Autonomous Innovative Vehicle Design

WHERE STEM MEETS THE ROAD!
Building upon a toddler “jeep” platform, students are introduced to C programming, Python, GPS technologies, Arduino, and motion sensors as they re-tool it to perform various tasks autonomously within a connected vehicle theme. Students apply authentic, real world engineering and technology skills in this dynamic project.

LEARN MORE AT
http://www.squareonenumerk.org/autonomous

STUDENTS SOLVING REAL-WORLD PROBLEMS
The teams’ vehicle performance scores are based upon the level of autonomy and complexity of tasks they are able to achieve including obstacle avoidance, platooning, and parallel parking. Square One provides training, project parameters, on-going support, and a premiere competition event as well as exposure to career pathways in the mobility industry.

TEAMWORK & SOFT SKILLS
Students work collaboratively toward the project’s solution, managing timeline, budget, and public speaking.

CREATIVITY
Square One offers resources and connections; students decide what they want their project to look like. Missions are open ended with more than one “right answer.”

INNOVATION
Student teams design, build, test, modify and re-engineer an innovative solution.

SKILLS
Students apply skills they’ve learned in class, critical thinking, and problem solving.

IDEAS
Students advocate their ideas to integrate features while setting targets for success.

SAFETY
Student teams are given strict guidelines for safety considerations within project parameters, gaining useful lifelong skills.

FIRST YEAR STARTER KIT AND REGISTRATION COST: $2,500

WHAT YOU GET:
- Hands on teacher/student training, including SCECHs
- Starter kit (includes the vehicle!)
- Classroom curriculum
- Entry fee for challenge competition
- On-going technical support
- Exposure to industry career pathways

TO SIGN UP TO MOBILIZE STEM IN YOUR CLASSROOM, EMAIL US HERE:
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