

## STEM Challenge Overview

The New Mexico Department of Workforce Solutions (NM DWS), New Mexico Public Education Department (NM PED), and Los Alamos National Laboratory (LANL) invite NM high schools to participate in the 2019–2020 Governor’s STEM Challenge and Showcase. The Challenge program will recognize achievement and develop potential in NM’s diverse student population by exploring how STEM careers can address local, state, and global challenges. The Challenge will also advance and support the integration of Next Generation Science Standards (NGSS) into everyday classroom activities, and encourage students to pursue local STEM career opportunities.

Student teams from NM high school STEM classes will imagine, design, and develop a project model to address a question formulated by Los Alamos National Laboratory (LANL) around the topic theme of national security. Schools accepting the Challenge will utilize LANL’s question as a co-curricular learning tool and case study in their class curricula.

Participating NM industry employers will judge teams based on quality and degree to which answers reflect skills required for careers with NM STEM businesses, and award winning teams \$5,000 (\$500/student). All participating teams will present at a Statewide STEM Showcase in Los Lunas, NM, and all participating students will be eligible for a varsity letter in STEM recognized by the New Mexico Activities Association.

**Eligibility:** All students grades 9–12 from NM high schools including public, charter, and private schools may participate and home-educated students may join a public school team. Though all STEM classrooms may participate, schools will choose a team of up to **10** students and **2** teacher mentors to submit a proposed solution.

**Resources:** Teacher mentors will receive a \$500 stipend, in addition to professional development opportunities and funds for supplies and materials through the Public Education Department. Teams will also receive support from Subject Matter Expert mentors coordinated through NM State University partnered with Northern NM College and the University of NM.

**LANL Topic Theme:** Scientific research and technology at LANL is dedicated to protecting the security of our country and keeping its citizens safe. LANL invites students participating in the STEM Challenge to help identify new national security solutions aligned with the goal of *Keeping the World Safer Using Technology*. The following topics are areas where the Laboratory works to find solutions to challenging national problems:

- Protecting from Natural and Man-made Disasters
- Safeguarding Food, Water, and Energy
- Conserving the Environment
- Improving Health
- Securing Information and Data

### Important Dates:

- **August 30th, 2019:** Schools must register teams via [bit.ly/2YBNrxX](https://bit.ly/2YBNrxX)
  - School principal must approve team application
- **November 22nd, 2019:** Teams must submit prototypes/plans to the LANL Statewide STEM Showcase Coordinator Anjeli Doty at [adoty@lanl.gov](mailto:adoty@lanl.gov) by 11:59 p.m.
- **December 7th, 2019:** Statewide STEM Showcase held in Los Lunas, NM