

## Iowa 4-H Robotics Overview for 2020-2021

Join us for a fabulous year of Iowa 4-H robotics! Here is an overview of the monthly challenges offered by Iowa 4-H. The challenges can be done online (with a kit and educator support) or in-person with a team. To access the monthly challenges please visit:

<https://www.extension.iastate.edu/4h/projects/robotics>

**Standard materials needed each month per person or small group:** Computer with internet access, LEGO Mindstorms EV3 or Hummingbird Bit Premium Kit or Ozobot or Edison robot, glue gun, masking tape, cardboard, scissors, construction paper, markers, crayons, tubes, disposable cups, popsicle sticks, craft foam sheets, additional craft supplies

Month	Challenge (Design, build, program, test, and share a robot that...)	Real-World Connection	Extra Materials
October	can autonomously explore an environment	Self-driving cars, space rovers	Cell phone
November	can cook a meal	<a href="#">Robot burger shop in San Francisco makes dining cheaper</a>	
December	will locate and transport the things you need	Warehouse Kiva robots	
January	can play music and/or dance	<a href="#">Marimba-playing robot and robotic assistive tech for a drummer</a>	
February	can make a piece of visual art	<a href="#">Scribit robot</a>	
March	can take care of a farm, plant a seed	Agricultural robotics	Egg carton, seeds, soil
April	can make custom products	Manufacturing, entrepreneurship	
May	mimics an animal	<a href="#">Animals inspire some robotic designs</a>	

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