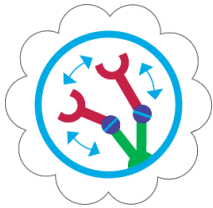
Girl Scout Badge Correlations



Girls Scouts just introduced new STEM badges to offer girls even more opportunities to learn skills and empower themselves with the experiences they need to succeed in life. Engineering For Kids has the lessons needed to help your Girl Scout troop acquire their badges. Contact us at mpls@engineeringforkids.net or call (763) 473-0362 to discuss this awesome opportunity!

Daisy Badges

Kindergarten and 1st Grade



Design a Robot

Corresponding Engineering For Kids Lessons:

Junior Robotics:

- Any Lesson from the Manual (60-minute workshop)

Junior Summer Camp - Inventor's Workshop:

- Robot Wind-Up (60-180-minute workshop)
- Sketch Bot (60-180-minute workshop)
- Tinker Bot (60-180-minute workshop)



How Robots Move

Corresponding Engineering For Kids Lessons:

Junior Robotics:

- Any Lesson from the Manual (60-minute workshop)

Junior Summer Camp - Inventor's Workshop:

- Robot Wind-Up (60-180-minute workshop)
- Sketch Bot (60-180-minute workshop)
- Tinker Bot (60-180-minute workshop)



Model Car Design Challenge

Corresponding Engineering For Kids Lessons:

Junior Mechanical Engineering:

- Rolling Rambler (60-minute workshop)



Roller Coaster Design Challenge

Corresponding Engineering For Kids Lessons:

Junior Mechanical Engineering:

- Marble Roller Coaster (60-minute workshop)



What Robots Do

Corresponding Engineering For Kids Lessons:

Junior Robotics:

- Any Lesson from the Manual (60-minute workshop)

Junior Summer Camp - Inventor's Workshop:

- Robot Wind-Up (60-180-minute workshop)
- Sketch Bot (60-180-minute workshop)
- Tinker Bot (60-180-minute workshop)



Computer Expert

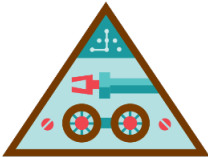
Corresponding Engineering For Kids Lessons:

LEGO® Robotics – Robotics 101:

- Robot Intelligence (180-minute workshop)

Electronic Game Design:

- Pong Session (90-minute workshop)



Designing Robots

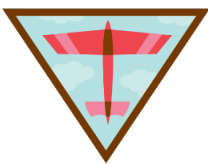
Corresponding Engineering For Kids Lessons:

LEGO® Robotics – Robotics 101:

- Robot Intelligence (180-minute workshop)
- Bouncing off the Walls (180-minute workshop)
- Sumobots (180-minute workshop)

LEGO® Robotics – Envirobots:

- Smart Food Miles (180-minute workshop)
- Rapid Recycle (180-minute workshop)



Fling Flyer Design Challenge

Corresponding Engineering For Kids Lessons:

Aerospace Engineering:

- Airplanes (90-minute workshop)
- Straw Rockets (90-minute workshop)
- Bottle Rockets (90-minute workshop)



Home Scientist

Corresponding Engineering For Kids Lessons:

Chemical Engineering:

- Utility Dough (90-minute workshop)
- Ice Cream Factory (90-minute workshop)



Inventor

Corresponding Engineering For Kids Lessons:

Any Engineering For Kids lesson could be used for this badge. Including:

- Electrical Engineering: Flashlight Builder (60-90-minute workshop)
- Environmental Engineering: Soda Ring Challenge (60-90-minute workshop)
- Aerospace Engineering: Lunar Lander (90-minute workshop)
- Industrial Engineering: It's a Breeze (60-90-minute workshop)
- Mechanical Engineering: Coasters 101 (90-minute workshop)
- Birthday Party Add-On: Lip Gloss + Flub (60-90 minute workshop)



Programming Robots

Corresponding Engineering For Kids Lessons:

LEGO® Robotics – Robotics 101:

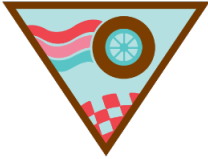
- Arm Flexing (180-minute workshop)

LEGO® Robotics – DaVini's Designs

- Smart Siege (180-minute workshop)

LEGO® Robotics – Envirobots:

- Solar Roller (180-minute workshop)



Race Car Design Challenge

Corresponding Engineering For Kids Lessons:

Mechanical Engineering:

- Rubber Band Racer (90-minute workshop)
- Custom Dragster (90-minute workshop)



Showcasing Robots

Corresponding Engineering For Kids Lessons:

LEGO® Robotics - RoboGames

- Hungry, Hungry Robots (180-minute workshop)
- Paddleball Smash 'em (180-minute workshop)

LEGO® Robotics – Robo Battles:

- Tug of War (180-minute workshop)
- Jousting (180-minute workshop)
- Sumo Bots (180-minute workshop)



Snacks

Corresponding Engineering For Kids Lessons:

Chemical Engineering:

- Ice Cream Factory (90-minute workshop)
- Utility Dough (90-minute workshop)

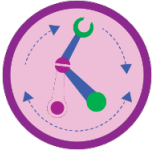


Animal Habitats

Corresponding Engineering For Kids Lessons:

Environmental Engineering:

- Soda Ring Challenge (60-90-minute workshop)
- Slick Solutions (60-minute workshop)



Designing Robots

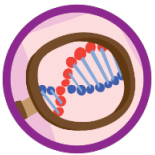
Corresponding Engineering For Kids Lessons:

LEGO® Robotics – Robotics 101:

- Robot Intelligence (180-minute workshop)
- Bouncing off the Walls (180-minute workshop)
- Sumobots (180-minute workshop)

LEGO® Robotics – Envirobots:

- Smart Food Miles (180-minute workshop)
- Rapid Recycle (180-minute workshop)



Detective

Corresponding Engineering For Kids Lessons:

Environmental Engineering:

- Purify It! (60-minute workshop)
- Slick Solutions (60-minute workshop)

Engineer Investigators – Summer Camp:

- Crack the Code (60-minute workshop)
- Identification Lab (60-minute workshop)
- Car Crash Clean-Up (60-minute workshop)
- Ransom (60-minute workshop)
- Liar, Liar (60-minute workshop)



Entertainment Technology

Corresponding Engineering For Kids Lessons:

Mechanical Engineering:

- Coasters 101 (90-minute workshop)

Aerospace Engineering:

- Straw Rockets (90-minute workshop)

Electrical Engineering:

- Levitrons (90-minute workshop)

Electronic Game Design:

- Pong Session (90-minute workshop)

LEGO Robotics Mindstorms:

- Robot Intelligence (180-minute workshop)



Musician

Corresponding Engineering For Kids Lessons:

Junior Mechanical Engineering - Toys:

- Good Vibrations Guitar (60-minute workshop)

Hardware Engineering:

- Veggie Potato (90-minute workshop)
- Kelvin's Guitar (90-minute workshop)



Product Designer

Corresponding Engineering For Kids Lessons:

Chemical Engineering:

- Utility Dough (90-minute workshop)

Electrical Engineering:

- Flashlight Builder (60-90-minute workshop)

Mechanical Engineering:

- Catapults (90-minute workshop)

Aerospace Engineering:

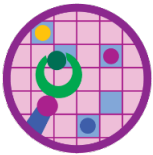
- Lunar Lander (60-90-minute workshop)

Industrial Engineering:

- It's a Breeze (60-90-minute workshop)

Birthday Party Manual:

- Add-On: Lip Gloss + Flub (60-90 minute workshop)



Programming Robots

Corresponding Engineering For Kids Lessons:

LEGO® Robotics – Robotics 101:

- Arm Flexing (180-minute workshop)

LEGO® Robotics – DaVini's Designs

- Smart Siege (180-minute workshop)

LEGO® Robotics – Envirobots:

- Solar Roller (180-minute workshop)



Showcasing Robots

Corresponding Engineering For Kids Lessons:

LEGO® Robotics - RoboGames

- Hungry, Hungry Robots (180-minute workshop)
- Paddleball Smash 'em (180-minute workshop)

LEGO® Robotics – Robo Battles:

- Tug of War (180-minute workshop)
- Jousting (180-minute workshop)
- Sumo Bots (180-minute workshop)



Simple Meals

Corresponding Engineering For Kids Lessons:

Chemical Engineering:

- Ice Cream Factory (90-minute workshop)



Special Agent

Corresponding Engineering For Kids Lessons:

Environmental Engineering:

- Purify It! (60-minute workshop)
- Slick Solutions (60-minute workshop)

Engineer Investigators – Summer Camp:

- Crack the Code (60-minute workshop)
- Identification Lab (60-minute workshop)
- Car Crash Clean-Up (60-minute workshop)
- Ransom (60-minute workshop)
- Liar, Liar (60-minute workshop)