

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



**Student Information and Application Packet
AAS Degree
Fall 2024**

(Application is subject to change year to year)



**GREAT FALLS
COLLEGE**

**MONTANA STATE
UNIVERSITY**

Dear Prospective Welding Technology & Fabrication AAS Student,

I am excited by your interest to continue in the Welding Technology & Fabrication program at Great Falls College Montana State University. The Associate of Applied Science (AAS) degree will expand your knowledge and skill for the welding industry and open some new possibilities which could include supervision duties within the industry.

The AAS degree is designed to build on the skill and knowledge you gained during the Certificate of Applied Science (CAS) program. Students will be qualification tested on thicker material and industry standard positions for plate and pipe. Students will also spend a greater amount of time working with and interpreting welding blueprints and weld symbols, while building fabrication skills on a variety of metals. You will also be exposed to some repair techniques used throughout the industry.

The Welding Technology & Fabrication program has a limited enrollment capacity. Sixteen students are enrolled in each intake which provides for a small class size. As a student, this is advantageous to you as it allows more individualized attention and more opportunity for hands-on experience. Students will be selected for the program on a first-come, first-served, and points-based system. The points are generated for prior educational experience and work experience.

Information regarding the profession, the program, and 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 Todd Reser, Program Director at office (406) 771-5141 or cell (406) 442-3480.

Sincerely,

A handwritten signature in black ink that reads "Quincie Jones". The signature is written in a cursive, flowing style.

Quincie Jones, MEd.
Director of 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
Two-year Associate of Applied Science (AAS) Program

Job Description and Occupational Outlook:

If you are looking for a two-year education that will lead to a career, 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 (SMAW, GMAW, FCAW, 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 2024 hourly wage in Montana ranged from \$17.21-\$22.74. 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 AAS 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, stainless 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 a basic understanding of weld repair and equipment maintenance related to the welding field.
- 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.
- Use Computer Aided Design software to: Draw and edit a 2D object, annotate a drawing, plot and scale drawings.

Welding Technology & Fabrication AAS Curriculum:

The AAS degree is comprised of 62 total credits. Please see the Great Falls College MSU Catalog for specific information and curriculum lay out of the program: <http://catalog.gfcmsu.edu/academic-programs/welding-technology-aas/>

Students entering into the Welding technology & Fabrication AAS program are required to complete the Welding Technology & Fabrication CAS curriculum first. **Please visit the website for information on the Welding Technology & Fabrication CAS program and curriculum:** <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. <http://catalog.gfcmsu.edu/academic-programs/welding-technology-aas/#newitemtext>

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 GFC MSU.**

Acceptance to GFC MSU requires a completed admissions application file, which may be obtained by visiting the campus, calling the College (406) 268-3700 or applying online at <https://admissions.gfcmsu.edu/applynow.html>

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

The Welding Technology & Fabrication AAS Program admissions committee will review completed application packets after May 10, 2024. Welding cohort courses are restricted entry courses. Only students who have been admitted into the program will be able to enter these courses.

Completed Welding Technology & Fabrication program application packets must be submitted 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 as they are received. The first 16 completed applications, who meet the admissions criteria, will be accepted into the program. Only complete applications will be considered. See Application Packet & Check-off Sheet for specific requirements for program admission.

Priority Admissions:

Priority applicants will need to have the application to the committee by May 10, 2024. Notification of acceptance to the Fall semester will be June 10, 2024 for priority applicants.

Applications received after the priority deadline of May 10th will be considered only if any of the 16 admission positions remain open. Again, the earliest date and time stamps on completed Welding Technology and Fabrication applications will determine admission for any of these remaining openings. **No incomplete applications will be considered until they are completed.**

Welding AAS applications will not be accepted after August 12, 2024.

Student Health Insurance:

Program students entering the Welding program are strongly advised to carry their own medical insurance. Students will be financially responsible for their health care if they become ill or injured.

Student Health Insurance Option (*Subject to change*)

All GFC MSU students enrolled for 6 or more credits are required to have health insurance. For students without coverage, GFC MSU 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 and is subject to change. Please contact Student Central 406-771-4324 for more information. **Please see <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 Executive Director of Student Services, 2100 16th Avenue South, Great Falls, MT 59405. Telephone: 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 Success and Accessibility or call 406-771-4311 to schedule an appointment.

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

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.montana.edu/pls/gfagent/hwzkxfer.p_selstate

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.

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

Send official transcript to GFC MSU Registrar's Office:

Registrar's Office
Great Falls College MSU
2100 16th Ave S
Great Falls, MT 59405
406-771-5128

GREAT FALLS COLLEGE MONTANA STATE UNIVERSITY
WELDING TECHNOLOGY & FABRICATION AAS PROGRAM
Fall 2024 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 _____

SCHEDULE FOR AAS:

In the Fall of 2024, the AAS program will be in the morning from 7:00 am to 12:00 pm. With one exception, DDSN 114 will be from 6:00 pm to 8:30 pm. Fall semester starts August 26, 2024 and ends December 20, 2024. Fall Break is scheduled for October 21-25, 2024. Dates/times are subject to change.

In the Spring of 2025, the AAS program will be in the morning and will run from 7:00 am to 12:00 pm. Semester starts January 13, 2025 and ends May 9, 2025. Spring Break scheduled for March 10-14, 2025. Dates/times are subject to change.

Program Admissions Process:

The Welding Admissions Committee reviews application packets and uses established admissions criteria to rank applicants for admission. The Application Evaluation form used by the committee is enclosed. Criteria for selection emphasize academic performance in prerequisite courses, previous education, and welding work experience.

Current students enrolled in the Welding Technology & Fabrication CAS program may apply during the spring semester before the fall program intake. They can apply before finishing their prerequisites and may be considered for conditional acceptance if space is available. Final determination will be made after satisfactory completion of the prerequisite courses.

NOTE: Welding AAS applications will not be accepted after August 12, 2024.

**APPLICATION EVALUATION FORM
ASSOCIATE OF APPLIED SCIENCE WELDING TECHNOLOGY AND FABRICATION PROGRAM
GREAT FALLS COLLEGE MSU**

Please Complete

Applicant Name: _____ **GFC MSU Student ID:** _____

Application Scoring:

Eligibility Assessment: (Place "Y" in blank to indicate requirement has been met)

- * Admitted to Great Falls College MSU and admissions file complete _____
- * In good academic standing _____
- * Each Prerequisite course (CAS courses) completed with minimum grade of "C-" or higher _____

Admissions Criteria Score:

A. Performance in Prerequisite Courses

Cumulative GPA at GFC MSU @ time of application _____ x 2 = _____

Cumulative GPA at other institutions _____ x 1 = _____

Certificate of Applied Science in Welding _____
(add 5 points) = _____

List which college and where

Verification required –official transcript with degree posted must be on file with Registrar

B. Other Training

(Proof of qualifications are required to receive points – please provide copies)

OSHA 10 Class **(Provide copy)** _____ add 2 = _____

OSHA Construction class **(Provide copy)** _____ add 3 = _____

C. Welding Qualifications (list all and provide proof of each to receive points)

- | | | | |
|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| <input type="checkbox"/> SMAW | <input type="checkbox"/> FCAW | <input type="checkbox"/> GMAW | <input type="checkbox"/> GTAW |
| <input type="checkbox"/> Limited | <input type="checkbox"/> Limited | <input type="checkbox"/> Limited | <input type="checkbox"/> Limited |
| <input type="checkbox"/> Unlimited | <input type="checkbox"/> Unlimited | <input type="checkbox"/> Unlimited | <input type="checkbox"/> Unlimited |

Add 2 for each process _____

D. Years of Work Experience in Welding Field

Verification required (See attached form)

Years of Work Experience in Welding Field	Points
Less than 1 year	1
1 to 5 years	2
More than 5 years	3

Total for years' experience Score = _____

- ✓ In case of a tie, date received will be used as a tie breaker.
- ✓ If still tied, then GFC MSU Cumulative GPA will be used.

TOTAL POINTS: _____

Welding Technology & Fabrication AAS Technical Standards

The Welding Technology & Fabrication AAS Program is a popular program at Great Falls College MSU. 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 student 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.
- Perform destructive testing of welds per applicable code.
- 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.
- Calculate slopes, circumferences, and decimal equivalents.
- Effectively respond to and communicate in oral and written form from a variety of sources with peers, faculty, and staff.

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

CHECK-OFF LIST

√	Item
	Complete and submit your Welding Technology & Fabrication AAS Application Packet Cover & Check-off sheets. <i>Personal information must be complete.</i> (pages 8-10)
	<p>Good Academic Standing.</p> <ol style="list-style-type: none"> 1. All GFC MSU students must be in Good Academic Standing which means they are not on academic probation/warning OR academic probation/warning continued, OR academic suspension. 2. A student with Good Academic Standing has a cumulative GPA that is greater or equal to 2.0 at GFC MSU. 3. Good Academic Standing will be verified by the Registrar and any applicants, who are not in good academic standing will not be admitted to the program. 4. Currently enrolled students, who are not in Good Academic Standing at 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. 5. Applicants are encouraged to check with the Registrar’s or Admissions Office to confirm that they are in Good Academic Standing.
	<p>All applicants must have a Complete Admissions File and be ready for registration. A completed admissions file and ready for registration includes:</p> <ol style="list-style-type: none"> 1. Completed application to GFC MSU 2. Copies of high school/GED/HiSET transcripts or diplomas or equivalent 3. Proof of 2 MMRs <p>Complete admissions files and ready for registration status will be verified by the Registrar’s Office and applicants not meeting criteria will not be admitted to the program. Students are encouraged to check with the Admissions Office to confirm that their admissions file is complete, and they are ready for registration.</p>
	Sign and submit the <i>Technical Standards</i> (page 9-10)
	Optional – <i>Verification of Work Experience</i> (page 11)

Note: Turn all application materials in at one time so as not to risk misplacement of any items. Incomplete welding applications will not be reviewed.

WELDING PROGRAM VERIFICATION OF WORK EXPERIENCE in Welding field
For
Great Falls College Montana State University
2100 16th Ave S
Great Falls, MT 59405

Applicants, please make copies of this form if you have been employed at multiple sites.

_____ was employed _____
(PRINT) *Last Name, First, Middle Initial* *Business name*

From _____ to _____ working an average of _____ hours per week.
Month/day/year *Month/day/year*

Total hours of Occupational Experience: _____ **JOB TITLE** _____

COMMENTS/DESCRIPTION OF DUTIES:

Signature of Employer/Supervisor/HR Representative **Date**

Name of Employer (Please Print)

Mailing Address (Street Address, P.O. Box)

City, State, Zip Code

OFFICE USE ONLY
TYPE: _____ **AMOUNT:** _____
REVIEWED BY: _____ **DATE:** _____