



MECHANICAL ENGINEERING

Program of Study

Career Cluster: Science, Technology, Engineering, and Mathematics

Career Pathway: Engineering and Technology

This Academic Plan is based upon the state requirements needed for a College and Career Ready (CCR) Diploma.

Academic course names may vary among school districts.

Grade	1 st Course	2 nd Course	3 rd Course	4 th Course	5 th Course	6 th Course (CTE)
9 th Grade	English I	Algebra I	Biology	Health / Computer Literacy	Physical Education	Introduction to Engineering Design
10 th Grade	English II	Geometry	Chemistry or Geoscience	World History	Physical Education	Principles of Engineering
11 th Grade	English III	Algebra II	Science Course or Elective ¹	US History	Foreign Language ² or Elective ¹	Computer Integrated Manufacturing ³
12 th Grade	English IV	Senior Level Math Course	Elective ¹	US Government	Foreign Language ² or Elective ¹	Engineering Design and Development

¹ Electives may include arts and humanities courses or other career and technical education courses that relate to the program of study.

² Foreign Language courses are recommended if a student is planning on entering a university. (See individual university admission policies)

³ CTE Assessments will be administered during the completion level CTE course.

Career and Technical Student Organizations	Work-Based Learning	CTE Assessments
SkillsUSA	Job Shadowing / Internship / Work Experience / Career Days / Career Fairs / Field Trips / Guest Speakers	1) End of Program Technical Assessment for Mechanical Engineering 2) Workplace Readiness Skills Assessment (for Employability Skills Standards)

Postsecondary Options	State Articulation Agreements for CTE College Credit
College of Southern Nevada / Great Basin College / Nevada State College / Truckee Meadows Community College / University of Nevada, Las Vegas / University of Nevada, Reno / Western Nevada College	<p>Secondary Program Requirements Student must earn the state Certificate of Skill Attainment in Mechanical Engineering.</p> <p>Postsecondary Credit Options Western Nevada College 13 Credits</p>

High Wage - High Skill - High Demand Careers	State Recognized Industry Certifications
Mechanical Engineer / Electrical Engineer / Industrial Engineer / Manufacturing Engineer / Materials Engineer / Product Engineer / Quality Engineer / Project Engineer / Designer / Drafter	Refer to the Governor's Office of Workforce Innovation's Nevada Eligible Industry Credentialing List