

# CRTEC Career & Technical Programs

Serving the following School Districts:

COSSA  
Homedale  
Marsing  
Notus  
Parma  
Wilder



*Canyon-Owyhee School Service Agency (COSSA)  
Regional Technology and Education Center*





## General Rules for Career & Technical School (CTS) Classes

### Appropriate Placement

The competencies students master in CTS courses build on each other from level to level – therefore students may not be added at mid-year unless they are transferring from an appropriately similar CTS class. For transfers into the CRTEC programs, placement exams and oral interviews may be used to determine if a student is ready for the level of CTS class they are applying for.

### Integrated Academics

Applied math, technical writing, and technical literacy are required elements of CTS classes.

### Competency Based

CTS courses are competency based. That means that once a student has mastered the competencies at a level of training, that student will be advanced to the next level. Seat time is not an issue – mastery of competency is.

### Industry Assessment

All CTS programs of study must end with an industry-based assessment. All program concentrators (those students who have passed all levels of a program) must take these Technical Skill Assessments (TSAs), which is different than the industry certification. The state requirement is 100% participation by concentrators in TSAs.

## Instructional Time

Instructional time for CTS classes is a minimum of 150 minutes. Consortium schools should arrange their bus schedule so that the bus arrives a minimum of 5 minutes before the class starts and departs 5 minutes after the class ends.

### Did You Know?

Statewide, in 2014,  
**98%** of high school  
CTE students graduated.

94% of those graduates  
found jobs or moved into  
postsecondary education.

[http://www.pte.idaho.gov/  
pdf/2014.QuickFacts.pdf](http://www.pte.idaho.gov/pdf/2014.QuickFacts.pdf)

## High Standards

Pre-requisite grades for advancement in all CTE courses:

Level I first semester, students must earn a “C” or better or receive the instructor’s permission to move on.

Level I to Level II, students must earn a “C” or better.

Level II to Level III, students must earn a “B” or better.

Level III to Internship, students must earn a “B” or better (not all students will be placed on an Internship).

## Who Can Enroll

Students who are enrolled in one of our consortium schools (COSSA Academy, Homedale, Marsing, Notus, Parma, or Wilder) and who are in at least the 10th grade can enroll in one of our CTS programs.

## How many high school credits can I earn?

Students who attend classes at CRTEC can earn 2 elective credits and 1 technical math credit per semester.

## What if I'm not enrolled in one of these districts?

Students can enroll at CRTEC without being in one of our districts, but those students may be required to complete an out of district application, which has to be approved by the School Board. In addition, those students may be placed on a wait-list and students from the consortium schools will be given first priority.



## Message from the Director

Why do we say: “learning occurs for every student, every day, in every way” at the close of the morning announcements?

The Canyon-Owyhee School Service Agency (COSSA) prepares students for success, no matter what they do later in life. For the career & technical students seeking job skills, we provide these skills, as well as real-world job experience in settings that simulate the work place so they graduate ready to work and can apply their knowledge in high skill, high wage, and/or high demand professions.

These beliefs are foremost in the minds of all members of the COSSA staff as they think about what is best for every student they influence, every day they are interfacing with these students, and every time they positively interact with these students.

I am very proud to be a part of the COSSA educational team that fulfills this promise of learning that reaches “every student, every day, and in every way!”

Dr. Harold Nevill

## Frequently Asked Questions:

### How old do I have to be to enroll in a career & technical program?

You must be 16 or considered at least a 10th grader by your home high school.

### Can I earn college credits in any of the career & technical programs?

Yes. All of our programs are articulated with one or more colleges so that students may earn and purchase college credits while in high school. Check under each individual program description to see what credits are available.

### Can I earn an industry certification in any of the career & technical programs?

Yes. Check under each individual program description to see what certifications are available.

### Am I required to join the Career & Technical Student Organization (CTSO)?

You are not required to join the student organizations, but you will receive workplace readiness skill training throughout your program of study. Students who are in their last year of a program will take a workplace readiness assessment, regardless of affiliation with a CTSO.

## Make a Plan

Start planning your academic schedule early so that you can fit in the career & technical class of your choosing as early as your sophomore year.

Talk to your school counselor about your interests and decide on a plan of action that will work for you.

## Did You Know?

67% of Idaho CTE high school program concentrators enroll in college, compared to 53% of the general student population.

92% of technical college completers found jobs or continued their education.

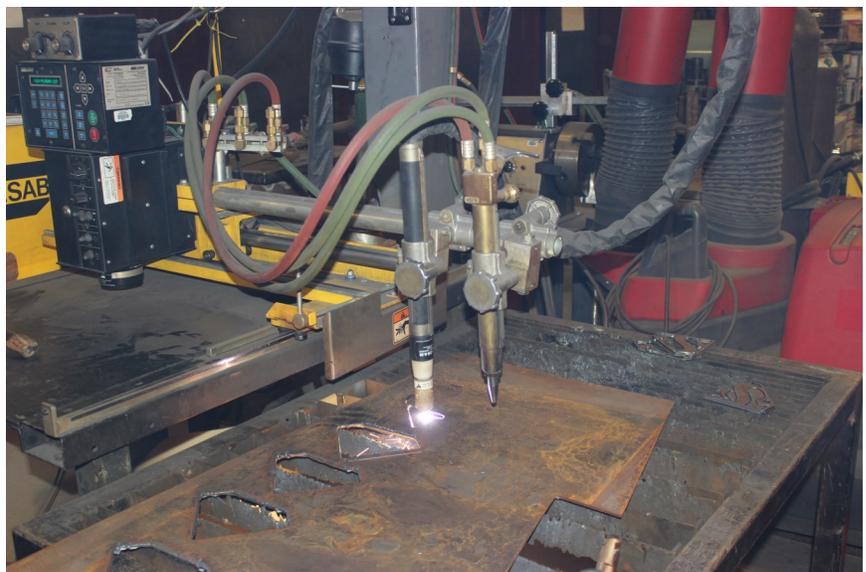
<http://www.pte.idaho.gov/pdf/2014.QuickFacts.pdf>

## Why CTE?

Earn college credits and a real-world certification while getting your high school diploma.

## Did You Know?

COSSA is one of only 15 Career & Technical High Schools in the State of Idaho.



# Career & Technical Student Organizations

Membership fees for all CTSOs are \$20



CNA, EMT



Pre-Engineering



Culinary Arts



## National Leadership Conference

In 2015, COSSA Welding, CNA, and EMT Students in SkillsUSA and HOSA qualified at the State Leadership Conference to attend their National Leadership Conferences.



Auto, Diesel, Welding,  
Building Construction

## National Technical Honor Society



"The National Technical Honor Society serves over 180,000 student members annually. In 2015, NTHS will award over \$200,000 in scholarships to career and technical education students. NTHS honors the achievements of top CTE students, provides scholarships to encourage the pursuit of higher education, and cultivates excellence in today's highly competitive, skilled workforce."—<https://www.nths.org/>



## Internships available for select students during their 3rd year.

*A school district, community, or industry (preferred) based work experience/internship activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experience must be supervised and monitored by the teacher.*

Length: Minimum—Six weeks, Maximum—1 Semester

Credits: .5—2.0 elective CTS Credits, depending on length of internship

Prerequisite: Level III class with a "B" or better and instructor's permission



SkillsUSA®

# Automotive Technology

Automotive technology is a program designed to prepare students with skills that include servicing and maintenance of all types of automobiles. Automotive technology includes instruction in the diagnosis of malfunctions in and repair of engines; engine performance and controls and emission controls, fuel, electrical, cooling, and brake systems; and drive train and suspension systems. Also instruction is given in the adjustment, maintenance, replacement, and repair of individual components and systems. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe, efficient work practices.

## Instructor Bio

Mr. Gary Schleicher

Automotive Service Excellence (ASE) Master Automotive Technician with over 48 years of automotive experience.

My wishes and goals for students, being in our COSSA Automotive Program, are to teach them a valuable skilled trade, along with good work ethics and to make a positive difference in their lives that they will never forget.

Upon completion of Level III and passing the NATEF certification exam, students may earn their ASE certification.



## Requirements

- Students are required to have & supply their own pair of dark blue (Navy Blue ) coveralls to wear in the shop.
- Students must have and supply their own (shop appropriate) leather shoes or boots to wear in the shop.
- The students are responsible for the tools and tool boxes that are assigned to them. They are liable for missing tools.
- The students have to supply their own flashlight.

## Intro to Auto/Diesel Level I

*A course designed to introduce students to basic automotive and diesel technology, leading to professional certification after students complete Level II and Level III training.*

**10th Grade**

No prerequisites

1 Semester at CRTEC or 2 Semesters at the home school

### Instructor Bio

Mr. Kelly Hudgens

Holds both Master and Advanced Level ASE certifications.

## Automotive Technology Level II

*A course designed to provide students with automotive technology applications in the eight NATEF instructional areas.*

2 Semesters at CRTEC

**11th Grade**

Must pass Intro to Auto Level I with a "C" or better

**12th Grade**

Must pass Auto Level II with a "B" or better

Must pass Auto Level III with a "B" or better

## Automotive Technology Level III

*A course designed to provide students with automotive technology applications in the eight NATEF instructional areas.*

2 Semesters at CRTEC

## Automotive Technology Internship



**Student**  
*Auto Skills*

## College Credits

**8**

Auto Tech I, II, and III articulate to AU-TO 110—Automotive Service/Electrical Fundamentals for a total of 8 credits. Students must meet certain requirements, including earning a "B" in each high school class, to be eligible for college credit.





SkillsUSA®

# Building Construction

Residential carpentry/building construction is a program designed to prepare students with skills to lay out, fabricate, erect, install, and repair structures and fixtures, using hand and power tools. The program includes instruction in common systems of framing, construction materials, estimating, and blueprint reading. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe, efficient work practices.

## Instructor Bio

Mr. Richard Ray

8 years experience as a heavy equipment operator

25 years experience in Residential and Commercial Construction

Licensed Residential Building Inspector

Upon completion of Level III and passing the National Center for Construction Education and Research (NCCER) certification exam, students may earn their certification from NCCER.



## Requirements

- Students are required to have & supply their own (shop appropriate) leather shoes or boots to wear on the job site.
- The students are responsible for the tools and tool boxes that are assigned to them. They are liable for missing tools.

## 10th Grade

No prerequisites

### Building Construction Level I

*A course designed to introduce students to basic carpentry and building construction.*

2 Semesters at CRTEC

### Building Construction Level II

*Emphasis of work site skill is expected with the majority of the students participating in off campus work experience.*

2 Semesters at CRTEC

## 11th Grade

Must pass Building Construction Level I with a "C" or better

## 12th Grade

Must pass Building Construction Level II with a "B" or better

Must pass Building Construction Level III with a "B" or better

### Building Construction Level III

*A course designed to provide students with teamwork, critical thinking, problem solving, diagnostics, and repairing/building to industry standards.*

2 Semesters at CRTEC

### Building Construction Internship

## College Credits

8

Building Construction I, II, III is articulated with North Idaho College for a total of 8 credits. Students must meet certain requirements, including earning a "B" in each high school class, to be eligible for college credit.



**North Idaho College**

# Culinary Arts

This course is designed for students who desire to enter a Culinary Arts Career. Some career opportunities include: executive chef, sous chef, pastry chef, cake decorator, catering manager, restaurant owner, food columnist/writer, and food critic.

Students will learn food service cooking, baking and cake decorating, executive catering, kitchen management, kitchen safety and sanitation, inventory, budgeting, menu planning, food production, and customer service and sales.

## Instructor Bio

Upon completion of Food Production and passing the Serve Safe certification exam, students may earn their certification from Serve Safe.



## Requirements

- Students will be required to earn their Food Handlers card
- Students must take a CPR class
- Students will earn their fire safety certificate



## 10th Grade

No prerequisites

Must earn Food  
Handlers certification

## Nutrition & Foods

*Content includes food safety and sanitation, proper use of equipment and utensils, meal management skills, nutrition, food purchasing, preparation techniques and careers in related fields.*

2 Semesters at CRTEC

## Food Production, Management & Service

*A course in professional food preparation with practical applications emphasizing: career opportunities, reinforced basic skills, food safety and sanitation, use of commercial equipment, industrial food preparation, business management, food service techniques and employability skills.*

2 Semesters at CRTEC

## 11th Grade

Must pass Nutrition  
& Foods with a “C”  
or better

## 12th Grade

Must pass Food  
Science & Nutrition  
with a “B” or better

Must pass Food  
Production, Man-  
agement & Service  
with a “B” or better

## Advanced Food Production—

*Content provides students the opportunity to apply the skills they have acquired by assuming increasingly responsible positions, including participation in a cooperative education experience.*

2 Semesters at CRTEC

## Culinary Arts Internship



## College Credits

Nutrition & Food articulates to CULA 170—Food Service Nutrition for a total of 3 credits. Students must meet certain requirements, including earning a “B” in this class, to be eligible for college credit.

# 3



COLLEGE OF  
SOUTHERN  
IDAHO



# Diesel Technology

Heavy equipment/diesel is a program designed to prepare students with skills for the field maintenance of heavy equipment, and in general maintenance and overhaul of such equipment. Heavy equipment/diesel includes instruction in inspection, maintenance, and repair of tracks, wheels, brakes, operating controls, pneumatic and hydraulic systems, electrical circuitry, and engines. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe, efficient work practices.

## Instructor Bio

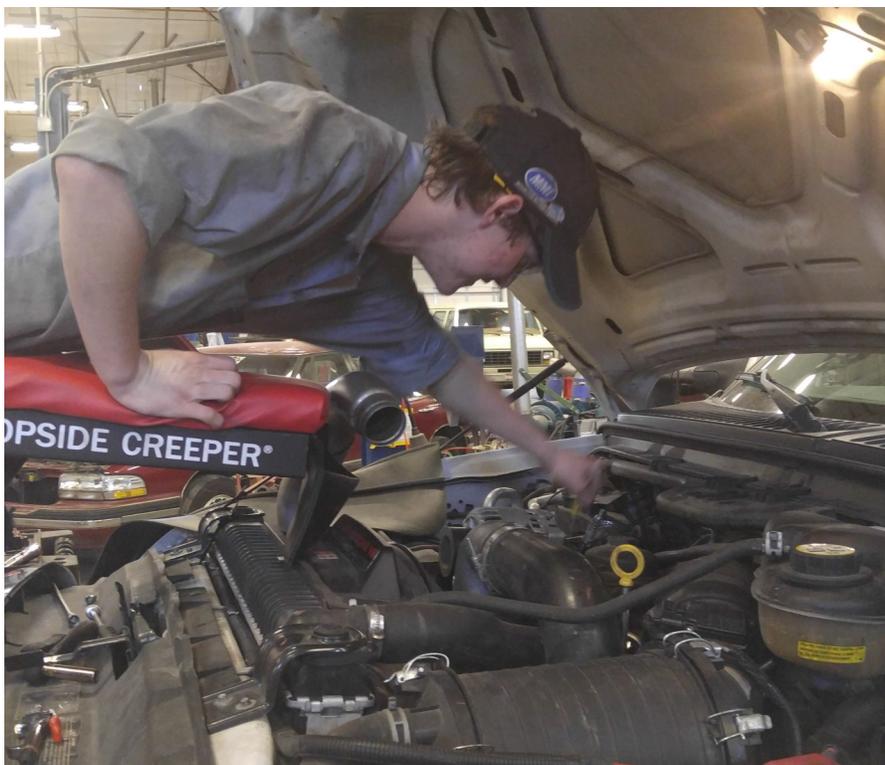
Mr. John Montana

17 years experience in the diesel industry (farm equipment, motor trucks, construction equipment, motor coaches)

Hobbies include hunting, fishing, camping, building furniture, and restoring Hodaka motorcycles.

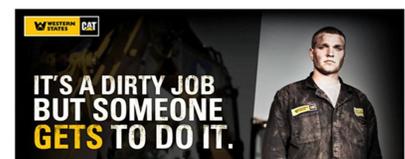
“If I can change students’ lives, I’ve done the job.”

Upon completion of Level III and passing the NATEF certification exam, students may earn their ASE certification.



## Requirements

- Students are required to have & supply their own pair of dark blue coveralls to wear in the shop.
- Students must have and supply their own (shop appropriate) leather shoes or boots to wear in the shop.
- The students are responsible for the tools and tool boxes that are assigned to them. They are liable for missing tools.



## Intro to Auto/Diesel Level I

*A course designed to introduce students to basic automotive and diesel technology, leading to professional certification after students complete Level II and Level III training.*

**10th Grade**

No prerequisites

1 Semester at CRTEC or 2 Semesters at the home school

### Instructor Bio

Mr. Kelly Hudgens

Holds both Master and Advanced Level ASE certifications.

## Diesel Level II

*The course will include an intro to diesel, basic electrical, basic hydraulic and air brake systems, basic steering and suspension, and basic engines..*

2 Semesters at CRTEC

**11th Grade**

Must pass Intro to Diesel Level I with a "C" or better

**12th Grade**

Must pass Diesel Level II with a "B" or better

Must pass Diesel Level III with a "B" or better

## Diesel Level III

*This course will include advanced electrical and electronics, advanced air brakes, advanced diesel engines (fuel systems, cooling systems, exhaust systems, etc.), and preventive maintenance (PMI).*

2 Semesters at CRTEC

## Diesel Internship



## College Credits

**8**

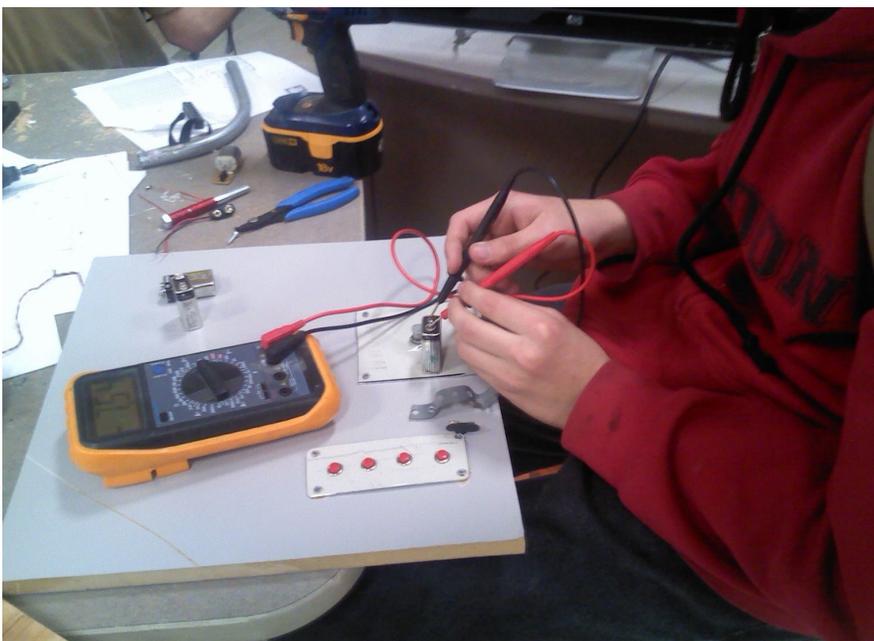
Diesel I, II, and III articulate to TTEC 100 & TTEC 120—Shop Practices & Mobile Hydraulics/Braking Systems for a total of 8 credits. Students must meet certain requirements, including earning a "B" in each high school class, to be eligible for college credit.

**cwi**  
College of Western Idaho

# Pre-Engineering Technology

Engineering Technology Education programs provide students literacy in the areas of Science, Technology, Engineering & Mathematics (STEM). Students study, design, research, construct, and test structures, materials, and techniques commonly used in today's highly advanced STEM industry applications. Instruction is centered around four curriculum areas that study the engineering design model and its associated technological processes. These areas comprise the umbrella of knowledge needed to function in a technological world that includes the integration of Science, Technology, Engineering & Mathematics and other academic disciplines. Students develop critical thinking, problem solving & teamwork abilities at increased levels of complexity.

Students who complete the pre-engineering program may apply the credits towards an Advanced Technical Certificate (ATC), Associate of Applied Science Degree (AAS), or a Bachelor's of Applied Technology Degree (BAT) from Idaho State University.



TECHNOLOGY STUDENT ASSOCIATION

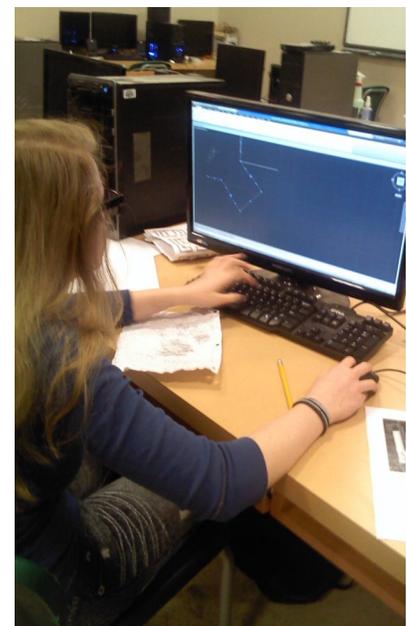
## Instructor Bio

Mr. Bert Kirby

7 years teaching Pre-Engineering for COSSA;

15 years with Mason & Stanfield engineering firm; Designing subdivisions, commercial buildings, bridges, dairy farm and golf courses. Also did aerial survey mapping for cities.

17 years with EG&G Electronics, involved in building GPS satellite systems, IBM airport wind shear radar systems, military equipment: Apache Helicopter, M1 Tank, Phalanx Gun Systems, MX and Patriot Missiles,



## 10th Grade

No prerequisites

Must pass Fundamentals of Engineering Technology with a "C" or better

## Fundamentals of Engineering Technology

*Students develop an understanding of the tools, techniques, and processes of technology using design principles, computers, problem solving and model making.*

1 Semester at CRTEC

## Technological Design

*Students research, develop, test, and analyze engineering designs using criteria such as design effectiveness, public safety, human factors, and ethics.*

1 Semester at CRTEC

## Advanced Design Applications

*Advanced Design Applications consists of four units including Manufacturing, Energy and Power, Construction and Transportation.*

2 Semesters at CRTEC

## 11th Grade

Must pass Technological Design with a "C" or better

## 12th Grade

Must pass Advanced Design Applications with a "B" or better

Must pass Engineering Design with a "B" or better

## Engineering Design

*Engineering Design will offer students the opportunity to understand and apply knowledge and skills required to create and transform ideas and concepts into a product that satisfies specific customer requirements.*

2 Semesters at CRTEC

## Engineering Internship

## College Credits

Technological Design & Advanced Design Application articulate to ESET 0103, 0103L, 0104, 0104L, 0105, 0105L, and INST 260 and 140. Engineering Design articulates to INST 220, 240, 250, 242, 251, 253, and 254. Total credits possible is 27. Students must meet certain requirements, including earning a "B" in each high school class, to be eligible for college credit.

# 27



# Health Professions

A student who wishes to only complete the Certified Nurse Assistant course will first take the Fundamentals for Health Professions course and then the CNA course. This can occur either in their Junior or Senior year.

A student who wishes to only complete the Emergency Medical Technician course will first take the Fundamentals for Health Professions course in their Junior year and then wait until the next year to take the year-long EMT course.

Students may take both CNA (Junior year) and EMT (Senior year) and earn both certifications.

## Instructors

Ms. Kelli Korn (EMT)

- Paramedic
- Firefighter
- BLS AHA Instructor



Upon completion of the CNA course, students will take the Idaho CNA examination.



Upon completion of the EMT course, students will take the National Registry EMT (Basic) certification examination.



## Requirements

- CNA—Uniform scrub pants and top
- CNA—Closed-toe shoes
- EMT—Uniform shirt (ordered by COSSA) & navy pants (not denim)
- EMT—Closed-toe black boots
- Watch with a second hand
- Immunizations
- Background check



## Fundamentals for Health Professions

*This is an exploratory course that provides initial exposure and acquisition of knowledge, skills and attitudes associated with a broad range of occupations relating to careers in health including job requirements and tasks performed.*

1 Quarter at CRTEC

## Medical Terminology

*This course provides the student with information about prefixes, suffixes, word roots, reading medical terms, abbreviations, and related terminology.*

1 Quarter at CRTEC

## Certified Nursing Assistant

*A course designed to prepare students for beginning employment as nursing assistants in nursing homes, hospitals, and other settings. Content includes medical terminology, anatomy and physiology, care of the patient, and assisting as a member of the health care team.*

1 Semester at CRTEC

## 11th Grade

**Must be able to pass a drug test & background check**

**Must pass Fundamentals for Health Professions and Medical Terminology with a “B” or better**

**Must be at least 16 to take State Certification**

## 12th Grade

**Must pass Fundamentals for Health Professions with a “B” or better**

**Must be a senior or turning 18 by the end of the school year.**

## Emergency Medical Technician—Basic

*A course designed to instruct senior level high school students to the level of Emergency Medical Technician-Basic. Students will receive classroom training in anatomy & physiology, airway management, patient assessment, medical & trauma emergencies, cardiopulmonary resuscitation, and more. Also includes advanced modules (starting IVs, IOs, and placing advanced airway devices.) Students will also participate in ride-alongs with Canyon County Paramedics.*

2 Semesters at CRTEC

## College Credits

Fundamentals for Health Professions articulates to HO 105—Intro to Allied Health and HO 106—Medical Terminology for a total of 4 credits. EMT articulates with CSI for 10 credits. Students must meet certain requirements, including earning a “B” in each high school class, to be eligible for college credit.

# 14





SkillsUSA®

# Welding

Welding has become very complex and very technical. The welding program at COSSA will provide you with the information and training to step directly into employment

In almost everyone's lifetime we are faced with situations where the knowledge of joining metals is necessary. This program will prepare you for the most basic welding processes to join such metals as carbon steel, aluminum, and stainless steel.

This program will also prepare you for many types of employment related to welding, such as: engineering, quality control, manufacturing technician, etc.

## Instructor

Mr. Mark Bauer

Welder Fabricator for 24 years, and COSSA instructor for 19 years.  
AWS Certified Welding Instructor & Inspector

## Requirements

- Students are supplied with their first pair of safety glasses and welding gloves
- Replacements must be purchased by the student.

Upon completion of Level III and passing the American Welding Society (AWS) certification exam, students may earn their AWS certification.



## Welding Capabilities

- ◆ Oxy-fuel welding & cutting
- ◆ Shielded Metal Arc Welding (SMAW)
- ◆ Gas Metal Arc Welding (GMAW)
- ◆ Gas Tungsten Arc Welding (GTAW)
- ◆ Flux Cored Arc Welding (FCAW)
- ◆ Basic Measuring
- ◆ Working with layout tools
- ◆ Soldering
- ◆ Plasma cutting
- ◆ CNC Plasma Cutting

## 10th Grade

No prerequisites

## Welding Level I

*The course introduces students to the metallic processes used in metals fabrication and provides them instruction on measurement and layout of material to be welded.*

2 Semesters at CRTEC

## Career Opportunities

- ◆ Fabricated Metal Manufacturing
- ◆ Transportation Equipment Manufacturing
- ◆ Ship & Boat Building
- ◆ Farm Machinery Manufacturing
- ◆ Mining Machinery Manufacturing
- ◆ Architectural & Structural Metals Manufacturing
- ◆ Construction
- ◆ Welding Inspectors

## Welding Level II

*Students will be provided the initial stages of instruction that will prepare them for certification as an entry level welder as described in AWS publication EG2.0-95.*

2 Semesters at CRTEC

## 11th Grade

Must pass Welding Level I with a "C" or better

## 12th Grade

Must pass Welding Level II with a "B" or better

Must pass Welding Level III with a "B" or better

## Welding Level III

*A course designed to provide students with team work, problem solving, diagnostics, and designing, repairing, fabricating, or building to industry standards.*

2 Semesters at CRTEC

## Welding Internship



## College Credits

Welding I articulates to WELD 159—Intro to Arc Welding and Welding II articulates to WELD 131—Welding Practice I for a total of 14 credits. Students must meet certain requirements, including earning a "B" in each high school class, to be eligible for college credit.

# 14



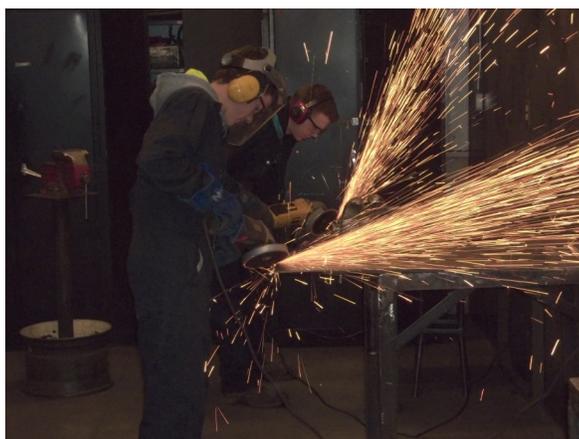
## Programs At-A-Glance

	10th Grade	11th Grade	12th Grade
<b>Automotive</b>	1 Semester—Level I	2 Semesters—Level II	2 Semesters—Level III
<b>Building Construction</b>	2 Semesters—Level I	2 Semesters—Level II	2 Semesters—Level III
<b>Culinary Arts</b>	2 Semesters—Nutrition	2 Semesters—Food Science	2 Semesters—Production
<b>Diesel</b>	1 Semester—Level I	2 Semesters—Level II	2 Semesters—Level III
<b>Engineering</b>	1 Semester—Fundamentals	2 Semesters—Adv. Design	2 Semesters—Engineering Design
	1 Semester—Tech. Design		
<b>Health Professions</b>		1 Semester—Fundamentals	2 Semesters—EMT
		1 Semester—CNA	
<b>Welding</b>	2 Semesters—Level I	2 Semesters—Level II	2 Semesters—Level III



## Programs At-A-Glance

	HS Credits Earned	Possible Coll. Credits	Certifications
<b>Automotive</b>	10 PT Elective Credits 5 Tech Math Credits	8	
<b>Building Construction</b>	12 PT Elective Credits 6 Tech Math Credits	8	
<b>Culinary Arts</b>	12 PT Elective Credits 6 Tech Math Credits	3	
<b>Diesel</b>	10 PT Elective Credits 5 Tech Math Credits	8	
<b>Engineering</b>	12 PT Elective Credits 6 Tech Math Credits	27	
<b>Fund. Of Health Professions</b>	2 PT Elective Credits 1 Tech Math Credits	4	
<b>CNA</b>	2 PT Elective Credits 1 Tech Math Credits		
<b>EMT</b>	4 PT Elective Credits 2 Tech Math Credits	10	
<b>Welding</b>	12 PT Elective Credits 6 Tech Math Credits	14	



### Elective Credits

Most high schools require up to 16 elective credits. Many of these can be earned by enrolling in a Career & Technical Program and passing the classes each semester.

### Math Credits

If you enroll in one of the Career & Technical Programs during your senior year, the math credit may count towards your required senior math. Talk to your school counselor for more information.

## Contact Us

Give us a call for more information about enrolling in one of our programs.

### CRTEC

109 Penny Ln  
Wilder, ID 83676

208-482-6074

smithb@coσσaschools.org



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**COSSA. Where learning occurs for every student, every day, in every way.**

*Canyon-Owyhee School Service Agency (COSSA) is a public school cooperative serving the special education, gifted/ talented, career & technical, and alternative education needs of students from Homedale, Marsing, Notus, Parma, and Wilder School Districts.*