

Chaffey  College
MacKenzie Scott
Student Support Fund Application

Title of Project: **State-of-the-Art Welding Center Equipment: Expanding Career Pathways to Living Wage Employment**

Application #: **202526-07**

Project Lead: **Irene Gishwiller**

Student:

Department: **InTech (Workforce and Economic Development)**

SECTION 1: OVERVIEW

S1: SCOPE OF PROJECT

This project will equip Chaffey College's new InTech Welding Center with state-of-the-art welding equipment essential for delivering industry-aligned training that prepares students for careers in the skilled trades. The new welding center, scheduled for completion by August 2026, will serve as a cornerstone facility for welding training development in the Inland Empire providing economically disadvantaged students with direct pathways to living-wage employment.

Access to equipment will enable students to:

- Earn industry-recognized certifications including Cal/OSHA-10 General Industry certification and American Welding Society (AWS) D1.1 Structural Welding Code-Steel and D1.3 Structural Welding Code-Sheet Steel certifications along with other certifications
- Master multiple welding processes including Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW), and Flux Cored Arc Welding (FCAW)
- Develop advanced fabrication skills including precision cutting, measuring, blueprint reading, and quality control
- Train with industry-standard equipment matching regional employer specifications
- Access cutting-edge technology including automated welding systems and digital welding simulators
- Enter careers with average starting wages of \$22.80/hour, approaching the regional living wage of \$27.69
- Complete accelerated 15-20-week training at no cost, eliminating financial barriers
- Access comprehensive wraparound support including career counseling, job placement assistance, and employer connections

S1: TIMELINE One-year

S1: IS THIS AN EXPANSION OF AN EXISTING PROGRAM? No

SECTION 2: PROJECT PLAN

S2: PROJECT OBJECTIVES

Chaffey College's InTech Center operates vital workforce preparation programs addressing critical skills gaps in advanced manufacturing and logistics sectors. These programs deliver accelerated, not-for-credit training through a student-centered approach, providing comprehensive wraparound support including tutoring, supportive services, and job placement assistance. This holistic model enables students to launch careers with living wages in six months or less.

InTech offers a 15-20 week, 324-hour Welding program covering Shielded Metal Arc and Gas Metal Arc Welding. Students receive a Certificate of Completion, Cal/OSHA 10 certification, and two American Welding Society certifications (AWS D1.1 Structural Welding Code-Steel and D1.3 Sheet Steel). InTech serves approximately 150 students annually in workforce development programs, with 86% qualifying as low-income.

Welding training addresses workforce demands across construction, advanced manufacturing, automotive, aerospace, and energy industries.

This project plan for equipment investment aligns with MacKenzie Scott's vision for philanthropy that focuses on institutions serving historically underserved communities, recognizing that access to quality education creates economic mobility. By providing state-of-the-art welding equipment to a program where 86% of students qualify as low-income, this initiative embodies her commitment to equity-driven solutions that address systemic barriers and create lasting community impact.

S2: KEY DELIVERABLES

The timeline for key deliverables and milestones includes:

Month 1-4: Procurement Process

- Equipment specifications and vendor selection have already been completed, including a review with trainers to ensure compatibility with the new facility infrastructure
- Update quotes from qualified vendors
- Submit purchase requisitions.
- Complete purchase approval process
- Issue purchase orders to selected vendors
- Ensure that all purchase processing timelines are met by the fiscal year end of June 2026.

Month 5-6: Equipment Acquisition and Staging

- Coordinate delivery schedules with the welding center construction timeline
- Arrange secure storage for early equipment deliveries
- Conduct pre-delivery inspections and documentation

Month 7-8: Installation and Testing

- Install equipment in new welding center

- Complete safety inspections
- Conduct instructor training on new equipment

Month 8-9: Program Launch

- Begin instruction with expanded capacity
- Host employer open house showcasing new capabilities
- Launch marketing for expanded program offerings

S2: STAFFING NEEDS

No additional staffing is required.

S2: SPACE NEEDS

No additional space is required. The new 12,000 square foot welding center has a groundbreaking scheduled for February 9, 2026, and completion is expected by August 10, 2026. This facility will include dedicated welding bays, ventilation systems, material storage, and classroom space designed specifically for the equipment requested in this grant.

SECTION 3: BUDGET OVERVIEW

S3: TOTAL AMOUNT REQUESTED: \$253,407

S3: PERSONNEL REQUESTS

	Amount Requested	# of Positions	New or Reassigned
Faculty	\$0	0	N/A
Classified	\$0	0	N/A
Student/STW	\$0	0	N/A

S3: SUPPLIES AND SERVICES REQUESTS

	Amount Requested	Details
Equipment	\$224,400	Mid-Range Equipment (\$500-\$4,999): \$65,485 Major Equipment (over \$5,000): \$158,915
Food	\$0	N/A
Services	\$0	N/A
Software	\$0	N/A

Supplies	\$29,007	Welding Safety Equipment & Supplies: \$29,007
Transportation	\$0	N/A
Travel	\$0	N/A
Other	\$0	N/A

S3: BUDGET NARRATIVES AND TOTAL COST OF OWNERSHIP (TCO)

The requested investment of \$253,407 in welding and fabrication equipment will create a comprehensive, industry-standard training environment that prepares students for high-demand careers in manufacturing, construction, and industrial maintenance. This equipment requested will support instruction in multiple welding processes, precision fabrication, and automated cutting technologies-providing learners with hands-on experience that mirrors modern industry practices.

Equipment will be purchased and stored within the first six months of grant approval. InTech has use of a basement that can store equipment till it can be moved to the new Welding Center

This equipment package will create a state-of-the-art welding and fabrication training center. Students will gain direct experience with modern tools and technologies, enhancing their readiness for employment in advanced manufacturing, construction, and industrial trades. By combining manual skills with automated systems like the CNC plasma table and hydraulic forming tools, this Center will equip learners with the technical competencies required by today's workforce.

Investing in this equipment not only strengthens the welding program but also supports local and regional industry by developing a pipeline of skilled, job-ready graduates. The hands-on experience, safety training, and exposure to cutting-edge fabrication technologies ensure that students are prepared for certifications and long-term career success in the skilled trades.

The InTech department is excluded from TCO due to being grant funded.

An itemized breakdown of the equipment requested is attached to this application.

SECTION 4: ALIGNMENT WITH BOARD PARAMETERS

S4: GREATEST IMPACT

InTech operates 2 workforce programs addressing critical skills gaps in manufacturing and logistics: Industrial Electrical and Mechanical Maintenance and Introduction to Welding, graduating approximately 150 students annually. These not-for-credit programs are funded through grants and offered at no cost to students, promoting participation from underserved groups. This equipment investment generates an impact beyond immediate enrollment numbers. While 100% of InTech's current students will benefit from the equipment, the new expanded capability will accommodate additional programs and increased cohort sizes. This investment establishes a permanent training

asset for Chaffey College serving future student generations for decades. InTech's demographics underscore the transformative impact on economically marginalized communities. By eliminating financial barriers, InTech achieves strong participation from historically underserved populations: 86% of students qualify as low-income, 11% are justice-involved, and 7% are veterans. This investment addresses a critical equity gap—economically disadvantaged students deserve access to high-quality, industry-standard training equipment. By providing professional-grade welding systems, this investment ensures low-income students graduate with skills and confidence identical to graduates of expensive for-profit programs, leveling the playing field in the regional labor market and creating pathways to economic mobility.

S4: EQUITY FOCUS

This equipment investment directly addresses systemic inequities in technical education access. Traditional welding programs at for-profit institutions cost \$15,000-\$20,000, creating insurmountable barriers for low-income students. InTech's no-cost model, enabled by this equipment grant, eliminates financial obstacles while providing superior training on industry-standard equipment.

The program's accelerated 15-20-week format recognizes that economically disadvantaged students cannot afford extended training periods without income. By compressing high-quality instruction into an intensive format, students can quickly transition to earning living wages while minimizing opportunity costs.

Summary of demographic data

Bachelors Degree or higher: InTech 4.9%; Chaffey College 5.1%; City of Fontana 21.9%; San Bernardino County 23.6%

Percentage in poverty: InTech 86%; Chaffey College 49.2%; City of Fontana 9.6%; San Bernardino County 13.57%

Justice Involved: InTech 11%, Chaffey College 0.7%; not reported for City of Fontana and San Bernardino County

Veterans: InTech 7%; Chaffey College 2.9%, not reported for City of Fontana and San Bernardino County

(Source: Chaffey Data from 2023-2024 academic year. Fontana and San Bernardino data from ACS Census Report, 2023, DataUSA and Indicators.sbc.county)

S4: RESOURCE ENHANCEMENT

This equipment investment enhances rather than duplicates existing resources by establishing InTech's first comprehensive welding training center with industry-standard equipment matched to regional employer specifications. Currently, welding instruction at InTech operates with limited equipment capacity, restricting the number of students who can train simultaneously and limiting the scope of training certifications offered.

The equipment purchases, including the Miller Dynasty 300 multi-process welders enable TIC welding instruction, expanding beyond the basic stick and MIG welding currently offered. The Lincoln Torchmate CNC plasma cutting table introduces computer-aided manufacturing skills, bridging traditional welding with advanced fabrication technology. The expanded welding stations will increase capacity and enable InTech to serve a greater number of students. The new equipment packages enable

additional certifications including AWS D1.3 (sheet steel), D1.6 (Stainless steel) and D9.1 (sheet metal welding), going beyond the current certification being offered (AWS D1.1-Structural steel).

This equipment investment enables InTech to add critical technical training capacity that maximizes student success without service duplication.

S4: COMPLETION OUTCOMES

State-of-the-art equipment directly correlates with improved completion rates by increasing student engagement and confidence. When students train with industry-standard equipment identical to workplace environments, they develop technical competence that sustains them through intensive training.

Enhanced equipment capacity reduces wait times for hands-on practice, a critical factor in skill development and completion. Current equipment limitations force students to share stations, reducing practice time and extending program duration. The new equipment ensures that every student receives adequate hands-on training within the 15-20-week timeframe.

S4: TRANSFER OR EMPLOYMENT OUTCOMES

InTech's welding program provides direct pathways to living-wage employment, with 2024 graduates achieving an average starting wage of \$22.80 per hour. InTech's workforce development programs position students to enter what the 2024 Good Jobs Equity Assessment by the Centers of Excellence for Labor Market Research defines as "Good Jobs" in the Inland Empire/Desert region - occupations with robust job availability, growth projections and wages exceeding \$25.74 per hour with experience. The industry outlook reinforces this potential - according to the IEDRC's Center of Excellence 2024 subregional labor market report for San Bernardino County, the occupation of Welding and Soldering Equipment Manufacturing (NAICS code: 333992) is a high-quality industry group with a 26.9% growth rate from 2022 to 2027 and average earning of \$89,314.

This proposal requests funding for equipment investment that will support graduates' career advancement through specialized certifications. Advanced welding processes enabled by the new equipment will prepare graduates for a successful transition into employment, establishing them in careers with long-term financial stability and growth.

S4: EXPLAIN FEASIBILITY

InTech's established infrastructure and proven track record ensure successful implementation of this equipment investment. Key feasibility factors include:

Physical Infrastructure: The new 12,000 square foot welding center, currently under construction, is specifically designed to house the requested equipment. Electrical capacity, ventilation systems, and spatial layout have been engineered to support industrial welding operations.

Instructional Expertise: InTech employs AWS-certified welding instructors with industry experience and pedagogical training.

Administrative Systems: Established procurement, inventory management, and maintenance protocols ensure proper equipment stewardship. InTech's experience managing \$4+ million in annual grants demonstrates fiscal responsibility.

SECTION 5: EVALUATION

S5: EVALUATION PLAN

InTech utilizes a comprehensive data-driven approach to evaluate program effectiveness, analyzing student outcomes including enrollment, retention, completion, job placement, and wage progression. This robust evaluation framework ensures continuous improvement and accountability for invested resources.

Quantitative Measures of Success:

Completion Rates: Target 90% of enrolled students earning certificates and AWS certifications

Employment Placement: Target 75% job placement within six months of program completion

Wage Outcomes: Target average starting wages of \$22.80/hour, with 25% of student graduates earning \$25+/hour

Certification Pass Rates: Target 85% first-attempt pass rate on AWS certification exams

Qualitative Measures of Success:

- Student satisfaction surveys measuring training quality and career preparation
- Employer evaluations of new hires work-readiness and technical skills
- Industry advisory committee assessment of program alignment with workforce needs
- Alumni success stories documenting career progression and economic mobility

S5: MEASURABLE OUTCOMES

InTech employs multiple data collection methodologies to ensure comprehensive program evaluation:

Administrative Data: Collected through Formstack capturing demographics, educational, employment history, and barriers to employment. Data analyzed using Smartsheet for real-time tracking and reporting

Skills Assessments: Pre/post technical competency evaluations using AWS standards, measuring skill progression in welding processes

Employment Verification: Direct employer confirmation of hire dates, job titles, starting wages, and advancement opportunities

Student Surveys: Administered via Avocado text messaging platform measuring satisfaction, career confidence, and support service effectiveness.

Employer Feedback: Structured interviews and surveys with hiring managers evaluating graduate preparation, productivity, and retention compared to other hiring sources

Equipment Utilization Metrics: Usage logs tracking equipment hours, student practice time, and maintenance requirements to optimize resource allocation and identify additional needs

#	Item	Qty	SKU	Quote #	Vendor	Cost	Total Cost
1	Miller Dynasty 300 multi process, wireless foot control 300 vs wireless complete	2		1739896-00	Cameron Welding	\$ 16,565.33	\$ 33,130.66
2	Miller Heavy Duty ArcReach Suitcase 12 W/Pipe Pro Gun	2	MIL301605	1739896-00	Cameron Welding	\$ 4,352.67	\$ 8,705.34
3	Miller 20 Series Wire Feeder w/Meter run-in voltage ctrl	2	MIL30149900	1739896-00	Cameron Welding	\$ 2,538.67	\$ 5,077.34
4	Extreme XR-A Aluma Pro 15ft. Push pull gun (goes w/suitcases)	1		1739896-00	Cameron Welding	\$ 3,002.80	\$ 3,002.80
5	ProFax MIG Gun Flux Core Gun (goes w/suitcases)	2		1739896-00	Cameron Welding	\$ 377.60	\$ 755.20
6	DEWDW756 6" Bench Griner 5/8 HP	2		1739896-00	Cameron Welding	\$ 121.12	\$ 242.24
7	Bench Grinder and Belt Grinders -2 combination 8" and 4" bench and belt grinder	2		1739896-00	Cameron Welding	\$ 963.96	\$ 1,927.91
8	Steelmax 14" Metal Cutting Saw/ Chopsaw 120V	1		1739896-00	Cameron Welding	\$ 450.00	\$ 450.00
9	Torch & Regulator Kit OX/AC	3		1739896-00	Cameron Welding	\$ 359.92	\$ 1,079.76
10	Dewalt 120V Angel Grinders 4-1/2"	18		1739896-00	Cameron Welding	\$ 238.60	\$ 4,294.80
11	Pallet Truck Pallet Hand Jack	1		1739896-00	Cameron Welding	\$ 855.05	\$ 855.05
12	Rod Oven 450LB Capacity 120-V-50/60 01970	1		1739896-00	Cameron Welding	\$ 1,496.44	\$ 1,496.44
13	Box and Pan Brake-Baleigh Box and Pan Brake Bender BB-9612	1		1739896-00	Cameron Welding	\$ 12,049.54	\$ 12,049.54
							\$ 73,067.08
						taxes/Freight	5717
						Quote 1 Total	\$ 78,784.08
14	CNC Plasma Cutting Table Lincoln Torchmate	1		1740028-00	Cameron Welding	\$ 34,499.00	\$ 34,499.00
15	Lincoln Plateguard Table Additive 5 gal	2		1740028-00	Cameron Welding	\$ 241.50	\$ 483.00
16	Torchmate CAD CAM V9 Educational Pkg.	1		1740028-00	Cameron Welding	\$ 3,148.95	\$ 3,148.95
17	Torchmate 4000 Success Pkg. Starter	1		1740028-00	Cameron Welding	\$ 1,050.00	\$ 1,050.00
18	Torchmate student curriculum	1		1740028-00	Cameron Welding	\$ 56.70	\$ 56.70
19	Torchmate Teacher Answer Key for Student	1		1740028-00	Cameron Welding	\$ 56.70	\$ 56.70
							\$ 39,294.35
						taxes/Freight	3045.31
						Quote 2 Total	\$ 42,339.66
20	CO2 - 280cuft	2		1739956-00	Cameron Welding	\$ 465.30	\$ 930.60
21	Argon Tig 280cuft	6		1739956-00	Cameron Welding	\$ 517.39	\$ 3,104.34
22	75/25 GMAW 280cuft	8		1739956-00	Cameron Welding	\$ 523.22	\$ 4,185.76

InTech New Welding Center Need to Purchase Equipment List as of 9.30.2025

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23	Acetylene 140cuft	3		1739956-00	Cameron Welding	\$ 576.25	\$ 1,728.75
24	Oxygen-280cuft	3		1739956-00	Cameron Welding	\$ 469.42	\$ 1,408.26
25	Propane 33lbs	1		1739956-00	Cameron Welding	\$ 228.50	\$ 228.50
							\$ 11,586.21
						taxes/freight	\$ 952.35
						Quote 3 Total	\$ 12,538.56
26	H Fram Hydraulic Press Edwards 32" Hydraulic Press Brake 208V or 230V w/1000T air	1	53DK54		Grainger		\$ 10,419.21
27	H Frame Hydraulic Press 32" Hydraulic Press Brake Tooling 60T-This needs air	1	53DK66		Grainger		\$ 4,179.05
28	Elite Metal Tools Air Compressor-80lb./Quote from Grainger	1	BA9-1000553				\$ 6,496.44
29	Quantum System 16 Item #4-160030x7 4x5	2			Quantum Machinery		\$ 15,250.00
30	Quantum System 16 Item #4-160015x7 4x8	2			Quantum Machinery		\$ 22,000.00
31	Quantum 16mm Imperial Series 82-piece Welding Table Accessory Kit	1	IS163400		Quantum Machinery		\$ 6,700.00
32	Rotary Draw Bender	1	BA9-RDB125		Baleigh		\$ 6,000.00
33	Test Coupon Bender Hydraulic Wrap Around Bender	1			Triangle Engineering		\$ 12,000.00
34	Forklift w/5000 lb load capacity- Propane	1	EK25CLP		Elite Metal Tools		\$ 33,500.00
35	AWS Accredited Testing Facility (ATF)				American Welding Society		\$ 3,200.00
						Various Quotes	\$ 119,744.70
						Grand Total	\$ 253,407.00