



STEM 1.0: The BSA STEM Nova Program

Session Length: 45 Minutes

Through this session, you will:

- Explain** ** What is the BSA STEM Nova program, why it is important, how it started and what Scouts do to enjoy STEM fun and earn recognition and awards**
- Demonstrate** **Show Scouts how they can earn Nova and Supernova awards and how Scouters can work with Scouts to earn the STEM awards**
- Guide** **Help Scouts get started on a Nova award**
- Enable** **Scouts will be able to find counselors and mentors and start working to earn awards**

Learning Outcomes: [create a brief list of what participants should take away with them]

- Understand what the BSA STEM Nova program and why it is important
- Know how to get started on earning Nova and Supernova awards
- As a Scouter, be able to help Scouts earn the STEM awards

Theme Connection:

The theme of NOAC 2018 is “Decide Your Destiny,” emphasizing the message that today’s decisions shape tomorrow’s reality. This session will relay this theme in the following ways:

- **STEM is important to the future of the youth and to our nation**
- **Getting involved in the STEM Nova program can lead to a fulfilling STEM career**

This session will help the **Lodge/Chapter/Section** with the Journey to Excellence Requirement(s):

Req 3 and 4: Improve and retain membership

Embracing the STEM Nova program and STEM activities have been shown to improve and maintain Scout membership.

Req 7: improve lodge member participation

Scouts are more inclined to attend Lodge events when there are STEM activities included (this has been shown to be true with Unit meetings).

Req 9: Complete service projects.**



Scouts can participate in STEM activities to provide service to for other Scouts and the community.

Required Materials: [tailor specifically for this session after the syllabus is done, e.g. handouts, flipcharts, projector, screen]

- ****STEM Nova program slides****
- ****STEM Nova program handouts****
- ****flipcharts (optional)****
- ****projector & screen (optional)****
- ****laptop with slides (optional)****

TRAINER PREPARATION

1. Obtain STEM Nova program overview slides (from the National STEM Nova committee training task force lead)
2. Review STEM Nova program slides and be familiar with the program
3. Add examples from your own experience – times when STEM activities were included in a Scout program (if available)
4. Prepare handouts with the background and overview of the STEM Nova program and how Scouts can earn awards

Session Narrative

Introduction

5 minutes

This is an overview of the BSA STEM Nova program.
Here are the learning objectives.
STEM is...

First topic

10 minutes

Why STEM is important to you as a Scout and to our Country.
Exxon Mobil and BSA partnership
Prepared for Life!

Second topic

10 minutes

This is how the BSA STEM Nova program works.



Here are the Nova modules that are currently available.

Third topic

10 minutes

Here is an example of a Nova award and a Supernova award
This is how to earn Nova and Supernova awards

Additional topics as needed

10 minutes

This is how to process and obtain the awards.
Presentation of the awards

Takeaway Challenge

3 minutes

Please take out your notebook and pen. For the final three minutes, think about the role that you will be playing next year in the OA, or the role you hope to play. Write down three key ideas related to this session that you could help improve the way your chapter or lodge works / budgets / plans programs [something appropriate for your session]. During your break time later today, share these with others in your chapter or lodge.

Trainer Instructions: Have a prop to go with each of the main requirements. Show the props to help reinforce the idea of each requirement.



Appendix: Resources and Source Material

- STEM in Scouting website
<http://www.scouting.org/stem.aspx>
- STEM Mentor Resources
<https://www.scouting.org/stem-nova-awards/council/volunteer-support/>
- Finding STEM Volunteers
<http://blog.scoutingmagazine.org/2015/09/18/how-to-find-stem-experts-for-your-next-scoutmeeting-or-event/>
- STEM Supernova
<https://www.scouting.org/stem-nova-awards/awards/boy-scouts-supernova-awards/>
<https://www.scouting.org/stem-nova-awards/awards/venturer-supernova-awards/>
- STEM Nova Awards Guidebooks
Cub Scout Nova Awards Guidebook
Boy Scout Nova Awards Guidebook
Venturer Nova Awards Guidebook
- Commercial Sites, available online at
SteveSpanglerScience.com
Teachersource.com
Pitsco.com
<https://www.nasa.gov/audience/forstudents/index.html>
<https://www.engineeringtoolbox.com/>
- Lodge / Chapter Journey to Excellence Workbook
<https://oa-bsa.org/resources/forms/>
- GSLAC STEM website
<http://stlbsa.org/activities/other-activities/stem/>
Facebook
STEM Nova Award, BSA
Scouting and STEM - Greater St. Louis Area