

**South Dakota Space Grant Consortium
Project Innovation Grants
2006–2024
(86 Proposals Selected for Funding)**

Year	Amount (NASA \$)	Affiliate(s)	Title
2024	\$40,000	SDSU	Lunar Design Competitions
2024	\$22,300	SDSU	Lunar Life – Traveling Exhibit Research and Marketing Development
2024	\$15,015	SDSM&T	Development of a novel high-altitude temperature measurement system
2024	\$12,439	SDSM&T	Using Space-Based Remote Sensing Systems to Track West Nile Virus in the Black Hills
2024	\$11,700	CAIRNS	An IDEA for a New Observatory in Pine Ridge Reservation
2024	\$11,543	Augustana	NASA STEM for Girls
2024	\$10,500	Washington Pavilion	A Celebration of Science with Bill Nye
2024	\$10,000	Aerostar	STEAM Video: Using Stratospheric Balloon System Technology to Discover and Explore our Planet and the Universe
2024	\$8,474	RESPEC	Mining for Opportunities in Earth Sciences
2024	\$1,000	Journey Museum	Space Camp 2024- Ever Changing Weather
2023	\$31,738	Augustana	Patching the Leaky STEM Pipeline: A New Scholars Program at Augustana
2023	\$19,813	Badlands Observatory	Badlands Observatory Astronomy Education & Outreach Event
2023	\$22,499	USD	Monitoring of invasive Russian Olive using aerial photography, Sentinel-2, UAV imagery and machine learning
2023	\$30,400	SDSM&T	Novel Bulk Material Hauling Technologies for Lunar and Martian Colonization
2023	\$13,965	SD Discovery Center	Coder Mindset
2023	\$9,000	SDSM&T	National Eclipse Ballooning Project (NEBP): Western South Dakota Team
2023	\$4,563	SDSM&T	Reviving the supersonic wind tunnel for study of supersonic flows
2023	\$8,356	SDSM&T	Evaluating the geochemical characteristics of subsurface environments of western South Dakota to assess microbial habitability
2023	\$8,750	USD	Dust production via abrasion of basalt sand: An analog for Mars
2023	\$3,257	Black Hills Astronomical Soc	Hidden Valley Observatory (HVO) Telescope Update Project
2023	\$1,600	SDSM&T	What Does A Geoscientist Do?
2021-22	\$70,106	SDSU	In-Situ Resource Utilization NASA Design Challenges
2021-22	\$65,903	SDSU	Design, Development, and Testing of an Advanced Multirotor for Human Transportation

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2021-22	\$52,298	SDSU	Living and Working in Space - Children's Museum Traveling Exhibit Design
2021-22	\$17,610	SDSM&T	A life is a life no matter how small: the impact of spaceflight conditions on microorganisms
2021-22	\$4,428	Journey Museum	Journey into the Future
2021	\$30,000	SD Discovery Center	Tell it to the Stars - Astrophotography meets Indigenous Storytelling
2021	\$24,158	SDSU	Inspiring WasłóslolkiyekA (one who is eager to learn)
2021	\$16,205	SDSU	Collaborative Robots for NASA Robotic Mining
2021	\$1,435	BHAS	Hidden Valley Observatory Star Party Enhancements
2020	\$17,496	SDSM&T	Computational Astronomy 3
2020	\$11,714	SDSM&T	Establishing a Methodology for Utilizing Close-Range Photogrammetry to Generate High Resolution, Spatially Referenced Three-Dimensional Models of Drill Core
2020	\$10,700	SDSU	Hands-on Biomedical Engineering Experience for Undergraduates in NASA Space Challenges
2020	\$1,000	SDSM&T	Enhancing geospatial education with mobile-device-based GPS technology
2019	\$13,708	Augustana	Designed Laboratory Instrumentation for Education and Outreach
2019	\$15,802	SDSM&T	Computational Astronomy 2
2019	\$19,489	SDSM&T	Cross Comparison of Virtual Reality Systems for Education and Research Suitability
2019	\$20,000	SDSM&T	NASA Apollo 50th - Apollo Next Giant Leap Student Challenge
2018	\$16,555	DSU	The STEM Institute: Redesign of the Summer STEM Institute Program and Establishment of a More Inclusive Year-Round STEM Institute at DSU
2018	\$33,351	SDSM&T	Catching Rays – NASA HASP Project
2018	\$39,970	SDSU	SDSU Participation in the NASA 3D Printed Habitat Challenge
2017	\$14,132	SDSM&T	Drone Home: A Housing/Recharging System for Deploying Drones
2017	\$29,630	SDSM&T	Project Fireworker – Swarm Allocation for Project Firewalker
2017	\$3,415	BHSU	Women in Science Conference at BHSU
2017	\$31,237	Augustana	Ultrafast Lasers for Education and Research
2017	\$5,000	SDSM&T	SDSM&T CubeSat Team Formation
2017	\$5,000	SDSU	Startup of SDSU CubeSat Club
2017	\$5,758	BHAS	Hidden Valley Observatory Astronomical Imaging Camera Upgrade
2017	\$5,828	SDSU	Advanced Materials for 3D printable heat exchangers
2015-16	\$11,000	SDSU	South Dakota Aviation Mobile Lab
2015-16	\$11,900	Augustana	Measurement of atmospheric trace gases using cavity enhanced spectroscopy

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2015-16	\$13,100	Augustana	Hands-On Observational Astronomy Laboratories at Augustana University
2015-16	\$25,000	SDSM&T	Computational Astronomy for Teachers and Their Students
2015-16	\$31,484	SDSU	3D printable heat exchangers to enhance student learning related to space science
2015-16	\$4,000	SD Air & Space Museum	Establishment of Titan I Intercontinental Ballistic Missile Exhibits and Educational Programs at the SD Air & Space Museum
2015-16	\$48,550	BHSU-SURF	Flight to Totality: The SDSGC 2017 Solar Eclipse Balloon Project
2015-16	\$5,000	Raven Aerostar	Raven Aerostar Balloon Day 2017
2014 Ext.	\$20,150	BHSU-SURF	Integrating Sanford Lab Science into K-12 Classrooms Across SD
2014 Ext.	\$16,428	Augustana	Engaging the Youth in Programming
2014 Ext.	\$16,422	SDSU	STeAM Girls (Science, Technology, Engineering, art, and Math)
2014 Ext.	\$5,000	Raven Aerostar	Raven Aerostar Balloon Day
2013-14	\$13,000	Journey Museum	The Journey Museum's Summer in Space
2013-14	\$12,000	SDSM&T	Green Chemistry Education Workshop for Middle School Teachers in the Rapid City Area
2013-14	\$10,000	DSU	The STEM Institute: An interdisciplinary program for maximizing student recruitment and retention in STEM majors at DSU
2013-14	\$9,727	USD	SD Planetary Exploration Education Center (PEEC)
2013-14	\$6,840	Augustana	Sonia Kovalevsky Day at Augustana College
2013-14	\$5,000	SDSM&T	SDSM&T Mines Experimental Rocketry
2012	\$32,000	SDSU-Augustana	Looking Beyond One's Self—Toward Stars and Visions
2012	\$20,000	SDSM&T	Basic Small-Scale Submarine for Educational and Outreach Activities
2010	\$5,000	SDSM&T	SEDS Reformation
2010	\$10,472	SDSM&T	Design and Development of a Cooperative UGV/UAV Team
2010	\$18,646	SDSM&T	VARTM Process Simulation for Compressible Preform Materials
2010	\$15,000	SDSM&T	FRANC: The Design and Fabrication of a Search For Life Autonomous Underwater Vehicle and Satellite Relay Simulator
2009	\$10,000	SDSM&T	Thermal and Mechanical Properties of Cross-Linked Epoxy-Silicate Polymer Nanocomposites from Molecular Simulation
2009	\$6,850	LATI	AQUILA – High Altitude Balloon Research Project
2009	\$3,312	SDSM&T	High School Engineering Camp Activity Refinement
2009	\$45,914	SDSU	Remote Sensing for Water Quality Monitoring and Watershed Assessment on Lake Traverse Reservation

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2008	\$10,080	SDSM&T	Establishment of C-Band and L-Band InSAR Processing Capabilities at SDSM&T
2008	\$25,000	SDSM&T	Integration of NASA Space Projects Into RIAS Education (INSPIRE)
2008	\$25,000	SDSU	Initiation of a New Research Infrastructure for Space Power Generation
2007	\$19,925	Augustana	Robotics as an Exciting Platform for Learning Computer Science Concepts
2007	\$9,600	RESPEC	Developing an Internet-Accessible Database of 3-D Geologic and Engineering Data for Homestake Mine
2006	\$20,850	Augustana	Free High Performance Computing on Standalone Computers
2006	\$6,384	BHSU	Earthshots
2006	\$10,518	SDSM&T	Interdisciplinary Robotics Initiative
2006	\$15,501	SDSM&T	Space Adventures! Camp
TOTAL	\$1,453,493		