

The Career Development Center

1200 S. Sunset, Longmont

303-772-3333

cdc.svvsd.org

Career and Technical Education (CTE) classes like those offered at CDC, set students on a *career pathway* that provide real-world, hands-on experiences in areas of a career or occupational area. Pathways provide students with opportunity to acquire knowledge and skills linked with specific post-secondary programs, eventually culminating in a job after high school, a program certificate and/or a two-year or four-year degree. Thank you for considering the Career Development Center. Here are some things you will want to know about our programs.

- Registration
 - This year all students will register online through RevTrak with the registration window closing January 28th, 2018. You may request enrollment in any class at CDC (making sure you meet all prerequisites) and you will be notified the beginning of February if you are accepted. Attendance, grades, credit completion, ICAP, will all be considered when making a decision, helping to ensure that students are placed in classes they will be successful in.
- Schedules
 - All classes meet every other day for two blocks (some meet everyday)
 - A 1&2; 7:50-10:20 AM or A 3&4; 11:20-2:05 PM
 - B 5&6; 7:50-10:20 AM or B 7&8; 11:20-2:05 PM
- Transportation
 - SVVSD buses run from all home high schools to and from CDC daily. You will need to check on the bus schedule for your block. This is a free service for all students.
- Credit
 - All CDC courses are considered practical arts electives and count towards graduation requirements.
- Concurrent Enrollment (College Credit)
 - Some CDC courses also qualify for concurrent (college) credit through Front Range Community College (FRCC). Benefits of concurrent enrollment include:
 - No tuition cost, with the exception of books and/or supplies, as long as the college class is *passed with a C or better*
 - A jumpstart in a career
 - College Credit and/or certification
 - Concurrent classes include:
 - Maintenance and Light Repair—Automotive Technology
 - Medical Terminology—Health Sciences
 - Visual Communications and/or Digital Video Production—Multimedia
 - Welding I-Welding and Fabrication

- All students enrolled in these classes will need to complete registration for **both** St. Vrain Schools and Front Range Community College:
- St Vrain Valley Schools Concurrent Enrollment Program Agreement: https://drive.google.com/a/svvsd.org/file/d/0B9uX8ZmVGqbTa0J5RDZSTkFIUHZFnkF4dWc1NldfRk9UZkVZ/view?usp=drive_web
- Front Range Community College - <https://www.frontrange.edu>
 - Apply now
 - Sign up for College Opportunity Fund (COF) Stipend
 - Complete Paperwork
 - Register for classes through CDC
- Classes available to freshmen:
 - Agriscience
 - Introduction To Agriscience, Animal Science, Equine Science, Vet Science
 - Horticulture and Landscape
 - Greenhouse I, Irrigation Technology, Landscape Management
 - Health Sciences
 - Exploration of Healthcare, Medical Terminology
 - Other Programs
 - ProStart I and Engineering Technology I
- Please watch the CDC website for up-to-date information and for additional opportunities not listed in this printing: cdc.svvsd.org
- Contact Becky Olson, CDC Counselor with any questions: 720-494-3964, or by email at olson_becky@svvsd.org



AGRISCIENCE

Program Requirements:

- Students should be at 9th grade level in reading, writing, math, and science to be successful in all Agriscience program courses.
- All students will develop personal, leadership, and career skills through FFA participation.
- All students will develop and maintain an individual Supervised Agriculture Experience Program and maintain online records through The AET.



Through agricultural education, students are provided opportunities for leadership development, personal growth, and career success. Agricultural education instruction is delivered through three major components: classroom/laboratory instruction (contextual learning), Supervised Agricultural Experience programs (work-based learning), student leadership organizations (National FFA Organization).

Introduction to Agriscience, CTE 9302

Introduction to Agriscience is designed to teach students with an interest in agriculture about the careers and opportunities in the industry and to give students a basic knowledge of all career pathways of agriculture: Animal, Plant, Natural Resources and Environmental Science, Agribusiness, Food Products, and Power, Structure, and Technology. Students will understand the concepts and principles of agriculture in society, form career and education goals, develop personal, leadership, and career skills.

Grades 9-12; 1 Semester (Fall); 1.0 Practical Arts Credit; PreRequisite: N/A

Advanced Agriscience, CTE 9311

Advanced Agriscience is designed to further expose students to all aspects of the agriculture industry. Students will have the opportunity to focus their interests and work independently in order to be best prepared for careers and postsecondary education. Students will analyze the concepts and principles of agriculture in society, revise career and educational goals, and evaluate their plan for achievement, enhance personal, leadership, and career skills and continue progress in individual Supervised Agriculture Experience Programs, maintain records through the online record keeping system, and evaluate program progress based on records.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credit; PreRequisite: Introduction to Agriscience - CTE 9302 & instructor approval

**Industry certificates available*

Animal Science, CTE 9324

Animal Science is an advanced science-based course designed to introduce students to the production and management of agriculturally important animals. Students will understand industry and scientific terminology, analyze and identify external anatomy and internal body systems and physiology, including: nutritional needs, reproduction methods and processes, genetic influence, health, disease, and facility management. Students will use species-specific evaluation and selection methods. Students will analyze the concepts and principles of agriculture in society, revise career and educational goals, and evaluate their plan for achievement, enhance personal, leadership, and career skills and continue progress in individual Supervised Agriculture Experience Programs, maintain records through the online record keeping system, and evaluate program progress based on records.

Grades 9-12; 1 Semester (Fall/Spring); 1.0 Practical Arts Credit; PreRequisite: Introduction to Agriscience CTE 9302

Equine Science, CTE 9325

Equine Science is an advanced science-based course designed to introduce students to the production and management of horses. Students will understand industry and scientific terminology, analyze and identify external anatomy and internal body systems and physiology, including: nutritional needs, reproduction methods and processes, genetic influence, health, disease, and facility management. Students will use species-specific evaluation and selection methods. Students will revise career and educational goals, and evaluate their plan for achievement, enhance personal, leadership, and career skills and continue progress in individual Supervised Agriculture Experience Programs, maintain records through the online record keeping system, and evaluate program progress based on records.

Grades 9-12; 1 Semester (Spring); 1.0 Practical Arts Credit; PreRequisite: Introduction to Agriscience CTE 9302

Veterinary Science, CTE 9328

Veterinary Science is designed to expose students to all aspects of the veterinary field. The course will cover: Animals in Society and in Research, Veterinary Laws and Ethics, Business Management, Common Veterinary Medical Terminology and Equipment, Mathematical Applications in Veterinary Science, External and Internal Anatomy in Dogs, Cats and Livestock, Animal Behavior, and Veterinary Medical Practices in Animal Handling and Identification, Clinical Exams and Vital Signs, Blood Samples, Sutures, and Injections, Laboratory, Hospital and Surgical Procedures, and Pharmacology. Students will revise career and educational goals, and evaluate their plan for achievement, enhance personal, leadership, and career skills and continue progress in individual Supervised Agriculture Experience Programs, maintain records through the online record keeping system, and evaluate program progress based on records.

Grades 9-12; 1 Semester (Spring); 1.0 Practical Arts Credit; PreRequisite: Introduction to Agriscience - CTE 9302. Animal Science, Equine Science, Biology, and/or Anatomy & Physiology passed with a C or better - Highly Recommended.

**Industry Certificate Available*

Agribusiness, CTE 9315

Agribusiness is designed to expose students to the vast opportunities available within business related careers. It will be taught as an independent study in order to fit any student'S schedule; students are still required to attend during their scheduled blocks each day that school is held at CDC. Content areas include: Introduction to Business, Starting and Operating a Business, Financing, Sales and Marketing, Commodity Trading, Economics, and Agricultural Law. Students will revise career and educational goals, and evaluate their plan for achievement, enhance personal, leadership, and career skills and continue progress in individual Supervised Agriculture Experience Programs, maintain records through the online record keeping system, and evaluate program progress based on records.

Grades 10-12, 1 Semester (Fall/Spring); 1.0 Practical Arts Credit; PreRequisite: Introduction to Agriscience - CTE 9302 & instructor approval

AUTOMOTIVE TECHNOLOGY



****Automotive Maintenance and Light Repair, CTE 9803**

Automotive Maintenance and Light Repair (MLR) explores automotive industry standards and terminology, career opportunities and classifications, shop operations and safety, tool identification and usage, diagnostic equipment identification and usage, automotive systems, tires and wheels, hydraulic braking systems, cooling systems, lubrication systems, and preventative maintenance. Also included is basic operation of automotive braking systems--operation, diagnosis and basic repair of disc, drum, and basic hydraulic braking systems. The basics of electrical systems, electronic systems, batteries, starting systems, charging systems, lighting systems, electrical instruments and accessories, and ignition systems will also be studied. This course focuses on lecture and related experiences in the diagnosis and service of suspensions and steering systems and their components. ***This is a prerequisite for all advanced classes.***

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: N/A

FRCC 1st Sem: ASE 101 - Auto Shop Orientation & ASE 110 - Brake Systems

2nd Sem: ASE 120 - Basic Automotive Electricity & ASE 123 - Battery, Starting and Charging Systems

**Industry Certificate(s) Available*

***This is a Front Range College class taught at CDC with concurrent credit attached which requires a separate enrollment and registration process for all students.*

Brake Systems, CTE 9802

This course examines operation, diagnosis, service and repair of drum, disc, basic hydraulic, anti-lock, power assist units and machine operations of today's automobile brake systems. This class also teaches skills to perform service checks and procedures to automotive foundation braking systems and identify components and types of Anti Lock Braking Systems "ABS" as well as traction control systems.

Grades 10-12; 1 Semester (Fall/Spring); 1.0 Practical Arts Credit; PreRequisite: Automotive Maintenance and Light Repair - CTE 9803

**Industry certificate available*

Suspension and Alignment, CTE 9815

This course examines: design, diagnosis, inspection, and service suspension and steering systems used on light trucks and automobiles. Course includes power steering, Supplemental Restraint System "SRS" (or airbags) and all alignment procedures on industry standard equipment.

Grades 10-12; 1 Semester (Fall); 1.0 Practical Arts Credit; PreRequisite: Automotive Maintenance and Light Repair - CTE 9803

**Industry certificate available*

Engine Performance, CTE 9821

Areas of instruction include intake and exhaust systems, ignition system diagnosis and service, fuel system diagnosis and service, carburetor diagnosis and service, fuel injection diagnosis and service, emission control diagnosis and service, and on-board diagnostic system and service. ***This class meets every day in the afternoon.***

Grades 11-12; 1 Semester (Spring); 2.0 Practical Arts Credits; PreRequisite: Automotive Maintenance and Light Repair - CTE 9803

**Industry certificate available*

Engine Repair, CTE 9825

Instruction combines lecture and laboratory experiences in the removal and installation of the automotive engine, transmission, transfer case, and clutch assembly from and into front and rear wheel drive vehicles.

Grades 11-12; 1 Semester (Fall/Spring); 1.0 Practical Arts Credit; PreRequisite: Automotive Maintenance and Light Repair - CTE 9803

**Industry certificate available*

ENGINEERING TECHNOLOGY AND MANUFACTURING



Engineering Technology I and II, CTE 9721 or CTE 9731

Each is a 2 semester course that introduces students to CAD/CAM (computer-aided design and computer-aided manufacturing) software and the use of mills, lathes, and lasers used by machinists and engineers. Students work on a variety of projects and assignments designed to introduce them to 3D mechanical CAD and have the opportunity to create projects on CNC (Computer Numeric Control) and manual shop machines. The courses provide instruction in: Solidworks, Mastercam, Mastercam Mill/CNC, MasterCam Lathe/CNC, Manual Mill, Manual Lathe, Mastercam Mill, Mastercam Lathe, Machining Math, and Technical Writing. Students will also participate in a variety of job skills activities such as resume and cover letter writing as well as interview development.

Grades 9-12; 2 Semesters (Year); 2.0 Practical Arts Credits; Engineering Technology I - CTE 9721 is a PreRequisite for Engineering Technology II - CTE 9731.

**Industry certificate available*

Engineering Technology ISA, CTE 9735 (Independent Study)

This class is for the student who has learned how to take responsibility for his/her own technology career pathway, and is interested in an in-depth, further specialized exploration of machining and manufacturing. Each student will work on his/her own projects with the guidance of the instructor. Self motivation is a must.

Grades 11-12; 2 Semesters (Year); 2.0 Practical Arts Credits; PreRequisite: Engineering Technology II - CTE 9731 and instructor approval

HAIRSTYLING

Hairstyling 2, CTE 9603

This two year program includes haircutting, hairstyling, hair-color treatment, conditioning and scalp treatment, permanent waving and straightening, and dressing wigs. All students enrolled in the program must successfully complete a minimum of 1200 hours of training to take the State Board examination to be a licensed hairstylist. Classes meet every day, morning or afternoon.

Grades 10-12; 2 Semesters (Year); 4.0 Elective Credits; PreRequisite: Hairstyling I - CTE 9602



HEALTH SCIENCES



New to CDC Health Sciences Pathways starting 2018-19 school year, Exploration of Health Care, CTE 9515 and Medical Terminology, CTE 9516 will be prerequisites to all upper level courses. Class of 2022 will begin this process.

Students will participate in HOSA (Health Occupation Students of America)

Exploration of Healthcare, CTE 9515

This is the first course in the Health Science Pathway and is based on the National Consortium Of Health Science Education. This course looks at the history of health care, legal issues surrounding health care, characteristics of a healthcare worker, various health care careers and a brief overview of the anatomy of the human body. This course consists of lecture, demonstrations and hands on learning and optional job shadowing.

Grades: 9-12; 1 semester (Fall/Spring); 1.0 Practical Arts Credit; Prerequisite: N/A

****Medical Terminology, CTE 9516**

Medical Terminology is the second course in the Health Science Pathway. This course will explore the language of healthcare and health science. Students will learn the root, prefixes and suffixes of the health sciences language. Health care and health sciences have a language that is not common to those outside the medical field. This course will allow the student to have strong language skills prior to entering advanced courses. This course consists of lecture, demonstrations and hands on learning activities.

Grades 9-12; 1 semester (Fall or Spring); 1.0 Practical Arts Credit; Prerequisite: Exploration of Health Care - CTE 9515

FRCC: Medical Record Terminology, HPR 208

**Industry certificate available*

***This is a Front Range College class taught at CDC with concurrent credit attached which requires a separate enrollment and registration process for all students.*

Anatomy and Physiology for Health Care, CTE 9517

This course is for students interested in pursuing a career in health care. The course will explore the anatomy and physiology of the human body, as well as more common diseases in each body system that students will encounter as a healthcare worker. Students will learn Heartsaver CPR, First Aid and Universal Precautions with Personal Protective Equipment. This course includes lecture, hands on learning, demonstrations, dissections, cadaver lab and other activities.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisites: Exploration of Healthcare - CTE 9515 and Medical Terminology - CTE 9516

**Industry certificate available*

Introduction to Sports Medicine, CTE 9522

Introduction to Sports Medicine is a one semester class that introduces students to athletic training procedures as they relate to the athlete, physical educator, coach, and athletic trainer. The course includes a history of the athletic training profession, ethics, proper documentation of injuries, taping, and the principles of athletic training. Topics covered in this class include an overview of all aspects of athletic training, prevention and treatment of common to acute and overuse injuries, and general anatomy review.

Grades 11-12; 1 semester (Fall); 1.0 Practical Arts Credit; Prerequisites: Exploration of Healthcare - CTE 9515 and Medical Terminology - CTE 9516

Exercise and Health Science, CTE 9555

The Exercise and Health Science course is for the individual who enjoys physical activity and is interested in learning the science and psychology involved in adopting an active and healthy lifestyle and working in the industry. Students acquire skills in strength training, cardiovascular training, fitness assessment, writing programs, motivation, and communication techniques. Students study human anatomy and physiology, energy production, exercise modalities, first aid and CPR skills, and medical terminology. Students use this knowledge and apply these skills during job shadowing in fitness, sports and research facilities, working with other students, and in the classroom. On completion of course, students will be able to sit for the ACE certification exam.

Grade 12 (Student must be 18 years old by May of Senior Year); 1 semester (Spring), 1.0 Practical Arts Credit; Prerequisites: Exploration of Healthcare - CTE 9515, Medical Terminology - CTE 9516, and Introduction to Sports Medicine - CTE 9522

**Industry certificate available.*

Dental Assisting I, CTE 9501

This class gives the student a basic understanding of the history of dentistry, dental team members' jobs, careers, infection control, the anatomy of the head, anatomy of the oral cavity, histology of the teeth structures, gum structures, oral hygiene, polishing, tooth decay, tooth names, numbers and positioning, impressions, whitening trays, communication skills, ethics, and laws.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credits; Prerequisite: Exploration of Healthcare CTE 9515 and Medical Terminology - CTE 9516

Dental Assisting II, CTE 9511

Dental Assisting II is designed to instruct students in the treatment rooms and laboratory on all aspects of the dental assistant's duties on the job including: instrument names and passing of them, mixing and passing materials, suctioning, charting, and digital imaging. The course fulfills the radiology and infection control requirements of the Colorado State Dental Practice Act for certification.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: Dental 1 - CTE 9501

**Industry certificate available.*

Emergency Response, CTE 9521

Emergency Response is a one semester course based on the National Transportation Safety Board recommendations and is geared for the student who wants in-depth knowledge and information in pre-hospital emergency care. These individuals, often called "first responders," include but are not limited to firefighters, law enforcement personnel, lifeguards, ski patrollers, emergency response teams, and athletic trainers. The course features lecture, discussion, decision-making activities, skill practice, and video demonstration. This class is being replaced by

Grades 11-12; 1.0 Semester (Fall or Spring); 1.0 Practical Arts Credit; PreRequisites: Exploration of Healthcare - CTE 9515 and Medical Terminology - CTE 9516

**Industry certificate available*

Emergency Medical Technician (Pending District Approval)

Emergency Medical Technician course prepares the EMT student to provide pre-hospital assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries. This is a 2 semester course that will provide basic coursework to prepare the student for the work environment as well as for the National Registry Certification. *(Student must be 18 years old by May of Senior Year)*

Grade 12 ; 2 Semesters; 2.0 Practical Arts credits; Prerequisites: Exploration of Healthcare - CTE 9515 and Medical Terminology - CTE 9516

**Industry certificate available*

Nursing Assistant, CTE 9531

Nursing Assistant is for the 12th grade student interested in caring for others. Upon successful completion, students are prepared to take the written and skills exams for Colorado State Board of Nursing; Nurse Aide certification at a cost of \$123.00. This course includes basic theory and skills needed for working as a nursing assistant in a long-term care facility, home health care agency, or a hospital. Students will be trained in American Heart Association Basic Life Support (BLS) for the Healthcare Provider CPR. Time outside of class will be required for clinical experience. Students will be required to have up to date immunizations including the vaccine for Influenza, show proof of a negative Tuberculosis (TB) test and pass a required background check at the cost of approximately \$35.00, to participate. *Due to the mature nature of this course, only 12th grade students will be enrolled and must complete an interview with the instructor before being accepted into the program.*

Grade: 12; 1.0 Semester (Fall or Spring); 1.0 Practical Arts Credit; PreRequisite: Anatomy and Physiology (Either at CDC or home high school)

**Industry certificate available*

PLANT AND ENVIRONMENTAL TECHNOLOGY



Irrigation Technology, CTE 9357 **NEW******

The goal of this course is to introduce students to irrigation systems, the basic math and physics necessary to understand system hydraulics and design capacity, as well as best management practices. Students will become acquainted with the latest technology in irrigation systems and plant-soil-water concepts as well as design, install, and maintain uniform, efficient, and sustainable irrigation systems as they continue to build their knowledge of landscape irrigation management. Additional topics include electric and hydraulic troubleshooting, repair, efficiency, and water conservation practices. The course will be a combination of lecture, discussion, and hands-on activities.

Grades 9-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: N/A

**Industry certificate available*

Landscape Design and Maintenance, CTE 9359 **NEW******

Uses a discussion of landscape maintenance practices and best management practices as a launching point for the student to develop a site management plan and understanding of landscape maintenance contracting. Topics include weed identification, tree and shrub pruning, flower bed maintenance, turf care, client care and crew management practices.

Grades 9-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: N/A

Greenhouse I and II, CTE 9351 and CTE 9353

Introduces students to the biology of horticultural plants and basic horticultural practices while caring for the program's on-site greenhouse. Also emphasized are greenhouse design, systems, management, and the major greenhouse crops and their cultural needs. Students are responsible for planting, watering, and cultivating a variety of flowers, bedding plants and vegetables.

Grades 9-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: N/A

INTERACTIVE MEDIA TECHNOLOGY



****Visual Communications/Photoshop, CTE 9025**

This course is a combination of two college courses. In Introduction to Visual Communications students survey visual communications, its history and its impact on society. Students will demonstrate an understanding of the graphic design and illustration fields today, as well as the tools and media used. The Photoshop portion of the class concentrates on the high-end capabilities of Adobe Photoshop as an illustration, design and photo retouching tool. Students explore a wide range of selection and manipulation techniques that can be applied to photos, graphics and videos. Course competencies and outline follow those set out by Adobe as part of their Adobe Certified Associate exams. At the end of this course, students are given the opportunity to take the Adobe Certified Associate exam in Visual Communication Using Adobe Photoshop.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: N/A
FRCC: MGD 117 - Intro. to Visual Communications, MGD 111 - Photoshop I

**Industry certificate available*

***This is a Front Range College class taught at CDC with concurrent credit attached which requires a separate enrollment and registration process for all students.*

****Digital Video Production, CTE 9026**

Digital Video Production is a combination of two college courses. Videography (the first semester course) offers an introduction to the principles and techniques of video production, including camera operation, basic script writing, lighting, sound and basic digital editing. Detailed examination of the pre-production, production, and post-production processes, as well as aesthetics, will be included. In the second part of the class (Digital Video Editing) students continue to practice the three elements of filmmaking: pre-production, production, and post-production; but this time with an emphasis on post-production techniques including: media management, editing tools, titles, motion control, transitions, and special effects. Students will make a variety of films in this class and are encouraged to enter a local film festival. Both classes cover relevant tools and techniques as well as industry standards, delivery methods and output. At the end of this course, students are given the opportunity to take the Adobe Certified Associate exam in Video Communication Using Adobe Premiere Pro.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: N/A
FRCC: MGD 104 - Videography & MGD 164 Digital Video Editing

**Industry certificate available*

***This is a Front Range College class taught at CDC with concurrent credit attached which requires a separate enrollment and registration process for all students.*

PROSTART AND CULINARY ARTS



Prostart I, CTE 9672

ProStart gives students a platform to discover new career opportunities by providing hands-on training and relevant industry experience. This nationally certified, competency based program covers all facets of the industry and includes instruction in food preparation, lodging, customer service, and business management. By completing ProStart Level 1, students master fundamental management and culinary skills needed for success – like leadership, accountability, teamwork and responsibility – which they can take with them to positions in all industries.

Skill areas will include, but not limited to Workplace and Food Safety, Fruits & Veggies, Stocks, Sauces, & Soups, Professionalism, Communication, Interviewing & Resumes, Careers in the Industry, Customer Service, Cooking Methods, Leadership & Teamwork, and Potatoes & Grains. Students are also rotated through production and service stations while serving the community at the Sunset Cafe, our on-site restaurant. Students will also earn ServSafe Food Handler Certification.

Grades 9-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: N/A

Culinary Nutrition at the home high school is strongly suggested.

**Industry certificate available*

Prostart II, CTE 9673

ProStart gives students a platform to discover new career opportunities by providing hands-on training and relevant industry experience. This nationally certified, competency based program covers all facets of the industry and includes instruction in: food preparation, lodging, customer service, and business management. By completing ProStart Level II, students master fundamental management and culinary skills needed for success – like leadership, accountability, teamwork and responsibility – which they can take with them to positions in all industries. Skill areas will include, but not limited to Breakfast Food & Sandwiches, Nutrition, Cost Control, Salads & Garnishing, Purchasing & Inventory, Meat, Poultry, & Seafood, Marketing, Desserts & Baked Goods, Sustainability in the Industry, and Global Cuisine. Students also learn guest relations along with how to keep accurate financial records for the profit and loss of the operation. Students are rotated through production and service stations, while serving community.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: ProStart I - CTE 9672 with a C or better

**Industry certificate available*

Baking and Pastry, CTE 9680

In addition to reviewing and continued practice of safety and sanitation procedures, students will be introduced to the topics of basic baking terminology and measurement, baking percentages and ratios, ingredients, quick bread/yeast/lamination dough, cakes, chocolates, pies and pastries, cookies, planning and organization of bakery production and dessert artistry.

Grades 10-12; 1 Semester (Fall/Spring); 1.0 Practical Arts Credits; PreRequisite: ProStart 1 - CTE 9672

WELDING AND FABRICATION TECHNOLOGY



Welding and Fabrication I, CTE 9901

Welding and Fabrication I provides the foundational understanding of welding and welding processes. In this course students will learn industry based safety standards and become familiar with the following welding processes:

Oxyacetylene welding and torch cutting, plasma cutting, ARC, and MIG welding.

Students will become familiar with basic blueprint reading, weld symbols, welding-related math, and measurement. As their skill level is developed, small projects will be introduced throughout the year. Students will have the opportunity to engage in the SkillsUSA student organization, which incorporates leadership, service learning, and competitions to demonstrate skill level attainment.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credit; PreRequisite: N/A

FRCC WEL 100 - Safety for Welders, WEL 101 - Allied Cutting Processes, WEL 105 - Basic Shielded Metal ARC

**Industry certificate available*

***This is a Front Range College class taught at CDC with concurrent credit attached which requires a separate enrollment and registration process for all 1st year students.*

Welding and Fabrication II, CTE 9911

Welding and Fabrication II students will be exposed to more advanced welding process such as GMAW, FCAW, and GTAW, as well as an introduction to TIG welding. In addition, they will have the opportunity to refine what they learned from Level I to a higher standard. Students will identify welding symbols on drawings, read detail drawings, identify physical characteristics and mechanical properties of metal, explain pre and post heating of metals, identify equipment and filler metals utilized in GMAW, FCAW, and GTAW, as well as prepare welding test plates. Through the course of the year, students will have the opportunity to create more advanced welding projects for the community as well as private individuals. Students will have the opportunity to engage in the SkillsUSA student organization, which incorporates leadership, service learning, and competitions to demonstrate skill level attainment.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credit; PreRequisite: Welding I - CTE 9901

Welding and Fabrication III, CTE 9921

In this course the student will build upon their prior learning in Level II and can expect to engage in more advanced welding processes. These processes include advanced TIG welding including alloys such as aluminum and stainless steel, advanced blueprint reading, drawing and design, specifications, billing of materials, and Welding Procedure Specifications (WPS). Students will engage in advanced layout and fabrication processes to create projects for the community as well as private individuals. Students will have the opportunity to engage in the SkillsUSA student organization, which incorporates leadership, service learning, and competitions to demonstrate skill level.

Grades 11-12; 2 Semesters; 2.0 Practical Arts Credit; PreRequisite: Welding II - CTE 9911

INTERNSHIPS

CTE Internship, CTE 9999

After six weeks of successful participation in a CDC program, students are eligible to participate in industry specific internship in the career pathway of their choice.

Internships are both paid and unpaid. Students may earn up to .5 elective credit for every 60 hours spent on the internship. Contact Karen Carr, CDC Internship Coordinator to schedule an appointment at (303) 772-3333 or by email at carr_karen@svvsd.org

Grades 10-12; 1 semester (Fall/Spring); .5-1.0 Elective Credit; Prerequisite: N/A