Sample STEM Reports

What you can expect

When you request year-round or summer planning services for your child, you'll get a detailed report that is personalized to your child, using the information you provided in your questionnaire. BostonTechMom will explain the criteria used to research and identify opportunities, and each program will be presented with details that include location, subject matter(s), cost, registration information, web links, and the reason why a particular program is being presented for your consideration.

To give you an idea of what you can expect, excerpts from two different reports are shown here. In each case, selected STEM opportunities have been identified based on input from the completed questionnaire.

Sample report #1: Year-round planning for a teen

This 15-year-old girl is interested in school year and summer activities for computer science and entrepreneurship. The student has some basic coding experience. Included here are two examples of summertime opportunities and two examples of school year programs. A complete year-round report would include 6-8 STEM programs.

Sample report #2: Summer planning for a middle school student

This 11-year old boy is interested in summer activities for astronomy, design, and robotics. The sample report includes two programs. This child does not have STEM experience outside of school, but has expressed interest in participating in engineering-type camps during the summer. Included here are two examples of summer programs. An actual report would include at least 5 options.

Sample Report #1: STEM Opportunities for Teen

School Year Activities

Since your child has some coding experience and has expressed interest in pursuing computer science in college, here are two activities to consider during the school year. Both are free programs.

- [MAHacks](#) is a free biannual hackathon for high school students. Hackathons are fun events where students with or without coding experience come together to learn, design, and develop projects. The next hackathon is December 1-2, 2018 in Boston.
- [Girls Who Code](#) is a free coding club for girls run by the nonprofit Girls Who Code. This organization wants to close the gender gap in technology and help girls gain coding skills in a supportive environment so they can participate confidently when they attend college and enter the workforce. Clubs start up in the fall when school resumes and there is a club in your town. Contact them directly to inquire about joining.

Summer Programs

For the summer, here are two summer programs to consider, one focused on coding and the other on tech entrepreneurship.

[Kids 4 Coding: Python 101](#)

Location: Lesley University (Cambridge, MA)
Dates: July 22-26 or July 29-Aug 2
Focus: Programming
Ages: 13-16

Since your child has some experience with Scratch, Python would be a good language to learn next. This general purpose language was designed to be easy to understand and is a good language for beginners to learn.

> *In this course, your child will learn how to code in Python – the fundamental programming language for Machine Learning. By playing engaging games, you'll learn basic syntax, arguments, strings, if statements, functions, and parameters. Use your new coding skills to place game objects, construct mazes, create your own shareable game, learn basic input handling and basic game AI.*

Cost: $359 (one-week)
Registration: https://www.cognitoforms.com/BOSTON20191/CAM1316Python101

Sample Report #1 Continued

[Epiic Solutions: Summer Experiences](link)
Location: Boston University
Dates: July 22-Aug 2
Focus: Technology, Entrepreneurship
Grades: High School

Since your child has expressed interest in tech startups, I thought she might want to consider Epiic Solutions' STEAM Startups program. This experience will be a good way for her to think more concretely about potential career paths and will be an interesting item to highlight in her college applications.

> *Students work together in teams and create an idea for a startup. At the end of the two weeks, they pitch their STEAM-driven solution to a panel of judges. In addition to working on their projects, students travel to visit founders, startups, and companies working in STEAM fields and get to explore various college and career pathways.*

Cost: $1400 (2-week session)
Application: http://www.epiicsolutions.org/apply-2019

Sample Report #2: STEM Opportunities for Middle School Student

Summer Programs
Since your child loves his science classes, finds space studies interesting, and enjoys playing with LEGOs, here are two summer camps that touch on his interests in space, robotics and building things. No prior experience is necessary.

[Edge on Science: Galileo's Workshop](link)
Location: Regis College (Weston)
Date: July 15-19
Focus: Astronomy and Physics
Ages: 10-14 years

This unique program should appeal to your son's interest in space and astronomy. He will get hands-on experience working with telescopes, just as Galileo did.

> *In this unique program, you begin by experimenting with an assortment of lenses, prisms, mirrors, beam splitters and more. You and your partner set up an optical bench, to discover the wonders of optics! Retrace Galileo's own challenges, and then assemble your own take-home telescope.*

Sample Report #2 Continued

Cost: $655/session
Registration: https://edgeonscience.com/

Empow Studios: Tech & Design Camp
Location: Newton, MA
Dates: July 1-5; July 8-12: July 22-26; August 5-9
Focus: Game Design, Digital Animation, Robotics, Coding
Grades: 2-8

Since your son enjoys hands-on projects, designing things, and robotics, Empow Studio's Tech & Design Camp seems like a good match since it offers a little bit of everything and will allow him to explore many interests. This is a camp where kids choose what they want to create: Video Game Design, Robotics, Animation, Coding, 3D Printing, Music Production, and other exciting projects are all fair game.

> *This is the camp for digital explorers. The choices are limitless and the learning doesn't stop as campers build functional LEGO robot guitars, action-packed video games, fun animated mini-movies, and cool soundtracks. We teach the nuts & bolts behind these subjects, and campers use their imagination to make their project come alive. This isn't your typical STEM Camp or Computer Camp, it's a Tech & Design Camp where kids learn to design, build, and code; a tech camp for kids to create projects in digital art, engineering, and computer science.*

Cost: Full day $645/week; Half day $365/week. Extended day $20/day/ Early drop off is free.
Registration: https://empow.me/camp#1474840311290-594eb164-2eab

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