



Nevada STEM Advisory Council List of Recommended STEM Programs February 2023

The UNLV STEM Academy

PROGRAM OVERVIEW

The UNLV STEM Academy is organized and operated by the UNLV College of Engineering. As a strong advocate for "Access, Inclusion, and Equity" (NAPE), the Academy supports and supplements STEM education for Southern Nevada secondary students, particularly female and underrepresented students of color. The Academy aims at developing students' qualities of collaboration, communication, critical thinking, and creativity through half-day camps, full-day camps, Saturday camps, spring break camps, and summer camps.

The Academy offers the following training courses:

- *Math (at all levels up to Calculus)*
- *Python coding*
- *Arduino & IoT*
- *Drones*
- *Cyber security*
- *Introduction to semiconductor manufacturing*

TARGET GRADES

We target to train students in grades 6 - 12.

A UNIQUE OR SPECIAL FOCUS OF THE PROGRAM

The Academy strives for preparing the future college students and workforce who both are equipped with cutting-edge STEM knowledge via hands-on STEM activities, team-based projects, and interactions with STEM model teachers, college student mentors and faculty.

THE PROGRAM'S IMPACT ON STUDENTS

The Academy courses and group activities have significantly improved students' interests in learning STEM and helped to recruit a broader range of students in STEM course-taking pathways.

SPECIFIC SKILLS STUDENTS WILL LEARN

Students will learn hard skills in computer programming, mathematical modeling, data analysis, system design, and chip manufacturing as well as soft skills including critical thinking, problem solving, communication, and teamwork.

RESOURCES PROVIDED TO EDUCATORS

The course materials developed in UNLV STEM camp will be available to all CCSD school teachers free of cost. The camp will collaborate with CCSD professional development program and other teacher training projects funded at UNLV in providing professional development workshops for STEM teachers.

WEBSITE

<https://register.edoutreach.unlv.edu/wconnect/CourseStatus.awp?&course=222RG1038>

CONTACT INFORMATION

Prof. Yingtao Jiang

Prof. Shaoan Zhang

Email: stemunlv@unlv.edu

Phone: (725) 207-5458