



TENNESSEE COLLEGE
OF APPLIED TECHNOLOGY
— MURFREESBORO —

2023-24 PROGRAM HANDBOOK

Welding

TCAT Murfreesboro

1303 Old Fort Parkway, Murfreesboro, TN 37129

Instructor

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**2023-24 PROGRAM HANDBOOK
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INTRODUCTION

Mission

The mission of the Tennessee College of Applied Technology Murfreesboro is to be the leading training provider for workforce development by delivering the best in technical education to our region.

Accreditation

Tennessee College of Applied Technology is accredited by the Commission of the Council on Occupational Education (COE). The COE, originally founded in 1971 as a regional accrediting agency of the Southern Association of Colleges and Schools, is the successor to the Commission on Occupational Education Institutions (COEI). In 1995, the Council became a national accrediting agency. In 2006, the Council celebrated its 35th year of assuring quality and integrity in career and technical education. The Council's accreditation process is conducted on behalf of more than 181,000 students across the nation who pursue careers in a variety of technical fields.

Welcome

I would like to welcome you to the Welding program at the Tennessee College of Applied Technology – Murfreesboro. Throughout the course of your program, you will be exposed to the tools, skills, and theory lessons needed to earn and maintain an entry-level position in the field. There are many opportunities and pathways for this program, and you will be learning about them throughout your time here.

It is important that you stay on task and push your limits to learn and grow. This program is designed to act as a mock job setting. You should arrive on time and leave when class is dismissed, interact with fellow students respectfully, operate a safe and clean workspace, and develop professional traits that will be used for the rest of your career. If you treat this class like it is your job, the transition into employment will be smoother and easier for you and your employer.

I am here to assist you with questions, concerns, and anything else that may arise. All of us at TCAT – Murfreesboro are dedicated to your success, so please don't hesitate to reach out. I sincerely hope this course will be of help to you in your career journey.

Best,
Jeremiah Biehl

Acknowledgement Page

(Please return the completed form to your instructor.)



I have received and read my copy of the Program Handbook in preparation for my course of study at TCAT – Murfreesboro.

The Program Handbook describes important information about TCAT – Murfreesboro. I understand that if I have questions or concerns at any time about the Handbook, I will consult my instructor for clarification.

I will act in accordance with the standards of conduct outlined in this Program Handbook and in the TCAT – Murfreesboro Student Handbook as a condition of my enrollment.

Student's Signature

Student's Name (Print)

Date

PROGRAM INFORMATION

Program Description

The mission of the Welding program is to provide required technical instruction and skill development for the student to become gainfully employed.

Program Outcomes

At the completion of the diploma in Welding, graduates should be able to

- obtain the appropriate skills and knowledge in all areas of the program that are needed with safe and effective use of welding tools and equipment.
- obtain the latest repair methods and techniques in the repair of welding materials.
- obtain the appropriate hands-on training and experience to prepare them for employment in the welding industry.
- receive extensive instruction in welding symbol and print reading knowledge, welding testing, inspection, and preparation for employment in the welding field.

Program Outline

Course	Title	Customary Hours
WEL 0001	Worker Characteristics	6
WEL 1010	Technology Foundations	30
WEL 1020	Shop Orientation & Safety	18
WEL 1030	Cutting Processes	30
WEL 1040	Basic Shielded Metal Arc Welding	248
WEL 2030	Advanced Shielded Metal Arc Welding	100
	Shielded Metal Arc Welder Certificate	432
WEL 0002	Worker Characteristics	6
WEL 2010	Blue Print Theory	30
WEL 2020	Basic Gas Tungsten Arc Welding	100
WEL 1050	Basic Gas Metal Arc Welding	196
WEL 2040	Advanced Gas Metal Arc Welding	100
	Gas Metal Arc Welder Certificate	432
WEL 0003	Worker Characteristics	6
WEL 3011	Blue Print Reading	96
WEL 3020	Advanced Gas Tungsten Arc Pipe Weld	330
	Gas Tungsten Arc Welder Certificate	432
	Combination Welder Diploma	1296

Program Awards

Shielded Metal Art Welder Certificate	432 hours
Gas Metal Arc Welder Certificate	432 hours
Gas Tungsten Arc Welder Certificate	432 hours
Combination Welder Diploma	1296 hours

GRADING AND PROGRESS STANDARDS

Grading Standards

Evaluations of student achievement toward a program's identified occupational competencies are recorded for each student at the end of 432 hours of instruction that comprise a term. Those evaluations shall be based on the following scale of progress:

A	90-100
B	80-89
C	70-79
D	60-69
F	0-59
P	Pass
CONT	Continuing/Incomplete
W	Withdrew

Students will be graded in the following categories:

- Skill Proficiency
- Theory/Related Information

A student must maintain a "D" or better average per course code and an overall combined average of a "C" or better for the 72-day period of instruction, which comprises a term. Failure to maintain the required grade average will result in suspension at the end of the term. Additional retention standards for specific programs may be established based on accrediting or licensing requirements.

Retention Standards

A student who fails during any term to attain a cumulative GPA at or above the level indicated below for the customary clock hours attempted or the average grade per course will be placed on suspension at the end of the term.

Standard:

- A student must maintain a "D" or better average per course code and an overall combined average of a "C" or better for the 72-day period of instruction, which comprises a term.

Additional retention standards for specific programs may be established by the college based on accreditation or licensing requirements applicable to a program.

Worker Characteristics

Worker characteristics measure a student's professionalism in the workplace. The instructor will observe your actions throughout your time in class and give you an evaluation based off the

following categories. A number grade will be issued to you during mid-term and at the end of the trimester.

- **Attendance:** Attends class, arrives/leaves on time; notifies the instructor in advance for planned absences
- **Character:** Displays loyalty, honesty, trustworthiness, dependability, reliability, initiative, self-discipline, and self-responsibility
- **Teamwork:** Respects the rights of others; respects confidentiality; is a team player; is cooperative; displays a customer service attitude; seeks opportunities for continuous learning
- **Appearance:** Displays appropriate dress for the profession (grooming, hygiene, etiquette, uniform)
- **Attitude:** Demonstrates a positive attitude; appears self-confident; has realistic expectations of self
- **Productivity:** Follows safety practices; conserves materials; keeps work area neat and clean; follows directions and procedures; makes up assignments punctually; participates in class
- **Organizational Skills:** Manifests skills in prioritizing and management of time and stress; demonstrates flexibility in handling change
- **Communication:** Displays appropriate nonverbal (eye contact, body language) and oral (listening, telephone etiquette, grammar) skills
- **Cooperation:** Displays leadership skills; appropriately handles criticism, conflicts, and complaints; demonstrates problem-solving capability; maintains appropriate relationships with supervisors and peers; follows chain of command
- **Respect:** Deals appropriately with cultural/racial diversity; does not engage in harassment of any kind

TCAT – MURFREESBORO POLICIES

Attendance

As stated in the Student Handbook, “The nature of the programs at the Tennessee Colleges of Applied Technology is such that it is necessary for every student to attend regularly. Excessive interruptions due to absences will have an adverse effect on student progress.”

5.5% Absences – Instructor Counseling and Documentation

- Students who miss 5.5% of their enrolled hours for the term (24 hours for full-time students enrolled in 432 hours) must be formally counseled by their instructor. Absences affect the work ethic grade and could affect financial aid.
- The instructor documents the meeting with a signed attendance counseling form or memo. The student receives a copy, and the instructor retains a copy for his/her records.

9.7% Absences – One-Term Suspension with Appeal Opportunity

- Students who miss 9.7% of their enrolled hours for the term (42 hours for full-time students enrolled in 432 hours) are reported by the instructor to Student Services.
- The Student Services Office notifies the student of the option to (1) accept the one-term suspension or (2) appeal the suspension within three business days of notice. An appeal form is provided to the student.
- Student appeals are forwarded to an Attendance Appeal Committee (appointed by the Vice President of Student Services) for review of the documentation. Only one appeal will be granted within a 12-month period.
- If approved to continue, the student and the instructor are notified via email of the stipulations for approval (e.g. not missing additional classes for the term); if the student fails to meet the stipulations, the instructor notifies Student Services to proceed with suspension. If the initial appeal is not approved and suspension is recommended by the committee, the appeal is then reviewed by the Vice President of Student Services.
- In consultation with the President, the Vice President provides the final decision on suspension to Student Services, so the student and the instructor can be notified via email.

Tardies

As stated in the Student Handbook, “A student is considered tardy if not in the classroom at the designated time for class to start. Multiple tardies will result in the following discipline.”

5 Tardies – Instructor Counseling and Documentation

- Students who are tardy five times in the term (four times for part-time students) must be formally counseled by their instructor. Further tardies can lead to probation and other sanctions.
- The instructor documents the meeting with a signed tardy counseling form or memo. The student receives a copy, and the instructor retains a copy for his/her records.

6 Tardies – Probation and Student Success Plan

- Students who are tardy six times in the term (five times for part-time students) are reported by the instructor to Student Services.
- The Student Services Office places the student on probation, and the student is required to complete a Student Success Plan with the appropriate Student Services representative.

7 Tardies – Review by Vice President for Possible Suspension

- Students who are tardy seven times in the term (six times for part-time students) are reported by the instructor to Student Services.
- The Student Services Office notifies the Vice President of Student Services for review. In consultation with the President, the Vice President provides the final decision on suspension to Student Services, so the student and the instructor can be notified via email.

Three-Day No Call/No Show

Students are responsible for notifying their instructor each time they are absent. When a student misses three (3) consecutive days without contacting the college, that student may be presumed to have withdrawn from the college and will be exited from the program.

TBR General Policy on Student Conduct and Disciplinary Sanctions

TCAT – Murfreesboro is governed by the Tennessee Board of Regents (TBR). Students enrolled in a TBR postsecondary educational institution are citizens of their civic communities as well as the academic community. As such they are expected to conduct themselves as law-abiding members of each community at all times.

Admission to an institution of postsecondary education carries with it special privileges and imposes special responsibilities apart from those rights and duties enjoyed by non-students. In recognition of the special relationship that exists between the institution and the academic community which it seeks to serve, the Tennessee Board of Regents (“TBR” or “the Board”) has authorized the presidents of the institutions under its jurisdiction to take such action as may be necessary to maintain conditions on institution-owned and controlled property and to preserve the integrity of the institution and its educational environment.

Pursuant to this authorization and in fulfillment of its duties to provide a secure and stimulating atmosphere in which individual and academic pursuits may flourish, the Board has developed this policy, which is intended to govern student conduct at the institutions under its jurisdiction.

In addition, students are subject to all federal, state and local laws and ordinances. If a student’s violation of such laws or ordinances also adversely affects the institution’s pursuit of its educational objectives, an institution may enforce its own policies regardless of the status or outcome of any external proceedings instituted by other civil or criminal authorities.

Students are responsible for compliance with this policy and with institutional policies and regulations.

The policy in its entirety may be found at: <https://policies.tbr.edu/policies/general-policy-student-conduct-disciplinary-sanctions>.

Academic Misconduct

Academic misconduct is any action or attempted action designed to provide an unfair academic advantage or disadvantage for oneself or others. Academic misconduct includes a wide variety of behaviors such as plagiarism, cheating, fabrication, and other academic dishonesty. For purposes of this policy the following definitions apply:

- Plagiarism. The adoption or reproduction of ideas, words, statements, images, or works of another person as one's own without proper attribution. Examples include but are not limited to copying of passages from works of others into one's own work without acknowledgment; summarizing or paraphrasing ideas from another source without proper attribution, unless such information is recognized as common knowledge; and using facts, statistics graphs, representations, or phrases without proper attribution;
- Cheating. Using or attempting to use unauthorized materials, information, or aids in any academic exercise or test/examination. Examples include but are not limited to copying another's work; obtaining or giving unauthorized assistance; unauthorized collaboration or collusion with another person; having another person take a test for a student; and the use of unauthorized materials or devices. The term academic exercise includes all forms of work submitted for credit or hours;
- Fabrication. Falsifying, fabricating, or misrepresenting data, research results, citations or other information in connection with an academic assignment. Unauthorized falsification or invention of any information or citation in an academic exercise.

Academic misconduct is prohibited. Students guilty of academic misconduct, either directly or indirectly, through participation or assistance, are immediately responsible to the instructor of the class. In addition to other possible disciplinary sanctions which may be imposed in accordance with this policy, the instructor has the authority to take academic discipline consistent with institutional policy, procedures, and processes.

An instructor who determines that a student has engaged in academic misconduct may choose to exercise academic discipline by lowering to any extent, including to a grade of "F" or "zero," a student's grade in the course, assignment, or examination affected by the alleged academic misconduct.

The policy in its entirety may be found at: <https://policies.tbr.edu/policies/general-policy-student-conduct-disciplinary-sanctions>.

Acceptable Computer Use

All computer use including Internet use must be in support of education and research and appropriate for the assignment. The College is not responsible for a student's access to any

inappropriate material. All students at the College will be taught ethics and acceptable use of the computer system and the Internet. If there is a complaint about inappropriate usage, the instructor will resolve it. If not resolved by the instructor, the President or Vice Presidents will review the complaint. Inappropriate usage may be grounds for suspension or dismissal from the College.

This policy is in conjunction with TBR Policy IT Acceptable Uses 1.08.05.00.

Inappropriate usage includes but is not limited to:

- Using the network or Internet for personal and private matters including electronic mail outside the College.
- Hate mail, harassment, discriminatory remarks, and other antisocial behaviors including spamming.
- Accessing pornographic or obscene material.
- Accessing confidential material including but not limited to test files and personal/personnel records.
- Destroying, inappropriate deleting or changing, or otherwise damaging hardware or software.
- Downloading and/or installing programs or data files on College computers without permission of the Instructor.

Removal from Class for Disruptive Conduct

As stated in the TCAT – Murfreesboro Student Handbook, “Students are expected and encouraged to develop proper work habits and to maintain a sincere, cooperative attitude at all times.” This includes:

- actively and routinely participating in all class functions in a timely manner
- coming to class with the necessary tools and equipment required to participate in class activities
- wearing appropriate attire for the program area and displaying their name tag
- maintaining a respectful and cooperative demeanor at all times with instructors, institutional officials, and classmates
- avoiding inappropriate language or conduct deemed disruptive to the institution’s learning environment
- following all institutional procedures related to absences and tardiness (e.g. arriving to class on time, notifying instructor of planned and unplanned absences, etc.)

Pursuant to Tennessee Board of Regents (TBR) policy, students who engage in disruptive conduct or other conduct that violates the TBR’s General Policy on Student Conduct and Disciplinary Sanctions 3:02:00:01 may be temporarily removed or excluded from class by the instructor for each class session in which the conduct occurs. Repeated infractions may result in additional disciplinary sanctions.

Smoking

TCAT Murfreesboro's campuses are smoke free. This includes all tobacco and electronic cigarettes, vape products, and smokeless tobacco. Students may smoke/vape in their personal vehicles only.

Live Work

Live work projects performed by students enhances the technical training of students. The Tennessee Board of Regents Guideline Tennessee College of Applied Technology – A030, Instructional Projects, is the basis for all live-work projects performed at the Tennessee College of Applied Technology. Live work will be conducted when training programs require such projects for the acquisition of occupational skills leading to employment. Live work will be assigned to individual students by their instructor as part of the student's training program. All services are to be performed only by students with the instructional assistance of their instructor.

Work can only be accepted if it can be completed within a reasonable timeframe and projects cannot be allowed to remain in the Tennessee College of Applied Technology possession if not being actively worked on. Live Work projects will be assessed for timely completion.

Upon approval of the need to perform the service at hand, and verification of project ownership by the instructor of the training program, the instructor will complete a "Live Work and/or Service Agreement" form. This form will be submitted to the President or his/her designee for approval and signature. Upon approval of the need to perform the service at hand, and verification of project ownership, a Live Work Agreement form will be completed with a copy of the form being provided to the individual for whom the work is being performed. The owner of the project shall be responsible for providing the parts, supplies, and materials for individual projects. All live work is to be completed under the instructor's supervision and may be released only after a thorough final inspection.

The policy in its entirety may be found at: <https://policies.tbr.edu/guidelines/instructional-projects-colleges-applied-technology>.

Cooperative Education

Cooperative Education (Co-op) is an educational program that combines classroom instruction with practical work experiences directly related to the student's curriculum. This combined classroom study and work experience is a meaningful way for students to learn and to assist in making informed career choices while earning credit. Students interested in Cooperative Education should meet with their instructor to discuss co-op opportunities. The instructor must submit a co-op request form to the Vice President for approval. The student, instructor, employer, and Vice President must sign the formal co-op agreement. To be eligible for cooperative education, students must have completed at least 50% of their program of study.

CLASSROOM POLICIES

Dress Code

Appropriate attire must be worn that is representative of what the industry requires in the workplace. Long denim pants with a belt, an all cotton shirt (with a minimum sleeve length of 4 inches), and leather work boots with safety toe, securely tied are required. Provocative or offensive clothing is prohibited on campus. Ear buds are not permitted nor are they a replacement for ear plugs. No exposed metal in the face, neck, or hands.

ID Badge

Students must always wear their Tennessee College of Applied Technology student photo identification badges while on campus. The badges must be displayed so that they are readily visible. If a student loses his or her student ID badge, the student may request a replacement from Student Services after paying a \$5 fee to the Business Office.

Food/Drink

Food and drink are allowed in the classroom space, but students are responsible for cleaning up after themselves and taking out the trash when needed.

Cell Phones

Cell phones are not allowed in the classroom or lab area. It is considered a safety violation.

Sleeping in Class

Students are expected to develop proper work habits and to remain engaged and on task in class. Students are not permitted to sleep in class. Repeated violations may result in the student being sent home for the day.

Classroom/Lab Space Maintenance

Good housekeeping practices should always be followed. Each student is expected to pick up after themselves. Trash must be picked up on site; tools, equipment, etc. should be kept in appropriate places-not on benches, machines, and floors when not in use. As an integral part of instruction, each student is expected to participate in housekeeping and cleanup activities at the conclusion of each day (last 30 minutes) to maintain efficient, high-level training programs. Each program will establish a daily routine for cleaning, and students are expected to carry out duties as assigned.

Class Times

- Class begins at 7:45am, and students are expected to be in classroom/lab and ready to work at that time. Class dismisses at 2:30pm each day, unless specified otherwise. A lunch break will be given from 11:15am to 12:00pm. Students who return late from lunch or leave early will be docked in their attendance hours.
- Students are required to clock in and out each morning, leaving for and returning from lunch, and at the end of the day.

Attitude and Conduct

You are expected to be cooperative and to demonstrate a professional and respectful attitude at all times. Everyone is encouraged to work as a team. Horseplay, hazing, inappropriate language, and any other behavior deemed inappropriate for this program will result in being sent home for the day, and the student may be referred to the Vice President of Student Services for progressive disciplinary action.

Absence Notification

If you know in advance that you will be absent, you must notify your instructor by phone or email. If you do not know in advance that you will be absent, call or email the instructor as soon as possible. If you must leave class at any point, you must inform the instructor. Failure to notify the instructor in these instances will result in docked attendance and a deduction in your worker characteristic grade.

Computer/Internet Privileges

The classroom computers and internet are provided only as a resource for research and learning. They are not to be misused in the classroom.

Work Keys

All new TCAT students complete three assignments in Work Keys: Applied Math, Graphic Literacy, and Workplace Documents. When you take the placement test, take your time and do your very best, as you could be exempted from doing some of the lessons in each subject. You will need to reach the highest level in each subject. You can access Work Keys at <https://workkeyscurriculum.act.org/> from any computer with internet access. Your login information will be emailed to you by ACT Work Keys.

Tools/Supplies

Students are responsible for their tools and supplies.

SAFETY POLICIES

First Aid Kit

A first aid kit is available in the instructor's office. If you are injured, you should notify the instructor as soon as possible.

Safety

- Before being admitted to the shop area, students must complete OSHA 10 and Work Keys.
- Safety in the classroom and occupational setting will be discussed by your instructor. After completion of the safety instruction, you will be required to sign a Safety Form, identifying that you have been instructed and understand the safety procedures that apply to the program.
- Obey all safety rules.
- Follow all safety procedures when working on equipment.
- Keep work areas clean and free of hazards.
- Wear the proper PPE for any task being attempted.
- Clean up any spills immediately.
- Safety glasses must be worn in the lab area. No exceptions. This is true when operating a grinder or torches without safety glasses or face shield.
- Students will be sent home for the day for any and all safety violations.
- All injuries should be reported at once to the instructor.

Fire Procedures

In the event of a fire drill or actual fire, students should immediately exit the building via the back door and report to the back parking area.

Tornado Procedures

In the event of a tornado drill or actual tornado, students should immediately seek shelter in the hallway outside the classroom.