CAD Engineering / Manufacturing



CAD Engineering: Students will gain an understanding of the fundamentals of design and the project completion process. This includes initial drafting, refining drawings, and modeling using computer software, culminating in 3D printing. Additionally, students will explore real-world applications of 3D printing and manufacturing techniques, including working with sheet steel on a plasma CNC table. You will make a sign to place on the completed construction project.



Agriculture Science and Technology

Livestock Science: Students will learn about cattle, goats, horses, sheep, and swine. Lessons include learning breads, genetics, safe handling, and feeding. They will have hands-on lesson in how to dock tails, vaccinate, ear notch, and feeding. In addition they will have a field trip to a working sheep ranch and a cattle ranch.



Floriculture: Students will learn to identify numerous flowering plants, flower and plant care, color theory, basic design, sales, and marketing. They will have hands-on lessons in plant care, color theory, centerpiece creation, and boutonniere construction.

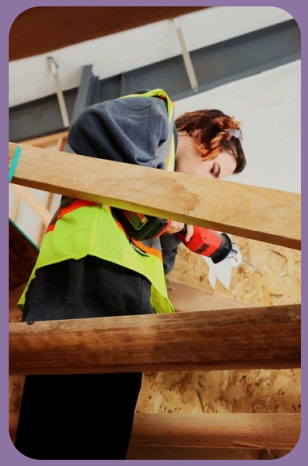


Plant and Soil Science: In this unit students will learn soil components and history, how to texture, nutrient test, and analyze soil. They will also learn plant and flower parts, and growth. There will be hands-on lessons in soil testing and texture, flower, plant, and seed dissection, and planting media preparation and seed germination.

Construction



Power Tools: Students will develop expertise in using saws, drills, impact drivers, and hand tools, with a strong emphasis on safety protocols and proper handling techniques for each tool.



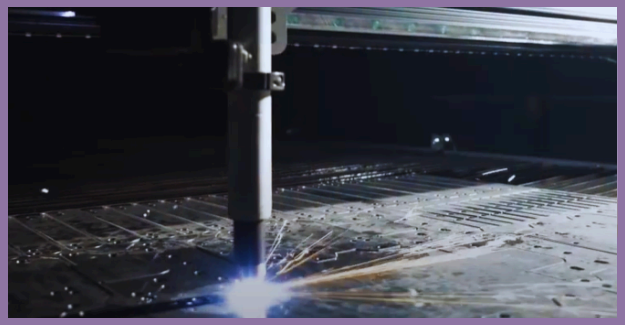
Career Opportunities: Students will explore key job roles in the construction industry and develop essential professional skills for successful employment.

Construction: Students will learn to design and construct a greenhouse or shed, utilizing power tools and construction techniques. The completed project may be used at Ponderosa.



About our CTE Programs





This 18-week instructional wheel is designed to immerse 8th-grade students in three interconnected fields—Agriculture, Construction, and CAD Engineering/Manufacturing. The course emphasizes hands-on learning, critical thinking, and real-world applications. Each subject area is explored over six weeks, providing students with foundational knowledge, skills, and experience through various projects and activities.

Chose a New Tech HS

Eagle Ridge New Tech High School is proud to be part of the New Tech Network of schools, which are dedicated to preparing students for a successful future with skills that align with workforce demands and a strong college-going mindset.

Those who choose a New Tech, are investing in a purposeful education focused on college and workforce readiness, ensuring that they are prepared to thrive in their future endeavors.

We utilize Project-Based Learning (PBL) to equip students with crucial "Professional or Soft Skills" that employers and higher education institutions highly value, such as:

- Communication,
- Teamwork,
- Problem-Solving,
- Time Management, and
- Leadership

Eagle Ridge New Tech High School

CTE Programs