



Introduction

The Anderson STEM Mobile is a community outreach program run out of the Ivy Tech Community College's Anderson campus. Launched in the summer of 2021, the Anderson STEM program has already partnered with 30 schools and engaged over 20,000 students through multiple avenues such as school visits, summer camps, and community-wide events.

Vision & Purpose

Our vision for the Anderson STEM Mobile is to inspire & **empower the next generation of innovators** in Madison & Hancock Counties by providing access to high-quality STEM education experiences. Our mobile STEM programs aim to make hands-on, **inquiry-based learning accessible** to all students, regardless of their background or location. We envision a community where every student can explore & discover the wonders of science, technology, engineering, & math, & they are equipped with the knowledge & skills needed to succeed in the 21st century. Our ultimate goal is to **foster a lifelong passion for STEM** learning & encourage students to pursue careers in these critical fields, helping to build a stronger, more prosperous future for our community & beyond.



Types of Programming

Mobile STEM Lab



The Mobile STEM Lab is basically a classroom on wheels. It is a 44-foot long trailer with two slide-outs that creates roughly 400 sq. ft. of space inside. It comes equipped with large monitors, lab-style work benches and an in-house generator with heating and cooling. The space can comfortably accommodate 15-20 people. Despite the on-board generator, the Mobile STEM Lab is only available during the months of March-June and late August-November (weather dependent). The Mobile STEM Lab is not available for one-day events. Visits from the trailer require a minimum of 4 weeks notice prior to the event.

Pop-up STEM Lab



The Pop-up STEM Lab is a branch of the Mobile STEM Lab where we bring our equipment and materials in a 7'x16' trailer and set-up our lessons inside a school, building, or appropriate outdoor space. The Pop-up STEM Lab is available any time of year. Visits from the Pop-up Lab require a minimum of 2 weeks notice prior to the event.

On-Campus Program



The STEM Lab Team participates in on-campus programming such as campus tours, skills workshops, and general team building events. If you would like to schedule a campus visit, please call 765-643-7133 or email askanderson@ivytech.edu. Please give a minimum of 2 weeks notice when requesting a visit.

STEM Camps



Our STEM Camps offer exciting hands-on sessions covering topics such as drones, 3D printing, and robotics. These camps are for rising 6th-12th graders. There is a minimal fee, which will be determined based on camp duration and theme. Registration information will be posted through various channels (social media, school newsletters, public libraries, etc.)

Collaborations/Partnerships



The Anderson STEM Mobile collaborates with several area companies and organizations. We periodically visit local libraries and community events where we engage students and adults in high quality, hands-on STEM education experiences. We participate in the annual Manufacturing Day in Indianapolis where hundreds of high school students get exposure to industry-specific employers and institutions. We often partner with various community-wide initiatives to help educate and promote positive youth development. We are always looking for more ways to collaborate in and around the community!

Age-Appropriate / Standard- Based Lessons

Our school visits are for 3rd grade and up. We will occasionally partner with local libraries or organizations to create lessons for K-2nd grade but only on special occasions. Each lesson is age-appropriate and designed to develop the foundational skills needed to help prepare them for various career paths. Research shows that professional opportunities in STEM sectors are projected to grow exponentially and Ivy Tech wants to be a resource to help students meet those demands.

Kindergarten - 2nd grade

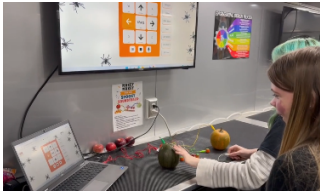


[Robert the Robot](#) - Engineering, VEX robotics, electricity

Makey Makey '[Banana Piano](#)' - electricity, circuits, conductors

DNA & Genetics, Earth Sciences and other hands on STEM lessons

3rd / 4th grade



Makey Makey '[Junk Drawer DJ](#)' - scientific method, electricity, conductivity

[SNAP Circuits](#) - electricity, circuitry

Sphero [Mini Robots](#) - computational thinking, coding

5th / 6th grade

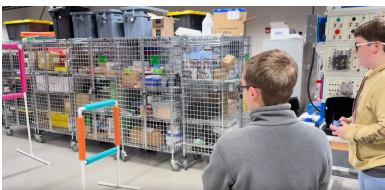


[SNAP Circuits](#) - electricity, circuitry, basic engineering

[VEX IQ Robotics](#) - engineering, electricity, mechanics, coding

[Drones](#) - types of drones, career options, physics of flight, manual flying, coding

6th - 8th grade



Chemistry - [acid/base reactions](#), chemical vs. physical changes, states of matter

[Drones](#) - types of drones, career options, physics of flight, manual flying, coding

[VEX IQ Robotics](#) - engineering, electricity, mechanics, coding

High School



[Drones](#) - types of drones, career options, physics of flight, manual flying, coding

VEX Robotics - advanced lessons using VEX IQ kits incorporating engineering and coding topics

Policies and Procedures

- The partnering school/organization agrees to request our services well in advance (see timelines for specific programming above).
- The partnering school/organization agrees to sign a MOU (Memorandum of Understanding) with Ivy Tech STEM department outlining each parties' intentions and obligations for the project/event. It will serve as a framework which outlines the roles, responsibilities and scope of the collaboration.
- The partnering school/organization agrees to work with Ivy Tech STEM department to create a workable schedule for the event, allowing a lunch and/or dinner break for the team members.
- The partnering school/organization agrees to provide at least one staff member to remain with the student groups at all times.
- There is no cost for the Mobile STEM Lab to visit K-12 schools in Madison and Hancock Counties during the academic year. All other requests for the Mobile STEM Lab may incur costs to cover transportation, materials/supplies, fuel, and propane expenses.

For further information, please reach out to us at our emails listed below.



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