



UNITED STATES
AIR FORCE ACADEMY

USAFA K-12 STEM Outreach Program Newsletter

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United States Air Force Academy and Air Force STEM Webpages

<https://www.usafa.edu/stem-outreach/>

<http://www.usafa.af.mil/>



QR Code for USAFA K-12
STEM Outreach page

Free Legacy STEM Camps for 11-15 Year Olds!



The application window for Legacy STEM Camps opens on January 1st and closes March 1st. Dates for the 2020 camps are June 8-12th for 11-12 year olds and June 15-19th for 13-15 year olds. Each exciting day camp features a variety of STEM activities, tours of research centers and a field trip to the Space Foundation. Direct questions to usafa.legacy@gmail.com.

Apply at

http://wpafbstem.com/pages/legacy_afa.html

Seeking Teachers for Legacy Camps

If you are interested in teaching one of the Legacy STEM Camps, contact DeLene Hoffner at usafa.legacy@gmail.com. All lesson plans and materials are provided and the stipend is \$1,500.

FREE Lincoln Laboratory Radar Introduction Course

Lincoln Laboratory Radar Introduction for Student Engineers (LLRISE) is a two-week, residential radar workshop focused on the combination of college-level class lectures and a hardware building experience. Students gain in-depth experience while building small radar systems. Participants are challenged to build a Doppler and range-radar by using creative problem-solving strategies. The hands-on program allows students to work in a state-of-the-art laboratory with highly talented scientists and engineers.

Who: Rising high school seniors (apply in junior year)

Date: July 12-25, 2020

What is the eligibility? U.S. citizens who have completed physics and pre-calculus by the end of junior year.

What is the cost? The program is free and includes room and board. Students provide their own transportation to and from the MIT Main campus. Application will be available beginning January 6th. The application will need:

- 2 recommendations (one from a math teacher and another from a science/engineering teacher)
- Copy of transcript(s)



USAFA K-12 STEM Outreach Mission

The United States Air Force Academy Science, Technology, Engineering, and Math (STEM) Outreach Program mission is to offer a variety of programs and services that effectively engage, inspire and attract the next generation of STEM talent.

USAFA Office of Research

DFRO Mission

Execute today's research in order to develop leaders for tomorrow's battlespace

Vision

Be the catalyst for innovation supporting all institutional research, brokering key associations, and developing officers of character

for the Air Force

Contact Us

Lt Col Chris McClernon
Associate Dean for Research
719.333.4195

Mr. Rick Rogers
DFRO Deputy Director
719.333.4195

Sandy Lamb
STEM Outreach Coordinator
719.333.8990
sandra.lamb.ctr@usafa.edu

- Copy of standardized scores (optional)
- 3 short essays

All applications must be completed online.

The application can be found at <https://www.ll.mit.edu/outreach/llrise>.

Please email LLRISE@LL.mit.edu with questions.

****Persons from underrepresented groups such as African Americans, Hispanic Americans, Native Americans, Alaskan Natives, Pacific Islanders, women, persons with disabilities, persons from disadvantaged backgrounds and active military dependents are strongly encouraged to apply. ****

STEM Wednesdays & Thursdays

There are spots available on Wednesday and Thursday afternoons for engaging, free science, engineering or robotics lessons for elementary classrooms. All materials are provided. Lesson topics include:

Solar Cars

Ozobots

Owl Pellet Dissection

Designing Trash Collectors

Engineering an Avalanche Protection System

Designing Bridges

Cleaning an Oil Spill

Designing Windmills

Engineering Flying Technologies

Engineering Aid Drop Packages

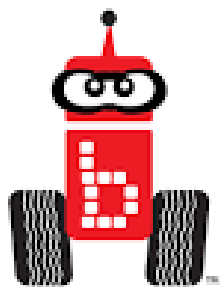
Animal Adaptations

Light or Thermal Energy Lessons

If interested, contact Sandy Lamb @ sandra.lamb.ctr@usafa.edu.



Expanding Botball Robotics in the Pikes Peak Region



We're looking for middle and high school teachers to coach Botball teams. Botball teaches students C, C++ and Python programming languages. Grants are available to cover the middle and high school \$2,500 kits and registration fee in an applied setting. A training for middle and high school teachers will be February 8th & 9th with a challenge set for May 2nd. For more information about Botball, please see

<https://www.kipr.org/> or

<https://www.youtube.com/watch?v=-CXyFSN3J-w>. This is a

great opportunity to teach kids coding! Contact Sandy Lamb if interested @ sandra.lamb.ctr@usafa.edu.

****The next Junior Botball Challenge will be held at the 21C Library on May 22 from 10:30-3:00PM****