

JERSEY**STEM** Overview

PROBLEM

We need to bridge the gender, innovation, and opportunity gaps.



GENDER GAP

Women make up only 27% of the STEM workforce. The amount of women studying computer science in college has been declining since the 1980s compared to other fields.

INNOVATION GAP

JerseySTEM leverages platforms such as MIT App Inventor and Scratch to teach coding and problem solving to students at an early age.





OPPORTUNITY GAP

74% of girls are interested in STEM-related fields, but only 20% of students are prepared for college-level STEM programs.

HOW YOU CAN HELP

Volunteer

Teach or help coordinate our programs.

Host

Provide a location for a club program.

Advertise Share this information with your community!

Donate Support Jersey**STEM** with a donation of any size.

OUR MISSION

JerseySTEM is a network of parents, professionals, students, and educators whose goal is to promote excellence in Science, Technology, Engineering, and Math ("STEM") education. We partner with schools and organizations to create and enhance STEM-oriented educational opportunities in underserved communities.

OUR VISION

Leverage the support of companies, local communities, and a growing network of volunteers to prepare underrepresented girls for STEM careers. Our partnership model includes:



ABOUT US



We are a 501(c)3 charitable organization committed to closing the gender, innovation, and opportunity gaps in STEM education. We are a 100% volunteer organization focused on bringing hands on, project based problem-solving skills, critical thinking, and team structured curriculum to underrepresented populations throughout New Jersey.

JerseySTEM offers free after-school programs

PROGRAM FEATURES

All JerseySTEM programs provide



- Support from a collegestudent Program Instructor
- Field-proven curriculum
- Software
- Supporting materials

Coding 100, Computational Thinking



- Introduction to block coding
- Design thinking modules with MIT App Inventor, Scratch, or Micro:bit coding projects
- Functions, loops, lists, variables, conditionals, and databases
- Small projects ladder into 1 large final project



JerseySTEM programs foster and encourage

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 - Design thinking and coding concepts
 - Presentation and problemsolving skills
 - Self-confidence borne from student-conceived projects

LET'S TALK!

| ONLINE: | <u>https://jerseystem.org/contact-us/</u> |
|----------|---|
| ADDRESS: | 186 Columbia Turnpike, #5-160 Florham Park, NJ 07932 |
| WEBSITE: | jerseystem.org |

SEYS



- Introduction to the computer science industry
- Design strategy and user experience development
- Coding
- Testing and problem-solving

Lab 100, Basic Chemistry

- Engineering design, development, and testing
- Creation of scientific hypotheses and experiments to test them
- Introduction to biological molecules (eg, DNA, proteins, polymers)
- Principles of biochemical reactions

