



THE UNIVERSITY OF ARIZONA

NATIVE AMERICAN SCIENCE & ENGINEERING PROGRAM

Member of the STEM PUSH Network, an NSF INCLUDES Alliance

An initiative of the [Office of Early Academic Outreach at The University of Arizona](#), the Native American Science & Engineering Program (NASEP) is a year-long program designed to provide Native American high school students with the necessary resources to enroll in college and pursue a career in a STEM field.

NASEP participants will gain a wide perspective on STEM fields through interactions with university and industry experts. NASEP exposes students to a wide variety of STEM pathways to better inform their college pathways in the context of the Native American experience. NASEP consists of:

- **Summer Programming:** Students stay for one week at the University of Arizona & participate in STEM workshops
- **Research Project:** Students work on [geoscience research](#)
- **Enrichment:** Students have opportunities to participate in events such as the Tribal Environmental Health Forum, Native American College Day at U of A, American Indian Science & Engineering Society Regional Conference

NASEP emphasizes & develops several targeted outcomes, including:

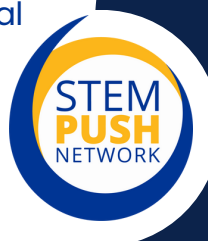
- STEM identity & sense of belonging
- Specific STEM content or skills
- Growth mindset & approach to STEM
- STEM identity & sense of belonging

Students demonstrate these skills through a [research poster](#) and entries in science competitions.



About the STEM PUSH Network

STEM PUSH, an NSF INCLUDES Alliance, is a national network of pre-college STEM programs who are engaging youth historically underrepresented in STEM to learn & do in-depth, authentic science, and ultimately to persist in STEM through college & beyond. More information available at stempushnetwork.org.



Program Features

Focuses on multiple STEM areas



i.e. environmental, medical, computer science, engineering, etc.

160 hours throughout the academic year

24 students served each year

Free for students to attend; NASEP pays living expenses at U of A

Serves Native American students, high school juniors & seniors, from throughout the Southwest

100% of NASEP students are underrepresented in STEM

Program Results

72% of NASEP alumni enrolled in STEM undergrad

69% of students persisted in STEM after one year

Alumni have attended institutions including:

- Arizona State University
- Dartmouth University
- Georgetown University
- Gonzaga University
- Massachusetts Institute of Technology
- Northern Arizona University
- Stanford University
- University of Arizona
- University of New Mexico
- Yale University



Scholarships available

for NASEP alumni enrolled at the University of Arizona through the Marsha Morgan Foundation

Partnerships with Indigenous industry professionals

- Raytheon
- IBM
- Tohono O'odam Water Resources Department
- Other STEM organizations

Students receive an iPad

to use throughout the program. After successfully completing NASEP, students keep the device

NASEP

The Native American Science & Engineering Program (NASEP) builds a community for diverse individuals interested in STEM to learn and explore in culturally sustaining ways. The program utilizes the American Indian Well-Being Model in Higher Education to create programming that focuses on holistic wellness in academia.

NASEP experiences are designed to develop the students' understanding of STEM opportunities. NASEP invites Indigenous industry professionals to interact with students throughout the program. Seeing professionals who look like them in positions they aspire to be in is important in building positive self-efficacy.

The program aims to create a systematic change in the hiring patterns on Indigenous Americans in STEM fields by increasing the number of individuals on the path to leadership in those areas.



NASEP is committed to introducing Native students to different areas in the STEM field by using culturally informed approaches to connect Indigenous funds of knowledge to the students' career interests.

- 2019 NASEP Student from Pascua Yaqui Tribe

Since 2009, NASEP has served 299 students from 32 different tribes across the Southwest, including:

Acoma Pueblo, Chemehuevi, Chickasaw, Cochiti, Gila River, Gres Ventre, Hopi, Jicarrila Apache, Kiowa, Laguna Pueblo, Lakota, Makah, Muscogee Creek, Navajo, Nez Perce, Northern Arapaho, Ogalala Sioux, Paiute, Pascua Yaqui, Pamunkey, Pojoaque Pueblo, Salt River Pima, San Carlos Apache, Santa Clara Pueblo, Shoshone, Tewa, Sisseton-Wahpeton Oyate, Tohono O'odham, White Mountain Apache, Winnebago, Yurok, and Zuni.

Connect with NASEP!

Contact NASEP Coordinator Carol Seanez at nasep@arizona.edu to schedule a visit.

More information about NASEP is available at nasep.arizona.edu.



NASEP
Native American Science
& Engineering Program