STEM Summer 2017 Programs at Penn
For School District of Philadelphia middle and high school students

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.

Find us online

- [www.sas.upenn.edu/STEMoutreach](http://www.sas.upenn.edu/STEMoutreach)
- STEMoutreach@sas.upenn.edu
- @PennSASS01
Our Programs

*Grade Level Eligibility refers to grade level completed.*

QuarkNet High Energy Physics Experimental Group
School of Arts and Sciences
Students will learn how laboratory experiments are designed and how scientists try to answer big questions, such as "What are the origins of mass?" and "How did the universe begin and evolve?"
www.hep.upenn.edu/HEP_website_09/QuarkNet/Overview.html

Engineering Summer Academy at Penn (ESAP)
School of Engineering and Applied Science
Combining sophisticated theory with hands-on practical experience in cutting-edge technologies, the ESAP offers 6 different courses – Biotechnology, Computer Graphics, Computer Science, Engineering Complex Networks, Nanotechnology, and Robotics.
esap.seas.upenn.edu/apply/

Penn Summer Academies (PSSA) and Penn Summer Prep (PSP)
School of Arts and Sciences
The 5 PSSA programs – Biomedical, Chemistry, Experimental Physics, Mathematics and Neuroscience are rigorous, subject intensive programs fusing traditional classroom instruction with experiential learning. Two PSP sessions offer college-level academics within an exploratory, non-credit environment. Students enroll in two immersive modules from across disciplines.
www.sas.upenn.edu/summer/programs/high-school/application

IRM Summer Research Experience
Institute for Regenerative Medicine
Designed to provide high school students with an interest in stem cell biology and/or regenerative medicine an opportunity to work at the bench alongside Penn faculty and other researchers.
irm.med.upenn.edu/science-impacting-the-clinic/education-outreach/

Summer Mentorship Program (SMP)
Division of the Vice President for University Life
Students in the SMP 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.
www.vpul.upenn.edu/eap/smp/

Penn Laboratory Experience in Natural Sciences
School of Arts and Sciences
Gain firsthand experience working in a university science laboratory. Carry out daily assigned tasks essential to research efforts and learn important skills that involve both lab procedures and computer-based data collection and analysis.
www.sas.upenn.edu/STEMoutreach/

Penn Summer Science Initiative
Laboratory for Research on the Structure of Matter
Students with a strong interest in materials science and engineering attend lectures, participate in experiments, use a computer lab, and go on field trips to Penn facilities as well as industrial sites.
www.lrsm.upenn.edu/outreach/pssi/

Canine Handler Academy
Penn Vet Working Dog Center
Gain hands-on training experience and enjoy various working dog demonstrations. Introduction to detection dogs and their many different jobs. Learn search, obedience, and fitness techniques while discovering the benefits of positive reinforcement practices.
www.vet.upenn.edu/research/centers-initiatives/penn-vet-working-dog-center/learn-about-working-dogs/canine-handler-academy

Girls in Engineering Math and Science Camp (GEMS)
School of Engineering and Applied Science
During 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.
www.seas.upenn.edu/awe/gems/