



Atlantic Technical College

Welding Technology Program Syllabus 2024-2025



Instructor Name: Mr. Dustin Welch
Department Name: Manufacturing
Office/Classroom Location: Building 15,
 Room 263
Phone Number: (754) 321-5125.
Email Address: dustin.welch@browardschools.com

Instructor Office Hours:
M-F: 1:50 PM - 3:50 PM
 (By appointment only)

Student Hours:
Monday – Friday
7:05 AM to 10:10 AM
 (Adults & High School)

Lunch: 10:10 AM to 10:40 AM

10:50 AM to 1:50 PM
 (Adults & High School)

NOTE: All students are expected to be present during their entire scheduled class time(s). All classroom breaks will occur on an “as needed” basis.

Program Name: Welding Technology
Career Cluster: Manufacturing

OCP	Course Number / Title	Course Length
A	PMT0070 / Welder Assistant 1	150 hours
	PMT0071 / Welder Assistant 2	150 hours
B	PMT0072 / Welder, SMAW 1	150 hours
	PMT0073 / Welder, SMAW 2	150 hours
C	PMT0074 / Welder	<u>450 hours</u>
		1050 hours total (Full-time, including summer)

College Policy/Adult Student Attendance:

- A student must be withdrawn after being absent for six (6) consecutive days.
- Two (2) additional absences may be allowed under certain circumstances with appropriate documentation.
- Please refer to the Broward Technical College Student Handbook for postsecondary students. <http://www.atlantictechicalcollege.edu/atc-student-handbook/>

Dual Enrollment/Magnet High School/Attendance Policy:

A student who has had at least five unexcused absences, or absences for which the reasons are unknown, within a calendar month, or 10 unexcused absences, or absences for which the reasons are unknown, within a 90-calendar-day period, may be exhibiting a pattern of non-attendance (F.S.1003.26 (1) (b)) and the School Board of Broward County, Policy 5.5.

**Required Books and Supplies
(Available at Campus Bookstore):**

1. Online Course: American Welding Society curriculum (Fundamentals of Welding)
2. American Welding Society Fundamentals of Welding (Hard Copy)
ISBN: 978-1-64322-052-9

**Required Tools / Retail Supplies
(Some items are available at ATC (Atlantic Technical College) Bookstore):**

1. Welding Shield with a #10 or Auto welding hood shades 9-13
 2. * Approved A.N.S.I. Z87 Clear Safety Glasses
 3. * Welding gloves (thick, Insulated for stick welding)
 4. * Canvas jackets with leather sleeves. (Sized to fit)
 5. * Chipping hammers
 6. * 6" inch wire brush and small wire brush 1" & 2"
 7. * Cutting Goggles or (approved A.N.S.I. Z87 Cutting Safety glasses with a #5 Lens (not part of the kit)
 8. * Flint Striker
 9. * Tip Cleaner
 - 10.* TIG welding gloves
 - 11.* Soap stone (used for marking metal during cutting) 2 pack sharpie markers
 12. Tape Measure 25ft
 13. Wire Cutters
 14. 10" Vise Grips
 15. 10" Adjustable Wrench.
- * Items included in the Tillman Premium Protection Kit
16. 4.5" Angel grinder
- Items below must be purchased by H.S. students**
17. Ear Plugs
 18. Cotton welding hat (no synthetic materials)
 19. Leather work boots (must be above the ankle Steel Toe is preferred)
 20. Two locks for lockers with 2 combination locks
 21. Work clothing (100% cotton or wool or blend of both)

ADULT STUDENTS: All required books & some materials/supplies can be purchased from the school bookstore. Stop by during operational hours for pricing & purchasing information. All other required materials/retail supplies not available at the bookstore need to be purchased elsewhere. All required books and materials/retail supplies must be obtained before the program starts.

HIGH SCHOOL STUDENTS: Students who receive a required book will be issued one, if lost or missed placed the student will have to replace it at their own expense. Most of the required tools/supplies are on loan, high school students are responsible for the care and return of all of the required books and required tools/supplies on loan and will be issued an obligation for damaged or missing books and/or tools/supplies. Some of the required materials/supplies can be purchased from the school bookstore. All other required materials/retail supplies not available at the bookstore need to be purchased elsewhere.

<u>Grading Scale / System:</u>		Additional Program Specific Grading Information:	
A	90 - 100%	Employability	30 %
B	80 - 89%	Classroom projects/ Assessments	30%
C	70 - 79%	Lab Work	40%
D	60 - 69%		
F	50 - 59%		
I	Incomplete		

Online Course Grading Policy:
 Online Assignments / Teams assignments will be graded just like classwork.

View Your Grades:
Grades can be viewed online by following the directions below:

1. Go to <https://browardfocus.com>
2. Student ID which is on your student schedule.
3. Passcode: Student's date of birth formatted as PMM/DD/YYYY.
Two digits for the month, two digits for the day and Four digits for the year.

Welding program classroom / lab rules:
 The following rules must be complied with student(s) in the welding program to prevent hazardous conditions.

1. Students are expected to be in their seats and ready to work when the bell rings.
2. Students are required to always adhere to the Code of Conduct, as set forth by the School Administration and the Broward Technical College Student Handbook.
3. Students must always show respect to other students and the teacher.
4. All electronic devices must be silent and out of sight during instructional time. This includes cell phones, earbuds, smartwatches, headphones, mp3 players, etc. The school and/or teacher are not responsible for lost or stolen devices/personal belongings of any kind.
5. No food and/or drinks are permitted around any computers.
6. Students must notify the teacher, in advance, if planning to miss a portion of class time(s) for ANY reason.
7. Students shall familiarize themselves and adhere to all safety procedures in the Classroom Safety Manual and Lab.
8. No student should work in or enter the lab until they have had a lab orientation.
9. Student(s) must not operate any piece of equipment until they have been trained and have been authorized to operate it.
10. Wear approved A.N.S.I. Z87 safety glasses in the lab. **No Exceptions!** NO SUNGLASSES in the classroom and or lab at any time.

<p>Industry Credentials: American Welding Society Welding Certification available at an extra cost.</p> <p>Price for the A.W.S. Welding Qualification(s),</p> <ul style="list-style-type: none"> • \$25 for steel plate each and \$30 for steel pipe each. • 3G/4G SMAW • 3G/4G FCAW • 1G/2G/3G GTAW (Steel, Stainless Steel and Aluminum) 	<p>Outstanding Student Recognition Information:</p> <p>A gold seal will be applied to a Program Completion Certificate or an Applied Technology Diploma if the student has earned a 3.5 GPA (Grade Point Average) or higher in their Career and Technical Education (CTE) classes.</p>
<p>Program Name: Welding Technology</p>	
<p>Course Number: PMT0070 Course Title: Welder Assistant 1 Occupational Completion Point: A Intended Outcomes: 01.0 Demonstrate an understanding and apply workplace safety and workplace organization skills. 02.0 Demonstrate basic knowledge of industrial and manufacturing processes. 03.0 Describe and identify metal and its properties accurately. 04.0 Demonstrate basic knowledge of drawing and interpreting AWS welding symbols. 05.0 Apply basic Oxyfuel gas cutting principles and practices. 06.0 Create a product using basic Oxyfuel gas cutting principles and practices.</p>	
<p>Course Number: PMT0071 Course Title: Welder Assistant 2 Occupational Completion Point: A Intended Outcomes: 07.0 Apply intermediate Oxyfuel gas cutting principles and practices. 08.0 Demonstrate plasma arc cutting principles and practices. 09.0 Demonstrate a basic understanding of shielded metal arc welding (SMAW). 10.0 Create a product using basic shielded metal arc welding (SMAW) principles and practices.</p>	
<p>Course Number: PMT0072 Course Title: Welder, SMAW 1 Occupational Completion Point: B Intended Outcomes: 11.0 Apply basic shielded metal arc welding (SMAW) skills. 12.0 Demonstrate and apply Carbon Arc Gouging (GAC) principles and practices. 13.0 Apply visual examination skills. 14.0 Create a product using Carbon Arc Gouging and basic shielded metal arc welding (SMAW) principles and practices.</p>	
<p>Course Number: PMT0073 Course Title: Welder, SMAW 2 Occupational Completion Point: B Intended Outcome: 15.0 Demonstrate and understanding of employability skills and career opportunities related to the welding industry. 16.0 Apply intermediate shielded metal arc welding (SMAW) skills.</p>	

17.0 Create a product using intermediate shielded metal arc welding (SMAW) principles and practices.

Course Number: PMT0074

Course Title: Welder

Occupational Completion Point: C

Intended Outcomes:

18.0 Apply basic gas metal arc welding (GMAW) skills.

19.0 Apply intermediate gas metal arc welding (GMAW) skills.

20.0 Apply basic flux-cored arc welding (FCAW) skills.

21.0 Apply intermediate flux-cored arc welding (FCAW) skills.

22.0 Apply basic gas tungsten arc welding (GTAW) skills.

23.0 Apply intermediate basic gas tungsten arc welding (GTAW) skills.

24.0 Demonstrate an understanding of pipe welding principles and practices.

The School Board of Broward County, Florida, prohibits any policy or procedure which results in discrimination based on age, color, disability, gender identity, gender expression, national origin, marital status, race, religion, sex, or sexual orientation. Individuals who wish to file a discrimination and/or harassment complaint may call the Director, Equal Education Opportunities/ADA Compliance Department at 754-321-2150 or Teletype Machine (TTY) 754-321-2158. Individuals with disabilities requesting accommodations under the Americans with Disabilities Act Amendments Act of 2008, (ADAAA (Americans with Disabilities Act Amendments Act)) may call Equal Educational Opportunities/ADA Compliance Department at 754-321-2150 or Teletype Machine (TTY) 754-321-2158.