The University of Pennsylvania is looking for talented and motivated Philadelphia public school students to attend STEM programs this summer. Scholarships are available based on need in most cases. Please use the information assembled in this flyer to encourage potential participants to apply, and use websites mentioned for details on individual opportunities.
**Engineering Summer Academy at Penn (ESAP)**
School of Engineering and Applied Science
Students will combine theory with hands-on, practical experience using cutting-edge technologies from 6 different disciplines – Biotechnology, Computer Graphics, Computer Science, Complex Networks, Nanotechnology, and Robotics.
https://esap.seas.upenn.edu/about/

**Teen Research and Education in Environmental Science (TREES)**
Center of Excellence in Environmental Toxicology
Students will experience a summer research and mentorship program offering hands-on environmental laboratory investigations in addition to working one-on-one with mentors on projects that they design.
http://ceet.upenn.edu/training-career-development/summer-programs/teen-research-and-education-in-environmental-science/

**Penn Laboratory Experience in Natural Sciences (Penn LENS)**
School of Arts and Sciences
Students will gain firsthand experience working in a university science laboratory, carry out daily assigned tasks essential to research efforts, and gain important skills that involve both lab procedures and computer-based data collection and analysis.
https://www.sas.upenn.edu/STEMoutreach/

**Penn Summer Science Initiative (PSSI)**
Laboratory for Research on the Structure of Matter
Students with a strong interest in materials science and engineering will spend one month participating in laboratory work, a materials science workshop, their own projects, faculty lectures, and field trips.
http://www.lrsm.upenn.edu/outreach/pssi/

**Summer Mentorship Program (SMP)**
Division of the Vice Provost for University Life
Students will partner with Penn’s professional schools of Dental Medicine, Nursing, Engineering, and the Perelman School of Medicine to gain first-hand experience in STEM disciplines and explore a variety of academic and career opportunities.
http://www.vpul.upenn.edu/eap/smp/

**QuarkNet High Energy Physics Experimental Group**
School of Arts and Sciences
Students will learn about the role of experimental high energy physics in our understanding of the universe through seminars, discussion, and an immersive research project.
http://www.hep.upenn.edu/HEP_website_09/QuarkNet/Overview.html

**Penn Summer Academies (PSSA) and Penn Summer Prep (PSP)**
School of Arts and Sciences
Students select from five rigorous, subject-intensive PSSA programs (Biomedicine, Chemistry, Experimental Physics, Mathematics, and Neuroscience), which fuse traditional classroom instruction with experiential learning. The PSP sessions offer college-level academics within an exploratory, non-credit environment. Students enroll in two immersive modules from across disciplines.
https://www.sas.upenn.edu/summer/programs/high-school/application

**Girls in Engineering Math and Science Camp (GEMS)**
School of Engineering and Applied Science
Students experience a week of hands-on science, math and engineering activities. Girls in GEMS explore topics including bioengineering, nanotechnology, materials science, mechanical engineering, graphics, and computing.
http://www.seas.upenn.edu/awe/gems/web-forms/application.php

**Canine Handler Academy**
Penn Vet Working Dog Center
Students will gain hands-on dog training experience and enjoy various working dog demonstrations. They will be introduced to detection dogs and learn search, obedience, and fitness techniques while discovering the benefits of positive reinforcement practices.
http://www.vet.upenn.edu/canine-handler-academy