



Carson High School Engineering Program of Study



Major Career Options

- Engineer
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CTE Diploma Course Requirements: To qualify for this certificate, the student must (1) earn a 3.0 GPA or higher in the career and technical education (CTE) course sequence; (2) pass the state CTE assessment for Engineering; and (3) pass the state CTE assessment for the Employability Skills for Career Readiness.

Yellow: General Graduation Requirements

Blue/bold: Recommended Engineering Pathway

Green/italics: Recommended Electives

Career Cluster: Skilled and Technical Sciences		Career Pathway: Electronic Engineering	
9 th Grade	10 th Grade	11 th Grade	12 th Grade
<i>Semester 1&2</i>	<i>Semester 1&2</i>	<i>Semester 1&2</i>	<i>Semester 1&2</i>
English I or Honors English I	English II or Honors English II	Junior Level English with Honors and Advanced Placement classes available	Senior Level English with Honors and Advanced Placement classes available
Discovery Science	Biology or Honors Biology	Junior Level Science with Honors and Advanced Placement classes available	Elective
Algebra I or Honors Geometry	Geometry or Honors Algebra II	Algebra II or Honors Trigonometry/Pre-Calculus	Trigonometry/Pre-Calculus or Advanced Placement Calculus
Freshmen Transitions and Health	World History or Honors World History	U.S. History/Honors and Advanced Placement U.S. History	Government/Honors and Advanced Placement Government
Physical Education or NJROTC	Physical Education or NJROTC	Elective or Foreign Language	Elective or Foreign Language
<i>Elective</i>	<i>Elective</i>	<i>Elective</i>	<i>Elective</i>
Introduction to Engineering	Principles of Engineering	Digital Electronics (SY 14-15)	Engineering Design and Development (SY 15-16)
Work-Based Learning Opportunities	College Credit/Tech Prep	Career-Technical Student Organizations (CTSOs) and Clubs	CTE Assessments
<ul style="list-style-type: none"> • Career Awareness • Cooperative Education • Job Shadowing • Paid/Unpaid Internship • Service Learning 		<ul style="list-style-type: none"> • SkillsUSA 	<ul style="list-style-type: none"> • State End of Program Technical Assessment for Engineering • State Employability Skills for Career Readiness Assessment

Post-Secondary Options			
Two-Year College or Proprietary Program	Apprenticeships	Four-Year College and University Programs	Certificates, Licenses, etc.
Western Nevada College (AAS) <ul style="list-style-type: none"> Drafting Technology-Mechanical Welding Technology Machine Tool Technology Western Nevada College – Bachelor of Technology <ul style="list-style-type: none"> Construction Management 	University of Nevada- Reno <ul style="list-style-type: none"> Engineering Programs University of Nevada- Las Vegas <ul style="list-style-type: none"> Architecture Interior Architecture and Design Landscape Architecture and Planning Engineering Programs 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">

This Program of Study is based upon the requirements needed for a CTE Diploma. Academic course names may vary among school districts. All students must pass the high school proficiency exams to qualify for any high school diploma.

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

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

CTE Assessments will be administered during the completion of Web Design and Development III course.

For extensive career information visit <http://www.nvcis.intocareers.org/>

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