Agricultural Welding, Power, and Structure Technology Curriculum Framework



This document was prepared by:

Office of Career Readiness, Adult Learning, and Education Options Nevada Department of Education 755 N. Roop Street, Suite 201 Carson City, NV 89701

www.doe.nv.gov

# **Nevada State Board of Education**

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# Vision

All Nevada students are equipped and feel empowered to attain their vision of success

# Mission

To improve student achievement and educator effectiveness by ensuring opportunities, facilitating learning, and promoting excellence



# Introduction

The Nevada Career and Technical Education (CTE) Curriculum Frameworks are a resource for Nevada's public schools and charter schools to design, implement, and assess their CTE programs and curriculum. The content standards identified in this document are listed as a model for the development of local district programs and curriculum. They represent rigorous and relevant expectations for student performance, knowledge, and skill attainment which have been validated by industry representatives.

This curriculum framework ensures the following:

- CTE course(s) and course sequence teaches the knowledge and skills required by industry through applied learning methodology and, where appropriate, work-based learning experiences that prepare students for careers in high-wage, high-skill, and/or in-demand fields. Regional and state economic development priorities shall play an important role in determining program approval. Some courses also provide instruction focused on personal development.
- CTE course(s) and course sequence includes leadership and employability skills as an integral part of the curriculum.
- CTE course(s) and course sequence is part of a rigorous program of study and includes sufficient technical challenge to meet state and/or industry standards.

# Nevada Department of Education

Curriculum Framework for Agricultural Welding, Power, and Structure Technology

### **Program Information**

Program Title:	Agricultural Welding, Power, and Structure Technology
State Skill Standards:	Agricultural Welding, Power, and Structure Technology
Standards Reference Code:	AGWPS
Career Cluster:	Agriculture, Food, and Natural Resources
Career Pathway:	Power, Structural, and Technical Systems
Program Length:	2-year, completed sequentially
Program Assessments:	ТВО
	Workplace Readiness Skills
CTSO:	FFA / SkillsUSA
Grade Level:	9-12
Industry Certifications:	See Nevada's Approved Certification Listing

### **Program Purpose**

The purpose of this program is to prepare students for postsecondary education and employment in the Agricultural Welding, Power, and Structure Technology industry.

The program includes the following state standards:

- Nevada CTE Skill Standards: Agricultural Welding, Power, and Structure Technology
- Employability Skills for Career Readiness
- Nevada Academic Content Standards (alignment shown in the Nevada CTE Skill Standards):
  - English Language Arts
  - Mathematics
  - Science
- Common Career Technical Core (alignment shown in the Nevada CTE Skill Standards)

# **Career Clusters**

The National Career Clusters<sup>®</sup> Framework provides a vital structure for organizing and delivering quality CTE programs through learning and comprehensive programs of study (POS). In total, there are 16 Career Clusters in the National Career Clusters Framework, representing more than 79 Career Pathways to help students navigate their way to greater success in college and career. As an organizing tool for curriculum design and instruction, Career Clusters provide the essential knowledge and skills for the 16 Career Clusters and their Career Pathways. <sup>1 and 2</sup>

<sup>&</sup>lt;sup>1</sup> Career Clusters | Advance CTE. (2022). Retrieved 31 August 2022, from <u>https://careertech.org/Career-Clusters</u>

<sup>&</sup>lt;sup>2</sup> The National Career Clusters<sup>®</sup> Framework. (2022). American Institutes for Research. Retrieved 31 August 2022, from <a href="https://www.air.org/sites/default/files/CTEClusters.pdf">https://www.air.org/sites/default/files/CTEClusters.pdf</a>

# **Program of Study**

The program of study illustrates the sequence of academic and career and technical education coursework that is necessary for the student to successfully transition into postsecondary educational opportunities and employment in their chosen career path (NAC 389.803).

#### **Program Structure**

The core course sequencing with the complementary courses provided in the following table serves as a guide to schools for their programs of study. Each course is listed in the order in which it should be taught. Complete program sequences are essential for the successful delivery of all state standards in each program area. A program does not have to utilize the complementary courses for students to complete their program of study.

Required/ Complementary	Course Title	Abbreviated Name	CIP Code	SCED Subject Area	SCED Course Identifier	SCED Course Level	SCED Unit Credit	SCED Course Sequence	SCED Course Number
R	Agricultural Welding, Power, and Structure Technology I	AGWPS I	01.0205	18	401	G	1.00	12	18401G1.0012
R	Agricultural Welding, Power, and Structure Technology II	AGWPS II	01.0205	18	401	G	1.00	22	18401G1.0022
С	Agricultural Welding, Power, and Structure Technology II Lab	AGWPS II L	01.0205	18	401	E	1.00	22	18401E1.0022
с	Agricultural Welding, Power, and Structure Technology – Advanced Studies	AGWPS AS	01.0205	18	405	E	1.00	11	18405E1.0011
С	CTE Work Experience – Agriculture, Food, and Natural Resources	WORK EXPER AFNR	99.0001	18	998	G	1.00	11	18998G1.0011
с	Industry-Recognized Credential – Agricultural Welding, Power, and Structure Technology	IRC AGWPS	01.0205	18	999	E	1.00	11	18999E1.0011

# Agricultural Welding, Power, and Structure Technology Required Core Course Sequence (R) with Complementary Courses (C)

#### **State Skill Standards**

The state skill standards are designed to clearly state what the student should know and be able to do upon completion of an advanced high school career and technical education (CTE) program. The standards are designed for the student to complete all standards through their completion of a program of study. The standards are designed to prepare the student for the end-of-program technical assessment directly aligned to the standards (NAC 389.000 [1]).

# **Employability Skills for Career Readiness Standards**

Employability skills have, for many years, been a recognizable component of the standards and curriculum in career and technical education programs. The twenty-one standards are organized into three areas: (1) Personal Qualities and People Skills, (2) Professional Knowledge and Skills, and (3) Technology Knowledge and Skills. The standards are designed to ensure students graduate high school properly prepared with skills employers prioritize as the most important. Instruction on all twenty-one standards must be part of each course of the CTE program (NAC 389.800 [1]).

#### **Curriculum Framework**

The Nevada CTE Curriculum Frameworks are organized utilizing the recommended course sequencing listed in the program of study and the CTE Course Catalog. The framework identifies the recommended content standards, performance standards, and performance indicators that should be taught in each course.

### **Career and Technical Student Organizations (CTSOs)**

To further the development of leadership and technical skills, students must have opportunities to participate in one or more of the Career and Technical Student Organizations (CTSOs). CTSOs develop character, citizenship, and the technical, leadership and teamwork skills essential for the workforce and their further education. Their activities are considered a part of the instructional day when they are directly related to the competencies and objectives in the course (NAC 389.800 [3]).

#### Workplace Readiness Skills Assessment

The Workplace Readiness Skills Assessment has been developed to align with the Nevada CTE Employability Skills for Career Readiness Standards. This assessment provides a measurement of student employability skills attainment. Students who complete a program will be assessed on their skill attainment during the completion level course. Completion level courses are identified in the Program Structure table as SCED Course Level "G" and SCED Course Sequence 22 or 33 (NAC 389.800 [1]).

#### **End-of-Program Technical Assessment**

An end-of-program technical assessment may be implemented for those programs with current industry validated standards to align with the Nevada CTE Skill Standards for this program. This assessment provides a measurement of student technical skill attainment. Students who complete a program will be assessed on their skill attainment during the completion level course. Completion level courses are identified in the Program Structure table as SCED Course Level "G" and SCED Course Sequence 22 or 33 (NAC 389.800 [1]).

## **Certificate of Skill Attainment**

Each student who completes a course of study must be awarded a certificate which states that they have attained specific skills in the industry being studied and meets the following criteria: A student must maintain a 3.0 grade point average in their approved course of study, pass the Workplace Readiness Skills Assessment, and pass the end-of-program technical assessment, if available (NAC 389.800 [4]).

# **CTE Endorsement on a High School Diploma**

A student qualifies for a CTE endorsement on their high school diploma after successfully completing the following criteria: (1) completion of a CTE course of study in a program area, (2) completion of academic requirements governing receipt of a standard diploma, and (3) meet all requirements for the issuance of the Certificate of Skill Attainment (NAC 389.815).

# **CTE College Credit**

CTE College Credit is awarded to students based on articulation agreements established by each college for the CTE program, where the colleges will determine the credit value of a full high school CTE program based on course alignment. An articulation agreement will be established for each CTE program designating the number of articulated credits each college will award to students who complete the program.

CTE College Credit is awarded to students who: (1) complete the CTE course sequence with a gradepoint average of 3.0 or higher, (2) pass the state end-of-program technical assessment, if available, for the program of study, and (3) pass the Workplace Readiness Assessment for employability skills.

Pre-existing articulation agreements will be recognized until new agreements are established according to current state policy and the criteria shown above.

Please refer to the local high school's course catalog or contact the local high school counselor for more information (NAC 389.800 [3]).

# Academic Credit for CTE Coursework

Career and technical education courses meet the credit requirements for high school graduation (1 unit of arts and humanities or career and technical education). Some career and technical education courses meet academic credit for high school graduation. Please refer to the local high school's course catalog or contact the local high school counselor for more information (NAC 389.672).

# **Core Courses**

# **Recommended Student Performance Standards**

**Course Information** 

Course Title: Agricultural Welding, Power, and Structure Technology I Abbreviated Name: AGWPS I Credits: 1 Prerequisite: None CTSO: FFA / SkillsUSA

#### **Course Description**

This course will introduce students into the foundational skills necessary for agriculture mechanics and industry employment. Areas of study may include general shop safety, basic welding, electrical applications, water management, agricultural drafting and construction, engines and power, and machinery maintenance and repair. An essential part of this course will be leadership activities and Supervised Agricultural Experience Programs.

## **Technical Standards**

CONTENT STANDARD 1.0:	INTEGRATE CAREER AND TECHNICAL STUDENT ORGANIZATIONS (CTSOS)
Performance Standard 1.1:	Explore the History and Organization of CTSOs
Performance Indicators:	1.1.1-1.1.3
Performance Standard 1.2:	Develop Leadership Skills
Performance Indicators:	1.2.1-1.2.6
Performance Standard 1.3:	Participate in Community Service
Performance Indicators:	1.3.1-1.3.3
Performance Standard 1.4:	Develop Professional and Career Skills
Performance Indicators:	1.4.1-1.4.5
Performance Standard 1.5:	Understand the Relevance of Career and Technical Education (CTE)
Performance Indicators:	1.5.1-1.5.3
CONTENT STANDARD 2.0:	IDENTIFY LAB ORGANIZATION AND SAFETY
Performance Standard 2.1:	Demonstrate General Lab Safety Rules and Procedures
Performance Indicators:	2.1.1-2.1.22
CONTENT STANDARD 3.0:	IDENTIFY AND DEMONSTRATE THE PROPER USE OF AGRICULTURAL HAND AND POWER TOOLS
Performance Standard 3.1:	Identify General Shop Hand and Power Tools
Performance Indicators:	3.1.1-3.1.3
Performance Standard 3.2:	Demonstrate Appropriate Usage of Shop Hand and Power Tools
Performance Indicators:	3.2.1-3.2.6
Performance Standard 3.3:	Demonstrate Appropriate Procedures for the Maintenance and Repair of Hand Tools
Performance Indicators:	3.3.1

CONTENT STANDARD 4.0:	DEMONSTRATE SAFE AND PROPER WELDING PROCEDURES
Performance Standard 4.1:	Identify Different Welding Processes and Applications (Oxyfuel [OXY], Shielded Metal Arc Welding [SMAW], Gas Metal Arc Welding [GMAW], Plasma Cutting [PAC])
Performance Indicators:	4.1.1-4.1.3
Performance Standard 4.2:	Demonstrate Safe and Proper Techniques in Oxyfuel Cutting (OFC)
Performance Indicators:	4.2.1-4.2.5
Performance Standard 4.3:	Demonstrate Safe and Proper Techniques in Shielded Metal Arc Welding
Performance Indicators:	4.3.1-4.3.6
CONTENT STANDARD 5.0:	UNDERSTAND THE PRINCIPLES OF ELECTRICITY IN AGRICULTURE
Performance Standard 5.1:	Understand Principles and Theories of Electricity
Performance Indicators:	5.1.1-5.1.4
Performance Standard 5.2:	Apply the Principles and Theories of Electrical Circuits
Performance Indicators:	5.2.1-5.2.5
CONTENT STANDARD 7.0:	UNDERSTAND PRINCIPLES AND APPLICATIONS IN AGRICULTURAL CONSTRUCTION
Performance Standard 7.1:	Demonstrate Practices, Applications, and Procedures of Drafting in Agricultural Projects
Performance Indicators:	7.1.1-7.1.2
CONTENT STANDARD 8.0:	UNDERSTAND PRINCIPLES AND APPLICATIONS OF SINGLE AND MULTIPLE CYLINDER ENGINES
Performance Standard 8.1:	Demonstrate Safe Practices and Procedures of the Operation, Maintenance, and Repair of Small Gas Engines and Equipment
Performance Indicators:	8.1.1-8.1.3
Performance Standard 8.2:	Demonstrate a Working Knowledge of the Essential Engine Operating Systems
Performance Indicators:	8.2.1-8.2.2
CONTENT STANDARD 9.0:	DEMONSTRATE BASIC SKILLS IN OPERATION, MAINTENANCE, AND REPAIR OF AGRICULTURAL MACHINERY
Performance Standard 9.1:	Demonstrate Safe Practices and Procedures of Operation, Maintenance, and Repair of Agricultural Machinery and Equipment
Performance Indicators:	9.1.1-9.1.3
CONTENT STANDARD 12.0:	DESCRIBE THE RELATIONSHIP BETWEEN A SUPERVISED AGRICULTURAL EXPERIENCE (SAE) AND PREPARATION OF STUDENTS FOR A CAREER IN AGRICULTURE
Performance Standard 12.1:	Actively Develop and Participate in Supervised Agricultural Experience (SAE) which Enables Students to Obtain Work-based Skills
Performance Indicators:	12.1.1-12.1.3
CONTENT STANDARD 13.0:	PARTICIPATE IN LEADERSHIP TRAINING THROUGH MEMBERSHIP IN FFA
Performance Standard 13.1:	Recognize the Traits of Effective Leaders and Participate in Leadership Training Through Involvement in FFA
Performance Indicators:	13.1.1-13.1.5
Performance Standard 13.2:	Understand the Opportunities in FFA
Performance Indicators:	13.2.1-13.2.3

Performance Standard 13.3: Understand the Importance of School and Community Awareness *Performance Indicators*: 13.3.1-13.3.3

#### **Employability Skills for Career Readiness Standards**

#### CONTENT STANDARD 1.0: DEMONSTRATE EMPLOYABILITY SKILLS FOR CAREER READINESS

Performance Standard 1.1: Demonstrate Personal Qualities and People Skills
Performance Indicators: 1.1.1-1.1.7
Performance Standard 1.2: Demonstrate Professional Knowledge and Skills
Performance Indicators: 1.2.1-1.2.10
Performance Standard 1.3: Demonstrate Technology Knowledge and Skills
Performance Indicators: 1.3.1-1.3.4

# Alignment to the Nevada Academic Content Standards\*

English Language Arts:	Language Standards
	Reading Standards for Literacy in Science and Technical Subjects
	Speaking and Listening Standards
	Writing Standards for Literacy in Science and Technical Subjects
<b>AA</b>	

Mathematics: Mathematical Practices Algebra Numbers and Quantity

#### Science: Science and Engineering Practices

\*Refer to the Agricultural Welding, Power, and Structure Technology Standards for alignment by performance indicator.

#### **Course Information**

Course Title:	Agricultural Welding, Power, and Structure Technology II
Abbreviated Name:	AGWPS II
Credits:	1
Prerequisite:	Agricultural Welding, Power, and Structure Technology I
Program Assessments:	TBD
	Workplace Readiness Skills
CTSO:	FFA / SkillsUSA

#### **Course Description**

This course is a continuation of Agricultural Welding, Power, and Structural Technology I and allows students to expand on skills and knowledge from Agricultural Welding, Power, and Structural Technology I. Areas of study may include general shop safety, basic welding, electrical applications, water management, agricultural drafting and construction, engines and power, and machinery maintenance and repair. Some topics may include advanced techniques and processes such as electrical controls and maintenance; basic construction and pipe fitting techniques; welding: Gas Metal Arc Welding (GMAW), Shielded Metal Arc Welding (SMAW), and plasma cutting; agricultural machinery operation and repair; hydraulics; and electrical power, and motor and control systems. An essential part of this course will be leadership activities and Supervised Agricultural Experience (SAE) Programs. The appropriate use of technology and industry-standard equipment is an integral part of this course will be leadership activities and Supervised Agricultural Experience Programs. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

#### **Technical Standards**

#### CONTENT STANDARD 1.0: INTEGRATE CAREER AND TECHNICAL STUDENT ORGANIZATIONS (CTSOS)

Performance Standard 1.1:	Explore the History and Organization of CTSOs
Performance Indicators:	1.1.1-1.1.3
Performance Standard 1.2:	Develop Leadership Skills
Performance Indicators:	1.2.1-1.2.6
Performance Standard 1.3:	Participate in Community Service
Performance Indicators:	1.3.1-1.3.3
Performance Standard 1.4:	Develop Professional and Career Skills
Performance Indicators:	1.4.1-1.4.5
Performance Standard 1.5:	Understand the Relevance of Career and Technical Education (CTE)
Performance Indicators:	1.5.1-1.5.3
CONTENT STANDARD 2.0:	IDENTIFY LAB ORGANIZATION AND SAFETY
Performance Standard 2.1:	Demonstrate General Lab Safety Rules and Procedures
Performance Indicators:	2.1.1-2.1.22
CONTENT STANDARD 3.0:	IDENTIFY AND DEMONSTRATE THE PROPER USE OF AGRICULTURAL HAND AND POWER TOOLS
Performance Standard 3.1:	Identify General Shop Hand and Power Tools
Performance Indicators:	3.1.1
Performance Standard 3.2:	Demonstrate Appropriate Usage of Shop Hand and Power Tools
Performance Indicators:	3.2.2

Performance Standard 3.3:	Demonstrate Appropriate Procedures for the Maintenance and Repair of Hand Tools
Performance Indicators:	3.3.1-3.3.2
CONTENT STANDARD 4.0:	DEMONSTRATE SAFE AND PROPER WELDING PROCEDURES
Performance Standard 4.3:	Demonstrate Safe and Proper Techniques in Shielded Metal Arc Welding
Performance Indicators:	4.3.7-4.3.8
Performance Standard 4.4:	Demonstrate Safe and Proper Techniques in Gas Metal Arc Welding
Performance Indicators:	4.4.1-4.4.8
Performance Standard 4.5:	Demonstrate Safe and Proper Techniques in Plasma Cutting Procedures
Performance Indicators:	4.5.1-4.5.6
CONTENT STANDARD 5.0:	UNDERSTAND THE PRINCIPLES OF ELECTRICITY IN AGRICULTURE
Performance Standard 5.2:	Apply the Principles and Theories of Electrical Circuits
Performance Indicators:	5.2.5-5.2.6
CONTENT STANDARD 6.0:	UNDERSTAND WATER AND WASTEWATER MANAGEMENT IN AGRICULTURAL AND INDUSTRIAL SETTINGS
Performance Standard 6.1:	Demonstrate Safe Practices and Procedures in Agricultural and Industrial Water Management
Performance Indicators:	6.1.1-6.1.3
Performance Standard 6.2:	Demonstrate Basic Pipe Fitting Skills
Performance Indicators:	6.2.1-6.2.2
CONTENT STANDARD 7.0:	UNDERSTAND PRINCIPLES AND APPLICATIONS IN AGRICULTURAL CONSTRUCTION
Performance Standard 7.1:	Demonstrate Practices, Applications, and Procedures of Drafting in Agricultural Projects
Performance Indicators:	7.1.3
Performance Standard 7.2:	Demonstrate Practices and Procedures in Construction of Agricultural Projects
Performance Indicators:	7.2.1-7.2.3
CONTENT STANDARD 8.0:	UNDERSTAND PRINCIPLES AND APPLICATIONS OF SINGLE AND MULTIPLE CYLINDER ENGINES
Performance Standard 8.1:	Demonstrate Safe Practices and Procedures of the Operation, Maintenance, and Repair of Small Gas Engines and Equipment
Performance Indicators:	8.1.1-8.1.3
Performance Standard 8.2:	Demonstrate a Working Knowledge of the Essential Engine Operating Systems
Performance Indicators:	8.2.1-8.2.2
Performance Standard 8.3:	Recognize Appropriate Power Attachments and Their Applications
Performance Indicators:	8.3.1-8.3.2
Performance Standard 8.4:	Demonstrate Maintenance and Repair Procedures on Single and Multiple
	Cylinder Engines and Attachments

CONTENT STANDARD 9.0:	DEMONSTRATE BASIC SKILLS IN OPERATION, MAINTENANCE, AND REPAIR OF AGRICULTURAL MACHINERY
Performance Standard 9.1:	Demonstrate Safe Practices and Procedures of Operation, Maintenance, and Repair of Agricultural Machinery and Equipment
Performance Indicators:	9.1.1-9.1.7
CONTENT STANDARD 10.0:	DEMONSTRATE THE OPERATION, MAINTENANCE, AND USE OF ELECTRICAL POWER, MOTORS, AND CONTROLS IN AGRICULTURAL APPLICATIONS
Performance Standard 10.1:	Demonstrate Procedures Associated with the Operation, Maintenance, and Repair of Electrical Power
Performance Indicators:	10.1.1-10.1.3
<b>CONTENT STANDARD 11.0:</b>	UNDERSTAND AGRICULTURAL HYDRAULIC SYSTEMS
Performance Standard 11.1:	Demonstrate Knowledge of the Basic Principles, Operation, and Maintenance of Hydraulic Systems in the Agricultural Industry
Performance Indicators:	11.1.1-11.1.4
CONTENT STANDARD 12.0:	DESCRIBE THE RELATIONSHIP BETWEEN A SUPERVISED AGRICULTURAL EXPERIENCE (SAE) AND PREPARATION OF STUDENTS FOR A CAREER IN AGRICULTURE
Performance Standard 12.1:	Actively Develop and Participate in Supervised Agricultural Experience (SAE) which Enables Students to Obtain Work-based Skills
Performance Indicators:	12.1.1-12.1.3
<b>CONTENT STANDARD 13.0:</b>	PARTICIPATE IN LEADERSHIP TRAINING THROUGH MEMBERSHIP IN FFA
Performance Standard 13.1:	Recognize the Traits of Effective Leaders and Participate in Leadership Training Through Involvement in FFA
Performance Indicators:	13.1.1
Performance Standard 13.2:	Understand the Opportunities in FFA
Performance Indicators:	13.2.1-13.2.3
Performance Standard 13.3:	Understand the Importance of School and Community Awareness
Performance Indicators:	13.3.2-13.3.3
Employability Skills for Career	Readiness Standards

# CONTENT STANDARD 1.0: DEMONSTRATE EMPLOYABILITY SKILLS FOR CAREER READINESS

	Demonstrate Personal Qualities and People Skills
Performance Indicators:	1.1.1-1.1.7
Performance Standard 1.2:	Demonstrate Professional Knowledge and Skills
Performance Indicators:	1.2.1-1.2.10
Performance Standard 1.3:	Demonstrate Technology Knowledge and Skills
Performance Indicators:	1.3.1-1.3.4

# Alignment to the Nevada Academic Content Standards\*

English Language Arts:	Language Standards Reading Standards for Literacy in Science and Technical Subjects Speaking and Listening Standards Writing Standards for Literacy in Science and Technical Subjects
Mathematics:	Mathematical Practices Algebra Numbers and Quantity
Science:	Science and Engineering Practices

\*Refer to the Agricultural Welding, Power, and Structure Technology Standards for alignment by performance indicator.

# **Complementary Courses**

Programs that utilize the complementary courses can include the following:

- Advanced Studies course
- Lab course(s)
- CTE Work Experience courses
- Industry-Recognized Credential course

#### **Course Information**

Course Title:	Agricultural Welding, Power, and Structure Technology Advanced Studies
Abbreviated Name:	AGWPS AS
Credits:	1
Prerequisite:	Agricultural Welding, Power, and Structure Technology II
CTSO:	FFA / SkillsUSA

#### **Course Description**

This course is offered to students who have achieved all content standards in a program and desire to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.

#### **Technical Standards**

Students have achieved all program content standards and will pursue advanced study through investigation and in-depth research.

#### **Employability Skills for Career Readiness Standards**

Students have achieved all program content standards and will pursue advanced study through investigation and in-depth research.

#### Sample Topics:

- Participate in individual/team competitions
- Investigate and utilize shop management techniques and procedures
- Participation in an internship or job shadow opportunities
- Develop Leadership Skills
- Explore college and career opportunities

# **Course Information**

Course Title:	Agricultural Welding, Power, and Structure Technology II LAB
Abbreviated Name:	AGWPS II L
Credits:	1
Prerequisite:	Concurrent enrollment in Agricultural Welding, Power, and Structure Technology II
CTSO:	FFA / SkillsUSA

#### **Course Description**

This course is designed to expand the students' opportunities for applied learning. This course provides an indepth lab experience that applies the processes, concepts, and principles as described in the classroom instruction. The coursework will encourage students to explore and develop advanced skills in their program area. The appropriate use of technology and industry-standard equipment is an integral part of this course.

#### **Course Information**

Course Title:	CTE Work Experience – Agriculture, Food, and Natural Resources
Abbreviated Name:	WORK EXPER – Agriculture, Food, and Natural Resources
Credits:	1
Prerequisite:	Completion of Level 2 course in the qualifying program of study
CTSO:	FFA / SkillsUSA

#### **Course Description**

This course is designed to expand the students' opportunities for applied learning. This course provides an indepth CTE work experience that applies the processes, concepts, and principles as described in the classroom instruction. This course will encourage students to explore and develop advanced skills through work-based learning directly related to the program of study. The course must follow NAC 389.562, 389.564, 389.566 regulations.

# **Course Information**

Course Title:	Industry-Recognized Credential – Agricultural Welding, Power, and Structure Technology
Abbreviated Name:	IRC OFFICE
Credits:	1
Prerequisite:	Completed Agricultural Welding, Power, and Structure Technology
CTSO:	DECA / FBLA

#### **Course Description**

This course is offered to students who have achieved all content standards in a program of study and desire to pursue an Industry-Recognized Credential that aligns with the standards and skills associated with the Agricultural Welding, Power, and Structure Technology Program of Study. This course is designed to expand the students' opportunities to pursue certification aligned with employment standards in the industry aligned with this program of study. The supervising teacher will provide instruction aligned with the certification requirements, monitor progress toward certification, and provide the students with appropriate testing or certification opportunities associated with the intended Industry-Recognized Credential that is the subject of the course. This course may be repeated for additional instruction and credit.