



Education and Workforce Development With Colorado Space Grant Consortium



Partner

B. K. Sobhani, C. Wilfong, M. Kettles, A. Strange
Colorado Space Grant Consortium, University of Colorado Boulder

Background

As the needs of the aerospace industry evolve, higher education needs to evolve along with it. In addition to looking at degree pathways in two- and four-year institutions, development and expansion of training, research and project opportunities for students outside the classroom are equally as important. Engaging undergraduate students early in hands-on, experiential learning is critical to the retention of students, particularly those traditionally underrepresenting in STEM fields. NASA Space Grant, represented in every state in the US, is well poised to lead the way in evolving the student experience for the aerospace workforce of the future. Colorado Space Grant Consortium is building the workforce of the future. Our programming evolves with time to accommodate the interest of the students, the technology available, and the needs of NASA and Colorado. COSGC is always looking for ways to push the boundaries of what our students can do in space but our core remains the same. The core of COSGC is embodied in our three strategic goals: Fostering inclusive student engagement, hands-on and research projects, and partnerships. COSGC provides statewide training workshops and design challenges, student scholarships and student internships. Through innovative partnerships, COSGC connects students and new aerospace companies and offers summer project and internship placements. These internships, coupled with the skills development workshops COSGC provides, is an important part of the development and growth of the talent pipeline.

Workforce Development

At the Colorado Space Grant Consortium, we're committed to launching more than just spacecraft, we're here to launch careers! Our Programs, Opportunities, and Workforce Development Hub are designed to help students grow as a professional, not just as a student. Whether they are building their first resume, exploring career paths, developing leadership skills, or preparing for internships and jobs, COSGC is here to lead the way, from the classroom to the workforce.

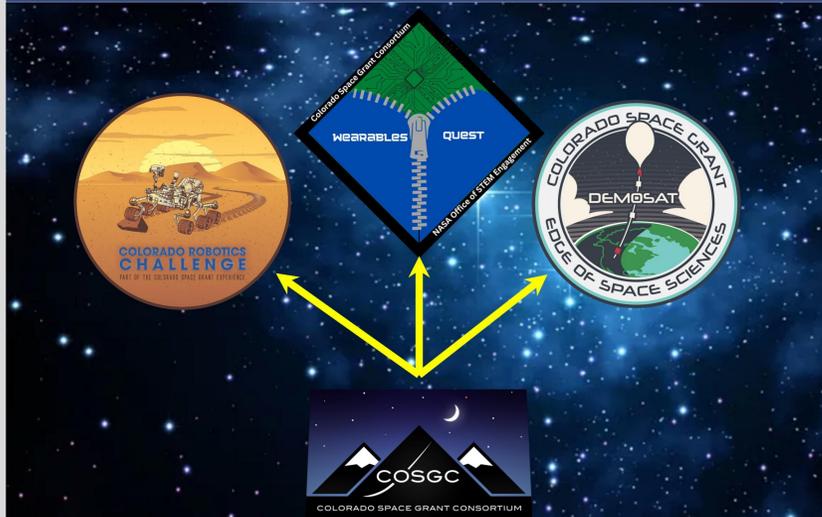


Affiliate Network

The COSGC is a state-wide organization involving Funded Affiliates, Academic Partners, InformalEd Partners, and Industry Partners. 21 colleges, universities and institutions around Colorado are funded Affiliates. Each Funded Affiliate has unique programs that include hands-on student projects, classes, research, and outreach. Affiliates also participate in state-wide teaching and hands-on projects.



COSGC Statewide Programs



The COSGC Design Challenges are a place where students can participate in a number of hands-on experiences including the Colorado Robotics Challenge, DemoSat Quest, Wearables Quest, and the NEW EONS Challenge!

COSGC also offers the HYPERDRIVE Summer Internship Program and the Statewide Undergraduate Research Symposium. Visit our website for more details on all of these opportunities.



EduSourcing Intern Program

What is EduSourcing? Industry and Academia working together to prepare the workforce of tomorrow. EduSourcing enables partnerships between Colorado Space Grant and Colorado aerospace companies to create and support opportunities for students to work with engineers and scientists from industry in an internship role. The students will work with industry mentors to develop, design, and demonstrate each company's technologies, concepts, and ideas. Work can take place either at Industry location or in COSGC facilities on the CU campus. Students receive important industry experience and the opportunity to put their classroom learning to real-world use. COSGC manages the recruitment and hiring process.

Student Engagement



How to get Involved

If you are interested in working with us, there are several options. Academic partners (K-12 and Higher Ed) are a part of the COSGC network but are not guaranteed base funding and are not voting members. Academic partners can participate in any COSGC program free of charge and receive discounted pricing on Component Kits. If supplemental funds become available, Academic Partners can propose projects for competitive funding. Informal Ed partners are a part of the COSGC network but are not guaranteed base funding and are not voting members. This partnership allows program development and shared events. InformalEd partners are also invited to have representation on the COSGC Advisory Board. Industry Sponsors are encouraged to support students, provide project opportunities and be involved in our workforce development efforts.



CU Student Projects

COSGC offers programs on the CU Boulder campus for students to get involved with hands-on design and research projects as early as their first semester. Our WARPSPEED cohort is an application and stipend based experience where we build technical and professional skills through workshops and team projects. CU also hosts the Great Lunar Expedition for Everyone (GLEE), a mission to design and deploy a distributed sensor network on the Moon. Satellite Collision Observation and Unified Tracking (SCOUT) is a cubesat mission to test new ways of identifying and tracking space debris in orbit. Climate Adaptation and Resilience Monitoring Alliance (CARMA) is utilizing NASA's STELLA spectroscopy device to study the impacts of climate change on plant health in a variety of vulnerable environments.



www.colorado.edu/center/spacegrant

Barbra Sobhani
Director, Colorado Space Grant Consortium
Email: Barbra.Sobhani@colorado.edu
University of Colorado Boulder
<https://www.colorado.edu/center/spacegrant>



TO FOLLOW US ON
INSTAGRAM
[@COSPACEGRANT](https://www.instagram.com/cospacegrant)