

## Tech Trek WA - Core Curriculum

The curriculum at Tech Trek is specifically designed to challenge all the girls who participate in the STEM camp. The requirements for a curriculum that teachers design should include:

1. The class must meet the state and national standards for the age level.
2. All classes should have objectives. The girls need to know what they are learning, how they are going to learn it and how it will all culminate at the end of the camp.
3. Most of the class time (12 hours) should be spent in hands-on activities. Very little of the class time should be spent in taking notes and individual work.
4. The girls should have time to work with others and time to discuss their learning with partners and the class.
5. The teachers must engage with the girls during the class. The student counselors should assist the teachers in keeping all the girls engaged but the teacher is responsible for the class and the activities.
6. During the week, in the afternoon, the teachers are responsible for presenting a short class called Taste of Core. This class is for the girls who did not take that particular core class to see a small amount of what the girls in the core class will learn. It should be hands-on and be at least one of the activities the teacher is using in her core class. The teacher will teach 4 Taste of Core sessions that are 90 minutes long.

## Past Curriculums

Tech Trek has had a wide assortment of curriculums in the past. The list includes: Cyber Security, App Inventor, Marine Biology and Ecology, Stardust Astronomy, Bodies by Design, Robot Engineering, Hot Air Balloon Physics, Chemistry (acids and bases), Structural Engineering and Rocketry. The teachers purchase the materials for the classes and are reimbursed for the cost.

## Mini-Labs

The teachers are also responsible for teaching one afternoon of mini-labs (2-90 minute sessions). The mini-lab is not from the core class. It still has to meet state and national standards. The topic can be any STEM topic the teacher feels passionate about that can be fit into a 90 minute class. Past topics include: engineering challenges, foam roller coasters, game star mechanics, layering liquids, heartstrings and reebops.