

## Beyond camping, canoeing, Boy Scouts add robotics

April 8 2011, By HOLLY RAMER, Associated Press



This photo released April 7, 2011 by the Boy Scouts of America shows a new Robotics merit badge, which depicts NASA's Mars rover. The badge will be unveiled next week as part of its efforts to emphasize science, technology, engineering and math. (AP Photo/Boy Scouts of America) NO SALES

(AP) -- Can a robot pitch a tent? If so, a Boy Scout who builds one might be able to earn two merit badges at once.

The Boy Scouts of America, which offers more than 120 badges ranging from archery to wilderness survival, next week will unveil a robotics merit badge meant to promote science, technology, engineering and math, fields collectively known as STEM. In doing so, the 101-year-old



Texas-based organization is trying to remain relevant and better reflect boys' interests, said Matt Myers, who oversees the Boy Scouts' STEM initiative.

Badges have been dropped over the years - blacksmithing and beekeeping for example - and replaced with new versions more in line with skills boys need to succeed, he said.

"Last century, camping was an essential survival skill. Sometimes, you might have had to live outside in the 1900s to survive. We view STEM as an essential survival skill in the 21st century," he said Thursday. "We're just trying to keep relevant with what kids need to learn."

Officials expect at least 10,000 of the nation's 2.7 million Boy Scouts to earn the new badge in the next year, compared with the roughly 500,000 who earn the most popular badge - first aid - each year.

Those earning the badge will be required to design and build a <u>robot</u> while learning about <u>robot</u> movement, sensors and programming.

The Boy Scouts have added four new badges in the last five years; the most recent was the Inventing badge introduced last June. Developing the robotics badge requirements took 14 months and involved help from more than 150 scouts, their leaders and industry professionals. Ken Berry, who led the effort, said the badge is a bit overdue given that hundreds of thousands of children and teens already are participating in robotics competitions around the country.

"We're promoting stretching of the mind like athletics promotes stretching of the body," said Berry, assistant director of the Science and Engineering Education Center at the University of Texas at Dallas.

The beauty of robotics is that it combines engineering, math and



computer science in a fun format that even young Scouts can master, Berry said.

"There's a low floor and a high ceiling with regard to robotics," he said.
"It's very easy to get into, and you can go a long, long way."

Berry, an Eagle Scout himself, said he would have loved the chance to earn a robotics badge as a teen. Now 49, he remembers learning about radios and electronics as a Boy Scout, but there wasn't much opportunity for hands-on building.

"One of the biggest problems we have for high school kids and Boy Scouts included, is that there aren't a lot of opportunities to tinker and experience what it's like to be an engineer, so when they get to the college level, students are often ill prepared to do an engineering degree," he said.

NASA, which allowed its Mars rover to be depicted on the badge, also agreed to take 100 patches into space on the Endeavour shuttle mission. Those badges will be distributed through an online contest.

"I think it would be cool," said Kyle Vachon, 11, of Auburn, N.H., who has earned badges in first aid and carpentry and is working on a badge in personal management.

Ten-year-old Josh Cerniglia of Atkinson, N.H., was also enthusiastic, since he has attended a robotics summer camp and enjoyed working on a build-your-own circuit kit.

"It's a bit strange because most of (the badges) have to do with camping, and robotics doesn't have to do a lot with camping," he said. "But I think as soon as I'm finished with fishing, I'll try to go for it."



The new badge will be formally announced Tuesday and unveiled Saturday in Boston during one of more than 75 events being held around the country to mark National Robotics Week. The Boston event is sponsored by iRobot Corp., one of the companies that helped develop the badge requirements.

©2010 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.

Citation: Beyond camping, canoeing, Boy Scouts add robotics (2011, April 8) retrieved 23 April 2024 from <a href="https://phys.org/news/2011-04-canoeing-boy-scouts-robotics.html">https://phys.org/news/2011-04-canoeing-boy-scouts-robotics.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.