Welding Technology Orientation

WELD 0000

Room:
Main Building 1037

Advisement Hours:
During Class Hours

WELD Program Faculty:
https://www.davistech.edu/
programs/welding-technology#faculty

Faculty

Introduction

Welcome to the Welding Technology program at the Davis Technical College (Davis Tech)! The purpose of this program orientation is to acquaint you with information specific to the program and its unique policies and procedures. You are required to read this document thoroughly and discuss any unclear sections with your instructor or a Career and Academic Advisor. You may also review college policies on the Davis Tech website (www.davistech.edu) or in Student Services.

Program Description

The Welding Technology program utilizes state-of-the art welding equipment and hands-on learning to prepare students American Welding Society (AWS) certifications. This program develops welding and cutting processes for the joining of parts according to blueprints, or written specifications, in the following industrial skill areas: gas metal arc welding (GMAW), flux cored arc welding (FCAW), shielded metal arc welding (SMAW), oxy fuel cutting (OFC), plasma cutting (PAC), gas tungsten arc welding (GTAW), spray arc welding, air carbon arc welding, and gouging.

Program Objectives

Students will engage in hands-on practice, instructional videos, information sheets, and competency tests. Upon completion of this program or a given certificate, students will have received specialized training as a welding technician. Students will have an opportunity to expand their skills through welding elective course options. Depending on individual needs, students will have the opportunity to learn and apply the following while enrolled in the Welding Technology program:

- Demonstrate:
  - Safe and clean shop practices
  - Accurate reading of welding blueprints
  - Accurate and clean metal cuts
  - Industry-acceptable welds
  - Knowledge of basic cutting and welding terms and equipment setup
- Explain key terms and uses for GMAW, FCAW, and GTAW welding processes

- Obtain industry standard welds in multiple processes and positions
- Translate welding blueprints accurately
- Perform certificate-level GTAW mild steel welds
- Explain inspection and metallurgy of various metals
- Obtain AWS Welding Certification
- SMAW Certification Preparation prepares students to make certificate-level MIG welds
- GMAW Certification Preparation prepares students to make certificate-level stick welds
- FCAW I, II Certification Preparation prepares students to make certificate-level flux core welds
- GTAW Certification Preparation prepares students to make certificate-level TIG welds
- Demonstrate accurate aluminum GMAW welding techniques

General Information

You can access this orientation on the Davis Tech program web site, as well as current information on the following items:

- Admission Requirements
- Classroom Availability
- Training Location
- Graduation Requirements
- Course Descriptions
- Program Requirements
- Gainful Employment Disclosures
- Estimated Cost (*tuition, fees, program and course materials*)
- Financial Aid
- Credentials
- Job Outlook
- Transfer Options
- Academic Agreements
- Industry Licensing and Certification

Advisement

Teacher advisement is important for your success at Davis Tech. Students who receive regular advisement are more likely to achieve their goals and complete their training program on schedule. Your instructor is available to meet with you during the advisement hours listed at the beginning of this orientation. These meetings are used for you and the instructor to accomplish the following tasks:

- Update contact information in Northstar, the Student Information System
- Review performance and attendance
- Define and clarify training and career goals
- Select appropriate courses according to interest and aptitude
- Select courses that achieve program completion requirements

- Discuss professional work ethic in performance, attendance, attitude, dress, behavior, and communication
- Discuss challenges with referral to appropriate institutional support systems that can help improve your success

Competency-Based Training

Davis Tech courses are competency-based, requiring you to demonstrate your knowledge and skill according to industry-based objectives and performance standards. Course lengths are based on actual clock-hours and are calculated on the average length students are expected to complete designated coursework. At the beginning of each course, you will purchase or receive course curriculum, which provides guided learning modules to follow. This includes the amount of time you should spend on each learning activity. This will help you meet industry time standards and complete coursework in an appropriate amount of time.

Scheduling

Courses in this program have an open-start/defined-end schedule. Courses in this program may be started at any time. Following course enrollment, you will receive a schedule that shows the date by which the course must be completed. If you fail to complete a course by the end date, you will be required to re-enroll and repay for the course. This type of scheduling is also referred to as course based because courses are paid for one at a time.

Campus Technology

Each time that you attend class, you will log in to and out of the Northstar Classroom Login Station using your 10-digit student number. You were given this number when you completed the Davis Tech enrollment process. You will use your student number to access the Student Portal as well. Your instructor will provide you with information on Canvas access.

You can access Canvas from any internet-connected computer at the following URL: https://davistech.instructure.com/login . If you have problems logging in to Canvas, please see your instructor or email online.support@davistech.edu . If you encounter technical problems while in Canvas, use the Help button in Canvas and the "Report a Problem" link. A general orientation to Canvas can be found in the New Student Orientation, but faculty will also offer an orientation specific to technology in your program on your first day of class.

Learning Resources
Student Resource Center
The classroom includes a Student Resource Center where you will find industry publications, periodicals, manuals, media materials. In addition, you will be given opportunities to use equipment and materials, such as computers with Internet access and software applications that are currently being used in industry.

Electronic Student Resources
Your Canvas orientation course contains electronic learning resources that can be used throughout your time in the program. Each canvas course links to these resources, and they will be updated

regularly. If you find a frequently used resource (website, video, tutorial, etc.) that you think would be helpful for other students in your program, consider sharing the link with your instructor.

First Aid Supplies
The classroom also includes a first aid kit, and other supplies needed in case of emergency. Evacuation maps can be found in strategic locations throughout the college.

Students with Disabilities
If you have a disability that may require accommodations, contact and work through the counseling service located in Student Services.

Performance Standards
Progress
Progress is calculated by the number of scheduled hours versus the amount of coursework completed. Program progress must be maintained at 67 percent or better to be eligible for financial aid. It is recommended that progress be maintained at 85 percent or better. This will ensure that you can complete the program in a timely manner. If you have difficulty meeting 85 percent progress, please meet with your instructor. If you do not complete a course by the end date, you will have to pay for the course again (adult students only), and a faculty member will help create a Student Success Plan to ensure your success on a second attempt.

Grading
Davis Tech courses are competency-based, requiring you to demonstrate your knowledge and skill according to industry-based objectives and performance standards. Course lengths are based on actual clock-hours and are calculated on the average length students are expected to complete designated course work. At the beginning of each course, you purchase or receive course curriculum which provides guided learning modules for you to follow. This includes the amount of time that should be spent on each learning activity. This will help you to meet industry time standards and to complete course work in an appropriate amount of time.

You will receive a grade for each course. The grading scale used throughout this program will be:

A	94 – 100%	A-	90 – 93%		
B+	87 – 89%	B	84 – 86%	B-	80 – 83%
C+	77 – 79%	C	74 – 76%	C-	70 – 73%

If you are unable to prove at least average competency in each course or module, you will not receive credit for having completed it.

Grades will be calculated using the following criteria:

Percent	Criteria

40%	Course Progress Factor - *How quickly you progress through each course compared to the average student*
35%	Average Scores of Tests and Assignments
10%	Follows Direction
10%	Stays on Task
5%	Attitude
Note: All welds are a pass or fail and are expected to meet AWS D.1.1 weld profile and standards	

Grades for welding and cutting processes will be calculated using the following criteria:

	Criteria
4	*Welds are desirable and completed ahead of time schedule*
3	Welds are desirable
2	Welds are acceptable
1	Welds do not meet AWS minimum standards. You cannot move pass this course until welds have exceeded this level.
Note on Performance Criteria: All welds are graded to AWS standards and are expected to meet American Welding Society (AWS) D.1.1 weld profile and standards	

Time Standards

When working as a welder, you must keep track of time. The instructor (as a shop manager/owner) expects work to be performed within a particular time standard.

1. A time standard is the time required to complete a specific task, as determined by welders in industry. All training modules are given a standard length indicating the amount of time it should take you to complete the work in that module. Use the clock to keep track of the time you spend on each module.
2. As a new student, because you will be learning new skills, the quality of your work is more important than the time you take to complete a task. Each time you complete a similar task, you should try to reduce the time you take without sacrificing quality. If you have difficulty completing work in the time given, it may suggest that you will have difficulty working in this trade.

Module Completion Reports are used to track the time spent on each course module. This serves as a record of the amount of time you spend on a module and what materials are used.

Attendance

Attendance must be maintained at 67 percent or better to be eligible for financial aid. The Welding Technology program prefers 85 percent minimum attendance to ensure students can stay on track for timely completion of each course. Attendance is calculated using the number of scheduled hours versus the number of hours you are present in the classroom. To meet this requirement, you must be in class on the days and times that you are scheduled. Your attendance requirement may be higher depending on any sponsorship or financial aid stipulations that apply to you. You must log in and out of Northstar each time you attend class, so your attendance is documented.

Talk to your instructor when an absence is necessary. Excused absences will be given for job interviews, Davis Tech sponsored activities, major illness and or major life events, off-site training, or high school activities. If you require an extended absence from the program, consult with your instructor prior to the absence. If necessary, a counselor in Student Services may assist you in this process.

Students are expected to attend class for the hours they are scheduled. If you are absent for ten consecutive scheduled days, you will be withdrawn from Davis Tech. Per the College Student Records Policy, student attendance information may be released to potential employers.

Academic Performance & Discipline
Your success in this program is important to us. We will work with you to help you succeed, but if we feel that you are not meeting the minimum standards as described in this orientation, we are committed to taking appropriate actions to help you improve.

High school students must meet minimum standards in grading, progress, and attendance before transitioning into a place in the program as an adult student. These standards are established by the program and may differ across the college. In the Welding Technology program, a high school student, who will become an adult student, should meet the following minimum standards:

Attendance: 85 percent   Progress: 85 percent   Grade: 80 percent

If you do not meet Davis Tech or Welding Technology performance standards, you will be subject to academic discipline. Reasons for academic discipline include but are not limited to violations of Davis Tech or program policies and procedures, violations of academic integrity, failure to maintain minimum attendance standards, failure to maintain progress standards, and repeating a course.

Academic Performance
Your success in this program is important to us. We will work with you to help you succeed, but if we feel that you are not meeting the minimum standards as described in this orientation, we are committed to taking appropriate actions to help you improve. The following steps may be taken if you fail to meet the minimum performance, progress, and attendance standards or violate the Welding Technology program policies and procedures:

Academic Probation
Students who are on academic probation may lose Federal Financial Aid, scholarship eligibility, or sponsorship and benefits, as determined in accordance with college Financial Aid requirements and Department of Education regulations.

If you are unable to complete a course by the course end date or meet program performance standards, you will be put on probation and a Student Improvement Plan will be developed. The plan will include details of the unsatisfactory performance, outline a plan and timeframe for performance improvement, and describe the process that will be used to monitor and evaluate future performance. This plan will be submitted to Student Services to become part of your student record. The plan will be signed by you and the instructor.

If you are unable to correct the unsatisfactory performance or complete the repeated course by the repeated course end date, you will remain on probation and will need to meet with your instructor and a college counselor to modify and further define the Student Improvement Plan. The instructor and counselor may also evaluate barriers that might prevent your success in the program and whether or not other training options should be considered.

If you fail to meet the performance standards outlined in the Student Improvement Plan, you will be required to participate in a Committee Review in order to continue as a student at the Davis Tech. The committee will be composed of you, the instructor, the program director, an impartial program director, and a college counselor. The committee will evaluate the corrective actions taken by the college, the Welding Technology program, and you to determine a mutually beneficial course of action. Possible options may include but are not limited to: continued academic probation, additional assessment, recommended change to another educational program, suspension, or termination from the program.

If you fail to appear for the Committee Review, you may be considered for disciplinary termination. If you have received a Student Improvement Plan or have been placed on academic probation and subsequently leave the institution, you may be considered for disciplinary termination. If you are terminated for academic performance, you must meet with a Career and Academic Advisor to discuss a plan for correction before being permitted to re-enroll at Davis Tech.

Problem Resolution
If you are not satisfied for any reason with classroom management, grading or academic disciplinary actions taken, discuss your concerns with faculty in your program. If this does not resolve your concerns, please contact Student Services.

Instructor Response Time
Your instructor will respond to any question regarding the program, assignments, or assessments in 24 hours within the Davis Tech operational schedule.

Student Policies and Procedures
You may find further information on institutional student policies and procedures here: http://www.davistech.edu/policies-and-procedures .

Placement Services
Placement services are available to you when you complete your program. These services include resume review, interview skills, and job placement assistance.

Student Follow-up
Your success in finding employment is an indication of the quality of our instruction. To evaluate the effectiveness of our programs, we ask that you notify us of your employment status. If you are already employed, become employed, or if your employment status changes, please notify your instructor. You may also report current military service, the pursuit of additional education, or indicate reasons that may prevent you from completing your program or finding employment. If we

don't receive a response from you, a Davis Tech employee will contact you to request your employment status.

Program Safety

You will learn about industrial safety in WELD Introduction to Welding and are expected to follow the following safety standards:

- Personal Protective Equipment (PPE) is required beyond the yellow line;
- Equipment safety devices must never be removed or disabled;
- Clean your work area;
- Other safety procedures as outlined in the Shop/Classroom Clean-Up Agreement at the end of this orientation.

Course Evaluations

At the end of each course, your curriculum will guide you to an online evaluation with questions about instructional content and your primary instructor. We appreciate and value your feedback. Although you will be asked to enter your student number, this is simply to verify the evaluation is completed only once per student. The results of the actual survey are anonymous. Feedback is used for program improvement and professional development.

Employer Advisory Committee

The Welding Technology Employer Advisory Committee is made up of local industry professionals who meet at least twice a year. During the meetings, the advisory committee reviews the program, courses, equipment, materials, facilities, and the learning environment to ensure that what is being taught aligns with industry practices. They also provide information about the employment outlook in the field and specific changes that help us to better meet their employment needs.

American Welding Society

Davis Tech is the first American Welding Society (AWS) Accredited Test Facility (ATF) in Utah https://www.davistech.edu/aws . The AWS ATF program establishes minimum requirements for test facilities, their personnel, and equipment to qualify for accreditation to test and qualify welders. The program is open to independent laboratories, manufacturing plants, educational institutions, and other entities.

The AWS was founded in 1919 with a goal to advance the science, technology, and application of welding and related joining disciplines. It provides students with a variety of resources and opportunities, including a deeply-discounted Student Membership with $15 annual dues. With membership you will receive monthly issues of the Welding Journal, issues of American Welder, Welding Marketplace, 25% discounts on AWS publications, and discounts on AWS conferences. For more information and to sign up, go to the AWS website at: https://www.aws.org/home .

Lincoln Electric/Davis Tech Partnership

In 2010 Lincoln Electric and Davis Tech entered into a partnership whereby Lincoln Electric agreed to provide Davis Tech with new, state of the art equipment that is changed out yearly. After this

equipment is one year old, Lincoln sells it as used and brings new equipment into the school. This arrangement makes it very important that the equipment is maintained in the best condition.

Lincoln Electric also provides the school with welding consumables such as GMAW wire, FCAW wire GTAW rods, and SMAW welding electrodes for student use.

Lincoln Electric customers visit Davis Tech on a regular basis to look at and/or try new equipment. These customers are potential employers and as such it is extremely important that you treat every day as a potential job interview.

Lincoln Electric has also made the Davis Tech Bookstore an authorized seller of their welding apparel, allowing the school to provide welding gear for students at a deeply discounted rate.

In exchange for the use of equipment, introduction to potential employers, and discounted gear, Davis Tech provides Lincoln Electric with a professional environment to bring customers to look at equipment, a location for holding seminars and trainings, staff to take care of local shipping and receiving, and an office located on the Davis Tech campus.

Student Code of Conduct
Welding Technology Policy

1. **Safety**: All accidents are to be reported to the instructor immediately, no matter how minor.

2. **Projects:** Students cannot build anything that could be considered a weapon, i.e. guns or gun parts, axes, knives, swords, martial arts weapons, drug paraphernalia, or any tobacco items. All personal projects must have a sketch or blueprint and be approved by an instructor before beginning.

3. **Books:** You may use any classroom copies in the classroom. Books belonging to the classroom may not be taken home. All students are required to purchase textbooks at the bookstore. Be sure to ask if there are any used books available. It is a copyright violation to copy pages of a published text.

4. **Classroom Conduct:** We expect all students who attend Davis Tech to conduct themselves in a professional manner. We prepare students to act appropriately in the class and on the job so they can enter the workforce and be successful.

5. **Food and Drink**: No food or drinks are allowed in the classroom or shop areas.

6. **Language:** Abusive, vulgar, or disrespectful language will not be tolerated.

7. **Clothing:** Students need to wear clothing appropriate to the work environment in order to work in the shop. No loose or baggy clothing, and long hair should be kept restrained in order to work safely around the machines. No immodest or offensive clothing may be worn. Shorts and/or open-toed shoes are not allowed in the welding shop area.

8. **Computer Use:** The computers are for class-related use only. Students are not permitted to use the computers to play games, browse non-course-related internet sites, or download any software or projects. Computer use may be monitored and recorded at any time.

9. **Phones:** No outside calls are allowed. Some exceptions may be made for emergencies or for program/job related business. Be sure to obtain instructor permission first. If cell phones become a problem, you will be asked to turn it off or put them in a locker, car, etc.

10. **Smoking:** Smoking is prohibited outside the Davis Tech smoking shelter. No one under 19 may smoke or have tobacco products of any kind (this includes e-cigarettes or vaping products). Chewing tobacco is not permitted on school premises.

11. **Absences:** Absences cannot be made up. You may enroll for additional hours in the day or night class to catch up on late work.

12. **Attendance:** If you are an adult student and need to take extended time off, you will need to withdraw at Student Services. If you do not withdraw, you could accrue up to 10 consecutive absences and be dropped from the roll. This enrolled time must be paid off when you re-enroll. High school students: your attendance plays a large part in the computation of your grade. You must maintain 85% or better attendance. Every hour you are enrolled and not present counts against your progress.

13. **Personal Belongings:** Any items that are left after 30 days after the student withdrawal will become Davis Tech property.

14. **Appropriate Behavior:** Horseplay, roughhousing, and practical jokes will not be permitted anywhere in the shop or classrooms.

15. **Projects**: To develop your skills, all work is performed on projects. On occasion, you may be assigned projects belonging to the College or to other people. The instructor must give approval before ANY outside project may be brought into the lab.
    - All work must be done under the direction of the instructor.
    - Before a project (other than those belonging to the College) may be worked on, the owner must deposit sufficient money to cover the cost estimated for the particular project or work agreement. After the project is completed, any balance will be refunded.
    - Students must submit a record of their time spent on the task to receive credit for the project.