



# BERKELEY COUNTY 4-H STEM

## WHAT WE REPRESENT

Berkeley County 4-H STEM is a 4-H club operating under the WVU Extension Office in Berkeley County. Unlike many 4-H clubs, our group has a specific focus on STEM related education and activities. STEM stands for Science, Technology, Engineering, and Math. There is no cost for members to join and receive access to activities that include computer programming, robotics, critical thinking, and rocketry.

We strive to increase the knowledge and understanding of our students by participating in activities and competitions that foster "learn-by-doing" exploration in science, technology, engineering and math.



## ACTIVITIES & BENEFITS

Membership in our club includes potential participation in one of our many competition teams. We have teams for many skill levels, as well as varied skill-sets. One of our core relationships is with the FIRST organization. FIRST stands for "For Inspiration and Recognition of Science and Technology". FIRST sponsors National and International robotics competitions that include levels from elementary through college. We also participate in Team America Rocketry Challenge (TARC) which provides learning opportunities through rocketry competitions.

## TEAM ORGANIZATION

Our club currently includes between 20 and 30 members. We have 2 club leaders, and 10 adult mentor/volunteers. We could not function without the dedication of the volunteers who help to organize, coach, and administer the many tasks the club requires at any given time. We have mentors that assist in specific areas that include engineering, computer programming, team building, and project management.



## TEAM IMPACT

We are very proud of the many areas in which our members have excelled over the club's eight years. Our robotics teams win championships at all age levels and in multiple competitions. Our well-rounded members are also recipients of awards in local and regional science fair competitions, local and national band and vocal groups. They attend STEM camps and events. Our members continue to impress us as they embody the 4-H directive to "Make the best better."

### Awards and Accomplishments

- The FTC team was invited by NASA to represent FTC in WV at the renaming ceremony of the Katherine Johnson Independent Verification and Validation facility. The team and Mentors met with the Nasa Administrator, Astronauts, Senators, as well as the daughters of Katherine Johnson herself. It was an amazing honor.
- In 2020 and early 2021, our FLL and FTC teams were among a small few WV teams able to complete a season.
- In 2019, our First Tech Challenge robotics team, The Partytime ^'s, was the highest ranked WV team at the State Championship at Fairmont State University. The team also earned a spot in the finals at the Mountain Maryland Qualifier in early 2020.
- FIRST Lego League High Score and Robot Board Game awards at six of the last seven regional qualifying events. FLL teams have also received the Core Values, Project, and Robot Design awards.
- In 2017 our World Robotics Olympiad team finished as one of the top ten teams in the Nation
- Teams have won at Shepherd University RoboFest, Fayette County Race Day, and WV State 4-H Robotics Competitions. The FTC team received a Collins Aerospace Innovate Award at the Mountain Maryland Qualifier.



**Berkeley County 4-H STEM thanks you for your consideration and assistance in helping our youth members pursue a lifelong learning interest in STEM education. Please feel free to ask questions at any time of our members and/or contacts. Visit our Facebook page at [Berkeley County 4-H STEM](#), or email us at [bc4hstemclub@gmail.com](mailto:bc4hstemclub@gmail.com)**



## OUR CLUB NEEDS

There are many costs involved in running a STEM focused group. As we anticipate transitioning back to in-person competitions this season, our FLL and FTC teams will be participating in regional, State, and National robotics and STEM related competitions. The following outlines a few specific costs and items that we need for our robotic teams. In addition to these costs, we also have need for general funds for special events and STEM related activities.

### Robotics Competition Budget

Item	Number Needed	Single Item Cost	Total Cost
FLL Registration	2	\$225	\$500
FLL Field Pieces	1	\$150	\$150
FTC Registration	1	\$225	\$225
FTC Mecanum Wheel Set	1	\$350	\$350
FLL Event Cost	4	\$50	\$200
FTC Robot Materials Cost Parts specific for new season	1		\$500-\$1000
FTC Tools	TBD		\$500-\$1000
FTC Field Pieces	1	\$200	\$200
FLL & FTC Team Shirts	30	\$12	\$360
FLL & FTC Event Banner	1	\$300	\$300
		<b>TOTAL</b>	<b>\$4235</b>

## ARE YOU A STEM PROFESSIONAL?

If you have a background in a STEM related field, we would love to talk! We are always looking for ways to expose our club members to the breadth of STEM related jobs. Your involvement could be one-time or ongoing as a mentor, a presenter, a special guest, etc.



# Supporter Form

**Bronze Level**

**\$0 - \$99**

Supporter logo and information on all literature and handout materials for the 2021/2022 season.

**Silver Level**

**\$100 - \$249**

Supporter logo and information on the club’s banner that will displayed at all competitions, scrimmages, and outreach events. Also includes all benefits of lower levels.

**Gold Level**

**\$250 - \$499**

Supporter logo and information on all competition shirts for the season. Shirts will be worn by all team members, coaches and mentors at every competition, scrimmage, and outreach event. Also includes all benefits of lower levels.

**Platinum Level**

**\$500 +**

(limited to 4 sponsors)

Supporter logo placed on the robot. Also includes all benefits of lower levels.

## Supporter Contact Information

(Please print or type so that we can accurately include your information)

4-H Member Contact: \_\_\_\_\_

Business Name: \_\_\_\_\_

Contact Name(s) \_\_\_\_\_

Address \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Business Website: \_\_\_\_\_

Make checks payable to :  
**Berkeley County 4-H STEM**

**Federal EIN : 474729926**

Give checks to your member contact or mail to:  
**Berkeley County 4-H STEM**  
**405 S Rosemont Ave.**  
**Martinsburg, WV 25401**

**\*\*\*Please include your Business Logo\*\*\***