**2020 CYBER INNOVATION CHALLENGE GUIDELINES**

*EVENT DATES AND TIMES*

* Practice Round: April 24, 2020 from 10AM-1PM at the Advanced Technology Center. This will be a field trip for students, and lunch will be provided.
* Cyber Challenge: June 4, 2020 from 10AM-4PM at the Virginia Beach Convention Center. Challenge will operate as a single “round,” with all teams presenting during designated time slot.

*RULES OF ENGAGEMENT*

* Unlimited number of teams per school
* Teams may range from 1 to 3 people
* One Raspberry Pi per team will be issued to each school
* A single pack of accessories will be provided per team to each school
* All materials shall be returned to TCE prior the close of the school year
* No team member substitutions or additions after practice round
* Teams with more than 3 members *at any point* (including during the practice round) will be automatically disqualified
* Participants may enter only **one** STEM Trifecta competition. Enrollment in another challenge automatically disqualifies the person from participating in the Cyber Innovation Challenge
* Team must remain for entire competition on the day of the event. Leaving early disqualifies the entire team
* All teams must participate in the practice round in order to participate in the final event
* Team members may not re-enter the challenge area once they have reported their project completion
* In the event of a tie, time of completion will be used to determine team placement
* No outside assistance is permitted. This includes texting, instant message/Google hangout, email, and other similar communication methods.
* Spectators are not allowed in the participant area. This includes friends and family members. Any communication between a team member and spectator will be considered grounds for disqualification.

*PROBLEM STATEMENT*

* Assigned Wednesday, April 1, 2020
* Problem statement will be basis for innovation challenge competition on the day of the event
* Teams will use the time between the practice round and the main event to conduct research and try out solutions to the problem using the Raspberry Pi and other materials
* Teams may elect to use the solution they come up with prior to the event, or they may opt to create a brand new solution the day of the event
* Score will be based on
	+ relevance of the solution offered
	+ functionality of solution
	+ applicability to the real world (how realistic is the solution)
	+ depth of complexity of the solution (to what degree does the solution maximize the capabilities of the Pi)

*TRAINING*

* Training will be streamlined, gradually introducing a concept at a time rather than building a product
* Mentor training will be held
	+ Tuesday, January 15th from 5:00-7:00 (Raspberry Pi delivery and training)
* Mentors will hold club meetings a minimum of 26 times over the course of the year (approximately 1 time per week), for at least an hour
* Mentors will be provided with a pacing guide and lessons/projects for each meeting
	+ Mentors will create a Code Club account and designate themselves as a volunteer
	+ Materials advertising the Code Club are also available through this site
	+ Lesson/project progress should be reported on the monthly summary, and should reflect the expected progress listed on the pacing guide
* Each mentor will be required to submit a monthly calendar for TCE records. The calendar is directly tied to the stipend. At the each of each month, mentors should use form listed on the [www.vbstemtrifecta.com](http://www.vbstemtrifecta.com) site to complete their calendar.
* **One face-to-face practice round will be held at the ATC on April 24, 2020 from 10AM-1PM**. This will be a field trip for the students, and lunch will be provided.