

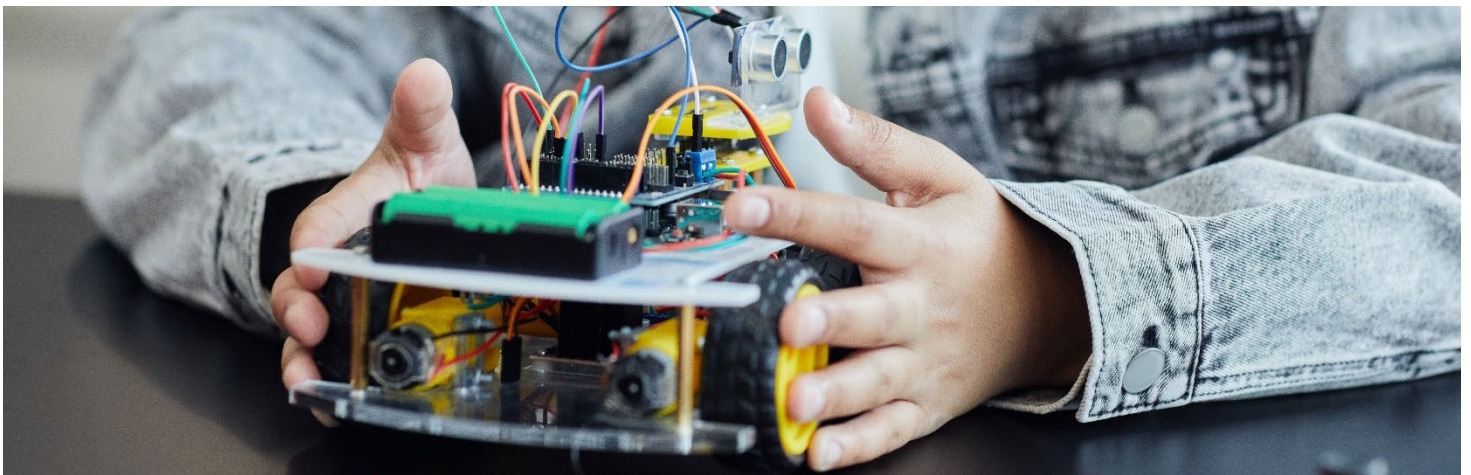
# Innovation Proposal: First Robotics Competition

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## Proposed Innovation

Students will design, build, program, and drive a robot to compete in a robotics competition. Students will use computer-assisted design (CAD) to develop a prototype, fabricate mechanical and electrical systems, and program their robot using Python. After refinement, students will travel to a competition to compete against other robotics teams.

## Purpose and Potential

The goal of this alternative curriculum is to foster science, engineering, math, and technology (STEM) skills while allowing students to lead project management during the engineering design process. Students will gain hands-on project-based skills including collaboration, organization, time management, marketing, and communication skills.

### Courses Include

after school sessions  
three days a week and  
some Saturday  
instruction from August  
through April.

### Student Outcomes

will be measured on a variety  
of skills at the start and end  
of the project including  
leadership, CAD, program,  
design, marketing, and  
fabrication skills.

### Funding

Grant funding will be  
used for materials  
including aluminum  
stock, electric motors,  
control boards,  
pneumatic cylinders, and  
various hardware.

*Under House Bill 386, Local Education Agencies can approve up to \$5,000 in grant funding for innovation programs. The innovation outlined here is one example that has been approved for implementation. Learn more at [schools.utah.gov/ulead](https://schools.utah.gov/ulead)*