

Monte del Sol Charter School Early College Program

Agriculture, Food, and Natural Resources:

Power, Structural and Technical Systems Career Cluster

Monte del Sol (MdS) Early College Program students will *learn and lead by doing* at the same time *learning and earning* college credit towards a CTE Certificate and/or an Associate Degree in various careers which will lead to a living wage, a sustainable career, create equity of support between traditional four year college-bound students and students seeking an alternative career path. We will be working in collaboration with Santa Fe Community College to provide dual credit courses on the MdS campus and on the SFCC campus (SFCC Campus is approximately 3 miles away from the MdS campus). In addition, we will be working with SFCC Dual Enrollment Coordinator, Accessibility Services, Financial Aid, Department of Vocational Rehabilitation, New Mexico Workforce Solutions and the State Apprenticeship Office to take advantage of all of the resources available to students (Dual Enrollment, Road to Success/Lottery Scholarships, Pell Grants and other relevant scholarships and programs applicable). The program's goals are fourfold: to increase graduation rates in underserved populations; for students to graduate with a high school diploma; for students to earn 12 plus credits worth of college credit and/or a Nationally recognized CTE Certificate; and to provide Early College students with 12 months of college and career counseling after graduation. Many students will be able to earn a certificate and/or an associate's degree with little to no

out-of-pocket costs to them or their families, leading to a sustainable career with a robust wage.

In collaboration with the Santa Fe Community College's School of Trades, Advanced Technology and Sustainability our focus for this funding will be to offer courses both on our school campus and on the SFCC campus to better prepare students for New Economy STEM jobs in the areas of sustainability i.e. Solar Photovoltaic, Water Treatment, Wind, Bio Fuels, Controlled Environment Agriculture, and Green Building. We are living in a critical era and are faced with monumental challenges to move to a more sustainable society and economy. These challenges will provide our youth with opportunities to be a part of the positive change in a sustainable career with a robust wage. Our objective is to provide students with the dual credit STEM classes, which will offer students a solid foundation of understanding the elements of these new economy sustainable careers. At the same time providing students with an environment to learn by doing, with hands on project based learning.

The Early College program will target and give first priority to traditionally underserved student populations.

- Special Education Students
- English as a First Language Students
- Native American Students
- McKinney-Vento Students
- Student Action Team Referrals
- Non traditional career seeking students

MdS current underserved populations numbers are approximately:

- 70% Free and Reduced Lunch
- 70% Ethnically Diverse
- 23% of students have special needs
- 12% McKinney Vento
- 15% English Language Learners

The overarching goal is to improve high school retention, graduation rates, certificates and/or college credits earned in conjunction with earning a high school diploma. We will prioritize Special Education, McKinney Vento, ELL, Native American and students seeking a non-traditional career path. One of the program's goals is to increase the graduation rates for these populations.

The UN Department of Economic and Social Affairs Youth in an article outlined the shift to greener jobs for our youth. *"Millions of green jobs have been created across a range of sectors and there are more work opportunities ahead, according to the report by the Green Jobs Initiative of ILO. The shift to a greener economy that could generate 15 to 60 million additional jobs globally over the next two decades and lift tens of millions of workers out of poverty, also offers opportunities for young people."* [Un.org](#) We have a responsibility as educators to prepare our youth for these new economy jobs.



**"[C]lean energy is the future,
and we all know New Mexico has the
sunshine and the wind capacity to be
a global leader in this new era. "**

Governor Michelle Lujan Grisham

<https://50by2030.org/>

Architecture & Construction Career Cluster: (Including Renewable Technology)

[Green Building and Construction Skills \(16\)](#)

[Certificate in Green Building Systems \(19\)](#)

[Certificate in Solar Energy \(25\)](#)

[Certificate in Sustainable Technologies \(22\)](#)

[Controlled Environment Agriculture \(27\)](#)

Employment Potential: <u>US News 2019</u>	US News Rated	Projected Jobs	Median Salary
<u>Construction Manager</u>	#1	44,800	\$91,370
<u>Wind Turbine Technician</u>	#2	75,200	\$52,590
<u>Electrician</u>	#3	59,600	54,110
<u>Solar Photovoltaic Installer</u>	#4	83,800	45,170
<u>Construction Worker</u>	#12	150,400	\$34,530

“Your degree or certificate in Sustainable Technologies provides you with an in-depth understanding of issues regarding sustainability, renewable energy, water treatment and

water conservation. Through your chosen concentration, you'll acquire the skills need for entry-level positions in a wide range of energy- and water-related businesses or public agencies. You could even consider starting your own business." [Santa Fe Community College Sustainable Technology Department](#)

Program of Study/Structure

9th, 7th, and 8th Grades: Students will work in their home group classes and on Naviance Self Discovery Career/Self Assessments. Students will be given the opportunity to take part in a Mentor/Internship in the area of their interest.

10th, 11th and 12th: Students will enroll in a Career Readiness class. Students will continue with their grade level Naviance curriculum and develop in depth career and college exploration in addition to honing their interviewing, resume writing skills and workplace expectations. The program will continue providing support and STEM Dual Credit courses at MdS and on SFCC Campus. Students will continue to work on their MdS Mentor/Internship placements.

All MdS Students: MdS students will work on College and Career Exploration through Naviance during their Home groups at their grade level Naviance curriculum. All students will be given the opportunity to take part in college and career fairs/events both locally and regionally. On a quarterly basis the Program Coordinator will organize guest speakers to present on various topics related to College and Career Readiness, Career Fairs, and guest speakers. All MdS High School students are required to take part in 2 Mentor / Internships throughout their high school career, write a culminating paper and

present their experience at The Annual Mentor/Internship Fair at the end of each school year.

Structure, Size and Scope:

We have and will continue to match our early college classes with STARS coding to take full advantage of cross-coding classes. For example our Intro to Sustainability dual credit class will satisfy a student's 3rd science requirement and or count as an elective. Classes will be offered in our afternoon blocks to better fit into student's schedules, as core classes are provided mainly in the AM blocks. We plan to offer Early College Classes during the summer in our Summer Academies. Students will have the opportunity to earn college credit during a 6-week block during the summer. The Early College Classes will be open to all students' grades 10th-12th. Students in grades 7th-9th will be provided with Career Exploration and Summer Academies, exposing them to various careers and activities.

The Program Coordinator will support students in exploring their career interests, participate in a career readiness course which will be an in-depth exploration into careers, post secondary options and hard/soft skills needed to succeed in the workforce. Students will participate in and Mentor/Internships, hands on projects on campus, at SFCC, and around the broader Santa Fe Community. Students will receive wrap-around services, 1:1 Career Counseling, assistance with job and/or Apprenticeship placement summers and/or

upon graduation. The Program Coordinator will provide graduating students with 12 months of support after graduation.

MdS is working diligently on staffing our dual credit classes in house. Currently we have 5 dual credit classes taught by MdS teachers in conjunction with SFCC. Our goal is to provide as many dual credit classes in house, as we see students who taking entry level college classes from instructors they are familiar with and have history, have more success and have a smoother transition to the college setting. To better support our students throughout their Early College experience, we will recruit Educational Assistance (EA) with expertise in the STEM fields to assist with managing the Maker Space and support teachers in the classroom. We encourage out teachers to further pursue education and interests to expand our dual credit offerings in house.

MdS is in the process of building additional lab/classroom space to provide students with hands on project based learning experiences. We have recently completed a 30ft Geodesic Dome Greenhouse Lab. Students now have a lab space to grow both soil and soilless based food production for out Garden to Table Program. This program provides fresh organic produce to our school kitchen. This lab provides additional lab space for our science classes.

Funding will also provide the seed money to began the fulfillment of our Makers Space Initiative. The Maker Space will provide a creative lab setting, where students can let

their imaginations go wild and embrace their creativity. Teachers will have access to the Makers Space to augment their curriculum with hands on project-based learning. Student and teachers will have access to

- Computer Workstations
- 3D Printers Stations
- Small to Medium Scale Electric Vehicles Design Stations
- Alternative Energy Design Stations
- Robotics Stations
- Woodworking Stations

Students and teachers will be encouraged to participate in local, state and national competitions to showcase and demonstrate their learning, such as the [Spellman Clean Tech Competition](#), [Envirothon](#) and [Junior Solar Sprit Competition](#).

Our school community has been collaborating with MdS parents, Santa Fe Community College, New Mexico Workforce Solutions, Department of Vocational Rehabilitation, Local Industry for input on establishing MdS Early College Program. Monte del Sol has a well-established Mentor/Apprenticeship Program, which was established in 2000 and has provided over 3000 Mentor/Apprenticeships. Currently 70% of our High School students are participating in a Mentor/Internship. MdS Mentorship Program has been a model for schools around Santa Fe, the state and will be a foundation of providing our students with real life hands on experiences in the real world with professionals in the community. Program. The feedback, input and support for the creation of the MdS Early College Program has been outstanding. Our community has been very supportive and excited to provide an alternative pathway to students. We are committed to pursue further and future funding to sustain the Early College Program.

The school's NM DASH 90 day plan focuses on teacher collaboration and qualitative data, using the school's mission of sustainability as a base. Teachers will meet for full day PD on February 15 and April 5, with Tuesday staff meetings also containing PD. Focus areas are Tier 1 intervention, Data driven-instruction and Collaboration. The College and Career Readiness program is a collaboration among Special Education, Science and Art teachers. In the CCR program formative assessment will be relied upon to direct the program. The 90 day plan creates opportunities for teachers to collaborate to design the program and motivate students to engage in learning opportunities that motivate them and tie into the school mission. The past three years were D, C, and D. We have instituted short-cycles assessments that have shown significant growth in math and reading, however we still have a significant percentage that has yet to achieve proficiency.