## Afterschool Club Budding STEM Engineer projects Kindergarten through 5th Grade

Fall session (8 weeks) – September – December (\$190) Winter/Spring Session (10 weeks) – February – May (\$225)



Structural Engineer: (Fall/Winter/Spring Session) K – 5th Build model bridges - Learn about the different typets of bridges and how they are built to support load - Build and investigate various types of bridges.

3rd – 5th will study the history, function, structural design, geometry and strength of bridge e.g. Beam, Truss, Cantilever and Bascule Bridges.



**Mechanical Engineer:** (Fall/Winter/Spring Session) K – 5th Learn about different types of simple machines and how they function to make work easier. E.g. Gears, Levers, Pulleys - Build and investigate various types of machines



**Environmental Engineer**: (Fall/Winter/Spring Session) K – 5th Save the environment! Learn about various alternative energy sources by building and investigating an eco-house, an eco-city, models of hydro-powered systems and solar-powered vehicles!



**Electrical Engineer:** (Fall/Winter/Spring Session) K – 5th Electrical components: Resistors, Capacitors, Diodes, etc. and application in systems - illustrated by building FM radios, lie detectors, Automated streetlamps and having fun with flying saucers.



**Robotics Engineer:** (Winter/Spring session) Build your own robot while learning about electrical circuit theory, electrical components, servo motors, photo-resistors, infrared sensors and transmitters.

## Where: School Classroom

How much: Fall Session \$190 participant/Session (all materials included) Winter-Spring Session \$225/participant/Session (all materials included)



Contact: stemafterschool@gmail.com | 202-460-4250 | stemafterschoolacademy.com

To register, please contact us or visit http://www.stemafterschoolacademy.com

These material are neither sponsored nor endorsed by the Board of Education of Montgomery County, superintendent, or this school