

School Administrator Guide: Field Trips, Group Classes and After-School Clubs at Tech Valley Center of Gravity

Tech Valley Center of Gravity (TVCOG) and our children's makerspace, the THINQubator, welcome groups of all ages for in-person tours and/or facilitated activities. Please see below for more information about the variety or programming options we have available.

COVID-19 Precautions

TVCOG is committed to adhering to both NYS and CDC guidelines regarding COVID-19 safety, to ensure the safety of our members and our community. **At this time, we are requiring masks be worn by all unvaccinated individuals. Masks are encouraged for all participants of youth programming.** Our facility is equipped with air filters and hand washing stations and all shared workspace will be thoroughly sanitized before and after use. In addition, many of our offerings can be converted to a virtual format; please don't hesitate to reach out to us to discuss alternative arrangements if your students are still learning virtually.

Tours

Most school groups choose to do a workshop at our facility, which includes a tour, but tours can be offered separately to those interested. Suggested donation amounts start at \$50 for a small group tour.

THINQubator Field Trips and Workshops

While THINQubator activities for students aged 4-13 are our most popular field trip option, we also can and do provide age appropriate STEM-related activities for groups of teens and adults. We tailor each event to the needs of the group, depending on size, time allotted, desired learning goals, age and/or ability, etc. All field trips include a short tour of the facility, followed by a hands-on activity that culminates in a project that students can take home.

Below is a sample list of our most popular low-cost field trip options in the THINQubator. The times listed below are approximations, and may vary based on age group.



Doodle Bots Activity

Price: \$10/student

Duration: 1 hr

Recommended for children ages 6-12

Students assemble and decorate their own drawing "robots" that are powered by a battery and a small motor, with markers as legs that make a spiral pattern as they move. Robots can be built to do two different types of drawing patterns.

Paper Circuit Copters

Price: \$10/student Duration: 1 hr Recommended for children ages 6-12 Students use conductive tape, disk batteries and LEDs to make a mini circuit to light up a paper "helicopter" that twirls when dropped.



Electronic Textiles

Price: \$15/student Duration: 1 - 1.5hr Recommended for children ages 10-14 Students use felt, conductive thread, and sewable electronic components to design and make their own light up bookmark or wrist band.



Light Up, Pop-Up Cards

Price: \$15/student Duration 1.5 - 2 hr Recommended for children ages 10-14 This is a more advanced paper circuits activity, where kids use copper tape, batteries and LEDs to make a pop-up, light up card with an on/off button.

Additional Field Trip Details

The listed pricing is based on a minimum of 10 kids per workshop; smaller workshops are offered at a flat rate instead of per-student pricing. We have a maximum limit of 25 kids per workshop, but we do offer the option for a multi-workshop day, where one group does the main activity, while the other group does a tour of the facility and a short engineering/team-building activity, and then the groups switch. This option is an additional \$100 per extra group, to cover the cost of the space and second activity.

We require that all groups maintain the following adult to student ratios:

- 1:8 for groups of children 8 and under
- 1:10 for groups of children 10 and up

We recommend that groups reach out to parents and bring along a few as volunteer chaperones in order to fulfill the adult:student ratio requirement.

TVCOG requires either a P.O for the full amount or a 50% deposit up front. The remaining amount due on the invoice must be paid by the day of the class. Payment can be made via cash, check or card. If you would like to pay by card, please let us know when you schedule your field trip date, so we can provide an online payment link.

Since projects are priced per student, we need an exact number of participants before issuing an invoice. Invoices can be changed to add or subtract students up to a week before the class date.

Class dates are based on your calendar and our instructor's availability. If you need to cancel or reschedule a trip, please notify us at least two weeks in advance. The required 50% deposit will not be returned to groups who cancel their trip less than two weeks before the event date.

Field Trip Costs

As a 501(c)(3) non-profit organization, TVCOG is committed to providing accessible services to our community. Program costs listed above are specifically designed to be as low-cost as possible, and account

for instructor fees and materials costs. Additional donations are welcome.

Financial assistance is available for schools in the Capital Region who serve primarily low-income students, by request. TVCOG reserves the right to fully or partially waive program costs for certified non-profit organizations or schools. We encourage school administrators to reach out to us if field trip costs are prohibitive; alternate arrangements, including having instructors come to you in order to alleviate transportation costs, can be made.

Speciality Workshops

TVCOG also offers more in-depth one-time workshops for middle school and high school students. These speciality classes tend to be longer and have higher materials expenses than our standard THINQubator offerings. Examples include:

- Introduction to Arduino: DIY Video Games
- Introduction to Electronics Soldering
- Advanced Electronic Textiles
- 3D-Design and Printing

Supplies pricing and estimated class lengths for these workshops vary depending on the amount of students attending. Please email us to find out more.

After-School Clubs

TVCOG also offers the option of collaborating with schools to create semester-long after-school programs that fit a school's specific needs. Clubs are geared towards middle school and high school students. Depending on instructor availability, these clubs can be hosted at our facility, virtually, or on-location at the school. Topics and format are determined by the needs of the school and the availability of TVCOG instructors, but most clubs are formatted to be once or twice a week for 6-10 weeks, for approximately 45 min-1 hour each. Examples of previously offered clubs include:

- Introductory Robotics (non-competitive only)
- Introduction to Scratch Programming
- Introduction to HTML and Web Design
- STEAM Club (one different small activity each week)

We design our afterschool programming in conjunction with schools in order to ensure that we are supporting their curriculum and students as best as possible, while staying within the school's budget. We encourage schools to contact us as early as possible to begin conversations regarding after school programming.

More Information

If you are looking for something different, please reach out to us; we are happy to collaborate with organizations and schools in order to create the perfect program for your needs. Please contact us via email at admin@tvcog.net to schedule a field trip, workshop, tour or to learn more about any of the options available.