



SAS Science Outreach Initiative

# STEM

Science  
Technology  
Engineering  
Math

# 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](mailto:STEMoutreach@sas.upenn.edu)

 [@PennSASSOI](https://twitter.com/PennSASSOI)

# Our Programs

*\*Grade Level Eligibility  
refers to grade level completed.*



**Penn**  
UNIVERSITY of PENNSYLVANIA

Science  
Outreach  
Initiative

**DATES**  
**June 26 – August 4**  
**APPLICATION DEADLINE**  
**April 12**  
**GRADE LEVEL ELIGIBILITY**  
**10th – 11th**

## 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](http://www.hep.upenn.edu/HEP_website_09/QuarkNet/Overview.html)

**DATES**  
**July 2 – July 22**  
**APPLICATION DEADLINE**  
**April 24**  
**GRADE LEVEL ELIGIBILITY**  
**9th – 11th**

## 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/](http://esap.seas.upenn.edu/apply/)

**DATES**  
**Academies Session: July 2 – 22,**  
**Prep Session A: July 10 – 22,**  
**Prep Session B: July 24 – August 5**  
**APPLICATION DEADLINE**  
**May 15**  
**GRADE LEVEL ELIGIBILITY**  
**9th – 11th**

## 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](http://www.sas.upenn.edu/summer/programs/high-school/application)

**DATES**  
**July 5 – August 25**  
**APPLICATION DEADLINE**  
**March 31**  
**GRADE LEVEL ELIGIBILITY**  
**10th – 11th**

## 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/](http://irm.med.upenn.edu/science-impacting-the-clinic/education-outreach/)

**DATES**  
**July 5 – August 4**  
**APPLICATION DEADLINE**  
**April 10**  
**GRADE LEVEL ELIGIBILITY**  
**10th**

## 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/](http://www.vpul.upenn.edu/eap/smp/)

**DATES**  
**July 5 – August 11**  
**APPLICATION DEADLINE**  
**March 31**  
**GRADE LEVEL ELIGIBILITY**  
**10th – 11th**

## 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/](http://www.sas.upenn.edu/STEMoutreach/)

**DATES**  
**July 10 – August 4**  
**APPLICATION DEADLINE**  
**April 15**  
**GRADE LEVEL ELIGIBILITY**  
**10th – 11th**

## 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/](http://www.lrsm.upenn.edu/outreach/pssi/)

**DATES**  
**Session 1: July 10 – July 14**  
**Session 2: July 17 – July 21**  
**APPLICATION DEADLINE**  
**June 1**  
**GRADE LEVEL ELIGIBILITY**  
**6th – 8th**

## 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](http://www.vet.upenn.edu/research/centers-initiatives/penn-vet-working-dog-center/learn-about-working-dogs/canine-handler-academy)

**DATES**  
**July 24 – July 28**  
**APPLICATION DEADLINE**  
**March 31**  
**GRADE LEVEL ELIGIBILITY**  
**6th – 8th**

## 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/](http://www.seas.upenn.edu/awe/gems/)