

## NATIONAL CAPITAL AREA COUNCIL, BSA STEM PROGRAMS 2016



**STEM** stands for **Science, Technology, Engineering, and Mathematics**. **The Boy Scouts of America** has created a new program which emphasizes STEM and gives Scouts an opportunity to explore these skills and be recognized for their achievements.

***STEM – it's in everything we do!***

### 2016 COUNCIL STEM EVENTS

**Monthly First Tuesdays (Montgomery), First Thursdays (Tysons)**

Tech Talk! Classes for Cub Scouts with Microsoft  
Cub Scouts can earn Requirements 3-5 of Tech Talk! NOVA Award  
<https://scoutingevent.com/?STEMicrosoft>

**Jan 16-Feb 13** Radio Merit Badge Class and Licensing Course <http://www.w3bsa.org>

**February 20** Out of this World! Nova Class & Astronomy Event  
Camp Snyder <https://scoutingevent.com/?stargazing>

**March 12** MITRE Scout Engineering Day  
Annual event for 400 scouts, w/ hands-on STEM activities & 22 Merit Badges  
<https://scoutingevent.com/?SED2016>

**March 21-24** SuperSTEM Days in Crystal City/Alexandria, VA  
*Workshops held with community partners such as TechShop Crystal City, the USPTO, Microsoft, NASM, for girl and boy youth.*  
<http://www.ncacbsa.org/activitiesevents/stem/stem-events-2016>

**April 16** USA Science and Engineering Festival  
<http://www.usasciencefestival.org/>

**April 23** Geology, Gem Mining Down and Dirty Nova Workshop  
<http://www.ncacbsa.org/activitiesevents/stem/stem-events-2016/>

**May 17-19** The Humans to Mars Summit  
Scouts free in uniform; may offer Out of this World Nova activities  
<http://h2m.exploremars.org/>

**July 18-21** STEM Day Camp at Camp Snyder  
<https://scoutingevent.com/?CWBSSTEMDayCamp>

<b>July 30 - August 6</b>	Marriott Project – STEM Week at Goshen The program includes a mix of Merit Badges, STEM NOVA Venturing Explorations, and activities. Use forensic science to solve an at-camp mystery, explore energy and forces on the COPE course, put your engineering skills to the test building catapults, examine the natural world, and much more! <a href="https://scoutingevent.com/?2016Marriott">https://scoutingevent.com/?2016Marriott</a>
<b>October</b>	Jamboree on the Air / Jamboree on the Internet
<b>October</b>	Scout Energy & Nuclear Science Merit Badge and Nova Start Your Engines! U.S. Energy Information Administration <a href="http://www.eia.gov/kids/activities/meritbadge/">http://www.eia.gov/kids/activities/meritbadge/</a>
<b>November</b>	Inventing Merit Badge Class at U.S. Patent & Trademark Office
<b>November</b>	Noche de Ciencias This yearly event is sponsored by the organization of Hispanic Professional Engineers and the Patent and Trademark Office.
<b>November</b>	Geology Lab & Tour Class – Down & Dirty Nova Northern Virginia Mineral Club & George Mason University Department of Atmospheric, Oceanic and Earth Sciences

## TRAINING EVENTS

<b>February 27</b>	University of Scouting Supernova Mentor and Nova Counselor Orientation <a href="https://scoutingevent.com/?ncacuofs2016">https://scoutingevent.com/?ncacuofs2016</a>
<b>March 12</b>	Commissioner's College What you've always wanted to know about BSA-STEM <a href="http://www.ncacbsa.org/commissioners/commissioner-training/commissioner-college/">www.ncacbsa.org/commissioners/commissioner-training/commissioner-college/</a>
<b>March 19</b>	Area 6 STEM Class
<b>June 26-July 2</b>	Summit Bechtel Reserve Youth and Adult STEM class <a href="http://www.summitbsa.org/programs/training/">http://www.summitbsa.org/programs/training/</a>
<b>June 12</b>	STEM University – training for adult leaders by STEM Committee <a href="http://www.ncacbsa.org/activitiesevents/stem/stem-events-2016/">http://www.ncacbsa.org/activitiesevents/stem/stem-events-2016/</a>
<b>July 17-23</b>	Philmont Training Center STEM Week <a href="http://www.philmontscoutranch.org/ptc.aspx">http://www.philmontscoutranch.org/ptc.aspx</a>
<b>November</b>	Pow Wow Supernova Mentor and Nova Counselor Orientation & What is STEM classes <a href="http://www.ncacbsa.org/training/pow-wow/">http://www.ncacbsa.org/training/pow-wow/</a>

## COMMUNITY / DISTRICT EVENTS

- Feb 6** Haymaker STEM Expo at Battlefield High School (POC: Bull Run District)  
<http://drake.iliterobotics.org/>
- Feb 6** NOAA Open House  
<http://preserveamerica.noaa.gov/hw16.html>
- March 12** K-12 STEM Symposium at Nysmith School in Herndon, VA  
(POC: Powhatan District)  
<http://stemsymposium.com/>
- June-August** Cub Scout Day Camp – Theme is Galactic Trek  
<http://www.ncacbsa.org/program/cub-scouts/day-camp/>

**Scouting is a perfect fit for STEM.** The National Capital Area Council, BSA is committed to making America No. 1 in these disciplines and creating a future workforce that is not only technically superb, but exemplifies the Scout Oath and Scout Law. <http://ncacbsa.org/stem>

## STEM PROGRAM INITIATIVES FOR NATIONAL CAPITAL AREA COUNCIL, BSA



**STEM** stands for science, technology, engineering, and mathematics. These disciplines are considered by many to be the foundation of an advanced society. A STEM trained workforce is viewed as an indicator of a nation's ability to sustain itself.

The Boy Scouts of America has created a new program which emphasizes STEM and gives Scouts an opportunity to explore these skills and be recognized for their achievements.

The National Capital Area Council, BSA is recognized nationally for its leadership in this new STEM program. Our Council organized a STEM Committee in 2012 to push forward this National Initiative.

### 2015 Accomplishments:

- Inventing Merit Badge Class with the US Patent and Trademark Office – one scout has an actual utility Patent!
- 100 youth participated in the Geology Day with the Northern Virginia Mineral Club and George Mason University
- STEM Day Camp Theme was Take Flight! In 2015
- Special STEM Camping weeks
- Youth earned over 100 Cubs/Webelos Supernova Awards & 3 Boy Scouts Supernova awards
- One Scout earned all Cub Scout Nova awards, Supernova and the Webelos Supernova!
- Over 1400 youth attended a NCAC STEM event, earning at least a partial Nova Award
- Great partnership with the Microsoft Store offers STEM workshops to Cub and Boy Scouts throughout the program year
- Monthly STEM curriculum engages 350 Explorer Scouts in STEM Clubs
- 17,989 STEM merit badges earned

The National Capital Area Council serves more than 56,500 youth members in the Washington, DC metro area, including 16 counties in Maryland and Virginia, and in the US Virgin Islands.

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## HOW TO GET STEM STARTED IN YOUR UNIT - *Get in on the FUN!*

1. Make sure you get a copy of the NOVA award books (Cub Scout, Boy Scout, and Venturing books) for your unit or per youth - sold in the local Scout shop or at [scoutstuff.org](http://scoutstuff.org) or read [online](#).
2. Any adult in the unit can help "Counsel" the youth on the NOVA level awards / approved by unit committee and following Youth Protection Guidelines. **Here's how.**
3. Get award worksheets from the Council office or online [HERE](#) or HERE.
4. Recruit an adult to be the Unit STEM Chair (STEM professional background optional)
5. Get familiar about the Nova program resources on this website and at [scouting.org/stem](http://scouting.org/stem)
6. Recruit adults with a STEM background to be Supernova Mentors. They will need to apply thru the District STEM Chair or District Advancement Chair. **Here's how.**
7. Find online training for STEM Counselors, Mentors, and for general information at this [LINK](#)
8. Supernova Mentors nearby can be found by contacting your District STEM Chair
9. Turn in Nova awards timely at the Scout Shops to purchase patches and pins.
10. Turn in Supernova awards timely to your District STEM Chairs or the Council Office for approval by the STEM Chair.
11. Catch up with your District STEM Chair to find out more about local resources (see this [page](#))
12. and lastly check out the cool STEM events taking place around the Council

<http://ncacbsa.org/stem>



## NOVA Activity Awards

- First Award – get NOVA patch
- Next Awards – get NOVA pins to place on the patch



## SUPERNOVA Awards

Cub Scouts

Dr. Luis W. Alvarez  
Wolf / Bear (bronze medal)

Dr. Charles H. Townes  
Webelos (bronze medal)

Boy Scouts

Dr. Bernard Harris  
(bronze medal)

Thomas Alva Edison  
(silver medal)

Venturing

Dr. Sally Ride  
(bronze medal)

Wright Brothers  
(silver medal)

Dr. Albert Einstein  
Venturer (gold medal)

