

**Great Falls College
Montana State University
Welding Technology & Fabrication Program**



**Student Information and Application Packet
CAS (1 year) degree
Fall 2023**

(Application is subject to change year to year)



**GREAT FALLS
COLLEGE**

**MONTANA STATE
UNIVERSITY**

Dear Prospective Welding Technology & Fabrication CAS (1 year) Student,

I am thrilled by your interest in the Welding Technology & Fabrication 1 year program at Great Falls College Montana State University. This is an exciting time for welders in our region, and across the country. With an aging skilled workforce and many retirements in the next few years, we expect a high number of job openings for welding program graduates.

Our welding program is structured around the American Welding Society (AWS) outcomes. As a graduate of the Welding Technology & Fabrication program, you will have the opportunity to obtain the skills and knowledge that are highly valued by industry. This program will prepare you to produce welds in all positions, meeting industry standards using the following processes:

Shielded Metal Arc Welding (SMAW)
Gas Metal Arc Welding (GMAW)
Flux Cored Arc Welding (FCAW)
Gas Tungsten Arc Welding (GTAW)

During your time as a Great Falls College MSU student, you will also learn to interpret welding blueprints and weld symbols, understand power sources and current types, and gain other work force skills necessary for entry level welding jobs.

The Welding Technology & Fabrication program has a limited enrollment capacity. Twenty-four new students are enrolled in each intake and have access to a welding instructor and a welding coach. Students will be selected for the program on a first-come, first-served basis from the pool of completed applications received by the application priority deadline.

Information regarding the profession and the program, and the application materials are enclosed in this packet. Please read the materials carefully. For additional information, answers to specific questions, or to set up an appointment, please contact Admissions at (406) 268-3700 or Welding Instructor Todd Reser at office (406) 771- 5141 cell (406) 422-3480. You may also contact me directly. My contact information is below.

Sincerely,

Quincie Jones, M.S.
Director Career & Technical Education
Great Falls College Montana State University
2100 16th Ave S
Great Falls, MT 59405
(406) 268-3723

Great Falls College Montana State University
Welding Technology & Fabrication
One-year Certificate of Applied Science (CAS) Program

Job Description and Occupational Outlook:

If you are looking for a one-year education that will lead to a career in high demand, Welding Technology & Fabrication might be for you. Welders are typically employed in settings that have shift work, some overtime, and may require work indoors and outdoors. You will oversee welding tasks before, during, and after the process to make sure that a quality job is done. Typical job tasks include interpreting welding blueprints and weld symbols, preparing metal fabrication components, and performing industry standard welds in all positions with a variety of processes including, SMAW, GMAW, FCAW and GTAW. Other tasks related to the welding industry, (i.e., cleaning, material handling, etc.), may also be part of your daily duties. If you have good concentration skills, good hand eye coordination, the ability to work unsupervised, and high standards of accuracy, this is the career for you.

According to the Montana Department of Labor, the 2020 hourly wage in Montana ranged from \$16.11-\$23.10. Great Falls area entry-level welders and fitters will start in the \$15-18 per hour range with the possibility of a benefits package.

Welding Technology & Fabrication CAS Curriculum Outcomes:

GRADUATES ARE PREPARED TO:

- Demonstrate effective oral and written communication skills appropriate to the welding industry.
- Demonstrate measuring methods and apply mathematical concepts to solve problems related to welding.
- Demonstrate the ability to follow industry safety practices.
- Demonstrate industry work ethic and professionalism.
- Demonstrate basic knowledge about AWS (American Welding Society) D1.1, API (American Petroleum Institute) 1104, and ASME (American Society of Mechanical Engineers) Section IX welding codes with the ability to pass a welder qualification test in multiple processes according to these codes.
- Troubleshoot and critically think through problems with welding systems and processes.
- Demonstrate the ability to produce welds that meet visual inspection criteria based on AWS codes and industry standards in all positions on the five basic joint configurations with carbon steel, and aluminum, using Gas Metal Arc Welding (GMAW), Shielded Metal Arc Welding (SMAW), Flux Core Arc Welding (FCAW), and Gas Tungsten Arc Welding (GTAW).
- Plan, design, and fabricate a weldment to industry standards by combining skills related to the various processes taught in the program. This will include cutting, preparing, welding, and assembling projects to specified tolerances.
- Demonstrate the ability to set up and operate to industry standards Oxy-fuel, Air Carbon Arc Cutting, and Plasma Cutting equipment.
- Demonstrate the ability to perform pipe welds in multiple positions to industry standards and codes.
- Demonstrate the ability to interpret blueprints and welding symbols to accurately fabricate a product.
- Identify materials and apply the principles of metallurgy during the welding process to solve practical welding problems.

Welding Technology & Fabrication CAS Curriculum:

See the Great Falls College MSU Catalog for specific information on the Welding Technology & Fabrication Program: <http://catalog.gfcmsu.edu/academic-programs/welding-technology/>

Program Expenses:

Welding students should begin planning early for financial aid or other arrangements to meet their educational needs. Approximate program costs can be found in the current catalog.

<http://catalog.gfcmsu.edu/academic-programs/welding-technology/#estimatedcosttext>

Welding Technology & Fabrication Application and Enrollment Process

(Please follow this checklist to be sure you complete all steps in the process)

1. ADMISSION TO GREAT FALLS COLLEGE MSU

- Apply to the college.**
 - Admission application is online at: <https://admissions.gfcmsu.edu/applynow.html>
- Submit a **complete admissions file**. After submitting the online application, submit the following to the Office of Admissions:
 - **Proof of high school completion or equivalency** (high school diploma or final transcript or GED/HiSET diploma or transcript)
 - **Proof of 2 MMR** (Measles, Mumps, Rubella) shots
- Be in **good academic standing** with the college (see more information on page 6)
- Be **admitted to the college**.
 - Admitted students will receive notification by mail from the Office of Admissions.

2. ADMISSION TO GREAT FALLS COLLEGE MSU WELDING TECHNOLOGY & FABRICATION PROGRAM

- Apply to the program.**
 - Use this packet and **submit pages 8 through 11** which includes:
 - Student Information page
 - Technical Standards
 - Self-Evaluation
- Be admitted to the Welding Technology & Fabrication Program.**
 - Admitted students will receive notification via email &/or postal mail from the Welding Program.
- Meet (virtually or in-person)** with the Welding Program Faculty
 - This meeting will cover information about and expectations for the program and will be scheduled by the Welding Program Faculty

3. INTENT TO ENROLL

- Return the Intent to Enroll form** by the date listed in your program acceptance letter.

4. ONLINE ORIENTATION

- Complete the online orientation** provided by Great Falls College MSU Admissions.
 - The Office of Admissions will send a link via email.

5. ADVISING & REGISTRATION

- Once the online orientation is complete, Admissions will schedule an advising appointment.
- Meet with academic advisor.**
- Register for classes.**
 - Welding cohort courses are restricted to only admitted welding students.

6. IN-PERSON WELDING PROGRAM ORIENTATION

- Attend the Welding Program Orientation** on Friday, August 18. Details provided in acceptance letter.

Important Information

(Please read carefully)

Admission to Great Falls College MSU:

Students must be admitted to the College prior to the submission of the Welding program application and be in good academic standing with the institution. Therefore, no applications will be reviewed until applicants have been admitted to Great Falls College MSU. See more details about the steps for admission on page 5.

Good Academic Standing

Good Academic Standing means students are not on *academic probation/warning* or *academic probation/warning continued* or *academic suspension*. The Registrar's office verifies academic standing. A student with Good Academic Standing has a cumulative GPA that is greater or equal to 2.0 at Great Falls College MSU.

Currently enrolled students, who are not in Good Academic Standing at the time of Welding application submission, will only be eligible for conditional admission if there are intake spots available after acceptance of applicants currently in Good Academic Standing.

Admission to Great Falls College MSU Welding Technology & Fabrication Program:

The Welding Technology & Fabrication Program admissions committee will review completed application packets after May 12, 2023. Submit completed application packets to:

Welding Admissions Committee
Student Central
Great Falls College Montana State University
2100 16th Avenue South
Great Falls, MT 59405

Note: Applications will be date and time stamped upon receipt. The first 24 completed applications, who meet the admissions criteria, will be accepted into the program. Only complete applications will be considered.

Priority Admissions

May 12, 2023: Priority deadline for Welding Technology and Fabrication applications

June 2, 2023: Notification of acceptance for priority applicants

If any of the 24 admission positions remain open after the priority deadline of May 12, 2023, then additional applications will be considered in the order they are received.

August 11, 2023: Last day to submit Welding applications

Cohort Information

Classes for the Fall 2023-Spring 2024 cohort will be held from **11 a.m. to 5:00 p.m. Monday through Friday**. Welding students are **REQUIRED to attend an in-person orientation day on Friday, August 18**.

- Fall semester is August 21, 2023-December 15, 2023
- Fall break: October 16-20, 2023
- Spring semester is January 8, 2024-May 3, 2024
- Spring break: March 4-8, 2024

Information Regarding Transferable Courses

Coursework taken at other educational institutions may be designated as equivalent courses for Great Falls College MSU. For a current listing of approved equivalent courses, visit the Transfer Guide under Student Information at: https://prodmyinfo.montan.edu/pls/gfagent/hwzkxfer.p_selstate

All transfer work must be from an [appropriately-accredited](#) institution.

If you have additional questions about transferability of courses, send a written request for evaluation of your prior transcript to the Registrar at Great Falls College MSU. Please include appropriate course descriptions and official transcripts from former colleges with your request for evaluation. Send to:

Registrar's Office
Great Falls College MSU
2100 16th Ave. South
Great Falls, MT 59405

Student Health Insurance

Program students entering the Welding program are strongly advised to carry their own medical insurance. Health insurance is available through the college for students who do not have other health insurance. Students will be financially responsible for their health care if they become ill or are injured.

All Great Falls College students enrolled for six (6) or more credits are required to have health insurance. For students without coverage, Great Falls College offers a program developed especially for students by Blue Cross/Blue Shield of Montana. This plan provides coverage for injuries and illnesses on or off campus. Please contact Student Central (406) 771-4324 or visit <http://students.gfcmsu.edu/insurance.html> for more information.

Equal Opportunity Policy

Great Falls College MSU is committed to the provision of equal opportunity for education, employment, and participation in all College programs and activities without regard to race, color, religion, national origin, creed, service in the uniformed services (as defined in state and federal law), veteran status, gender, age, political ideas, marital or family status, physical or mental disability, genetic information, gender identity, gender expression, or sexual orientation.

The College's Equal Opportunity Officer is the Chief Student Affairs & Human Resources Officer, 2100 16th Avenue South, Great Falls, MT 59405. Phone: (406) 771-4300.

Statement about Disability Services

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. Instructors must receive an official letter from the Disability Services Office in order to provide accommodations. If you believe you have a disability requiring an accommodation, please contact the Director of Academic Support and Disability Services or call 406-771-4311 to schedule an appointment.

<http://students.gfcmsu.edu/disabilityservices/index.html>

GREAT FALLS COLLEGE MONTANA STATE UNIVERSITY
WELDING TECHNOLOGY & FABRICATION CAS PROGRAM
Fall 2023 INTAKE
APPLICATION PACKET COVER AND CHECK-OFF SHEET

Name _____

Address _____

City _____ State _____ Zip Code _____

Telephone (Home) _____ (Cell/Other) _____

E-Mail Address _____

GFC MSU Student ID Number _____

For Office Use:

| | |
|----------|--|
| Complete | |
| | Application for admission to Great Falls College MSU |
| | High School completion/equivalency |
| | Admissions immunizations |
| | Good Academic Standing |
| | Welding application: Student Information (page 8) |
| | Welding application: Technical Standards (page 9) |
| | Welding application: Self-Assessment (pages 10-11) |
| | Meeting with Welding Faculty Date _____ |
| | Meet (virtually or in-person) with the Welding Program Faculty |
| | This meeting will cover information about and expectations for the program and will be scheduled by the Welding Program Faculty. |

Great Falls College MSU Welding Technology & Fabrication Program

Technical Standards

The Welding Technology & Fabrication Program is a popular program. Therefore, it is important that all students who start the program are serious about completing it and are aware of program expectations. The welding program is operated much like a production welding lab in industry. This is your job, breaks will be scheduled, attendance is required and you are expected to be productive during classroom and lab sessions. Students are exposed to and will need to be comfortable in an industrial work setting.

During the course of the program students will be required to work for prolonged periods while exposed to:

| | | |
|-----------------------------|-----------------------------|---------------------------|
| Extreme noise | Extreme heat | Sharp tools and materials |
| Electrical equipment | Hot metal and flying sparks | Dust and fumes |
| Machinery with moving parts | Slippery or uneven surfaces | |

While in this environment students will need to demonstrate specific technical functions, with or without reasonable accommodation, students must also demonstrate their competency in carrying out these tasks in a safe and effective manner. To successfully complete the Welding program student will be required to:

- Interpret and follow safety procedures and safely operate necessary tools, equipment, and machinery.
- Perform a variety of tasks requiring physical agility sometimes at varying heights and varying positions.
- Read and interpret job specifications then perform procedures accordingly.
- Effectively respond to and communicate in oral and written form from a variety of sources with peers, faculty, and staff.
- Lift and transport equipment and materials up to 100 pounds.
- Effectively read and interpret measuring devices to make precise measurements of 1/16th of an inch and do conversions to decimal equivalents.
- Distinguish indicators of poor vs. quality construction and detect fabrication problems.
- Identify names and uses of tools and machines, survey and select appropriate materials, tools, and equipment for welding work.
- Understand/interpret information from textbooks, handouts, diagrams, charts, and tables.
- Recognize welding terminology and symbols & effectively interpret blueprints and sketches.
- Distinguish shapes, forms, and patterns, including three-dimensional objects.
- Perform mathematical functions to include calculate volumes, circumferences, and area.

I understand that I will be expected to demonstrate competency in the technical standards stated above in order to successfully complete the Welding program. I also understand that I will be learning in a work environment setting exposed to hazards and will conduct myself in a safe manner.

Name (print)

GFC MSU Student ID number

Signature

Date



Welding CAS Program Applicant Self-Evaluation page 1 of 2

Your responses to this questionnaire are used only to determine which services would best promote your individual academic development. With that in mind, please answer these questions as *honestly as possible*:

PLEASE CIRCLE YOUR LEVEL OF AGREEMENT USING THE FOLLOWING SCALE:

| Strongly disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Strongly agree | Does not apply |
|-------------------|-------------------|----------------------------|----------------|----------------|----------------|
| 1 | 2 | 3 | 4 | 5 | NA |

| Study Skills: | CIRCLE SCALE BELOW | | | | | |
|--|---------------------------|---|---|---|---|----|
| I often attend class. | 1 | 2 | 3 | 4 | 5 | NA |
| When I do miss a class, I get a copy of the notes from that day. | 1 | 2 | 3 | 4 | 5 | NA |
| I turn my class assignments in on time. | 1 | 2 | 3 | 4 | 5 | NA |
| I take notes when reading the course textbook and other material. | 1 | 2 | 3 | 4 | 5 | NA |
| I read my notes, textbooks and other course material to prepare for tests and quizzes. | 1 | 2 | 3 | 4 | 5 | NA |
| My test and quiz scores accurately reflect my studying effort. | 1 | 2 | 3 | 4 | 5 | NA |

| Time Management: | CIRCLE SCALE BELOW | | | | | |
|--|---------------------------|---|---|---|---|----|
| I use the course outline to guide my course preparation. | 1 | 2 | 3 | 4 | 5 | NA |
| I often study more than 2 days before a test or quiz. | 1 | 2 | 3 | 4 | 5 | NA |
| I set aside specific times each week to study. | 1 | 2 | 3 | 4 | 5 | NA |
| I balance my social life and study time. | 1 | 2 | 3 | 4 | 5 | NA |
| I use a planner to help me manage my time. | 1 | 2 | 3 | 4 | 5 | NA |
| I have a specific place where I can study with minimal distractions. | 1 | 2 | 3 | 4 | 5 | NA |

| Expectations: | CIRCLE SCALE BELOW | | | | | |
|---|---------------------------|---|---|---|---|----|
| I find my schoolwork enjoyable and exciting. | 1 | 2 | 3 | 4 | 5 | NA |
| I am satisfied with passing all my classes with a 'C'. | 1 | 2 | 3 | 4 | 5 | NA |
| I am frustrated that I can't seem to make "A's" in my classes. | 1 | 2 | 3 | 4 | 5 | NA |
| My college grades will be/are the same as my high school grades. | 1 | 2 | 3 | 4 | 5 | NA |
| I feel anxious when taking tests, no matter how much I prepare. | 1 | 2 | 3 | 4 | 5 | NA |
| I know I will earn my certificate/degree in the expectation time. | 1 | 2 | 3 | 4 | 5 | NA |

Welding CAS Program Applicant Self-Evaluation page 2 of 2

PLEASE CIRCLE YOUR LEVEL OF AGREEMENT USING THE FOLLOWING SCALE:

| | | | | | |
|--------------------------|--------------------------|-----------------------------------|-----------------------|-----------------------|-----------------------|
| Strongly disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Strongly agree | Does not apply |
| 1 | 2 | 3 | 4 | 5 | NA |

| Living/Working Arrangements: | CIRCLE SCALE BELOW | | | | | |
|--|---------------------------|---|---|---|---|----|
| My living environment makes studying difficult. | 1 | 2 | 3 | 4 | 5 | NA |
| My work responsibilities interfere with my school responsibilities. | 1 | 2 | 3 | 4 | 5 | NA |
| Because of school and work, I have very little time to sleep or study. | 1 | 2 | 3 | 4 | 5 | NA |
| My family responsibilities take up all of my study time. | 1 | 2 | 3 | 4 | 5 | NA |
| My employer is supportive of me attending college and will work with my class schedule | 1 | 2 | 3 | 4 | 5 | NA |

| Support System: | CIRCLE SCALE BELOW | | | | | |
|---|---------------------------|---|---|---|---|----|
| My friends and family encourage me to complete my college degree. | 1 | 2 | 3 | 4 | 5 | NA |
| I have at least one person who shows real interest in my success. | 1 | 2 | 3 | 4 | 5 | NA |
| I would probably see a counselor if I could afford one to talk about my feelings and/or life. | 1 | 2 | 3 | 4 | 5 | NA |

Regarding your studies and academic progress, are there any circumstances or problems you are facing that we have not asked about on this questionnaire?
