

WINN Project Pre-Application

We strongly encourage you to call our office to discuss your plans to submit a program pre-application prior to completing this form. A pre-application submission and approval is required prior to a full application being accepted for an employer-provider partnership. The Workforce Innovations for a New Nevada (WINN) Fund was established to provide programs of workforce recruitment, assessment or training to the benefit of new or expanding companies in Nevada. This pre-application is to be completed by a representative of an Authorized Provider who wishes to provide a WINN Program. This application was updated in August 2021 to include provisions of Senate Bill 24, 81st Legislative Session. Applications requesting funding in excess of \$100,000 must be reviewed and approved by the Board. GOED Board meetings are held quarterly. Funding is provided to Authorized Providers in Nevada. Entities not approved in advance of the WINN Application may be asked to submit additional information. On December 2, 2021, GOED's Board approved minimum wage thresholds for WINN Fund investments. Jobs supported by the training program in this proposal must pay at least \$17 per hour; additional requirements apply and information can be obtained by contacting our office.

Training Provider Information

Name

Board of Regents, NSHE, obo Great Basin College

Address

1500 College Parkway, Elko, Nevada 89801, Elko, Nevada 89801

Primary Point of Contact

Nicole Maher

Title

Grants Director

Phone

(775) 761-2624

Email

nicole.maher@gbcnv.edu

For NSHE Institutions ONLY: Have you made NSHE's Workforce Development staff aware of intent to apply for WINN funds?

No

Employer Partner(s)

Company 1 Name

KG Mining (Bald Mountain) Inc. (Kinross)

Company 1 Function or Industry

Mining

Primary Point of Contact

Joseph Kemp, Vice President/General Manager

Email

joseph.kemp@kinross.com

Job Titles to Be Filled

Line bore welders

Number of Jobs to Fill/Create

15-20 (next 3 years)

Estimated Hourly Wage

Company Type

\$36-\$40

Primary For-Profit (51%+ export)

Company 2 Name

Komatsu Mining Corp. Group

Company 2 Function or Industry

Mining manufacturing, technology, service

Primary Point of Contact

Joshua Ritz, Welding Supervisor

Email

joshua.ritz@global.komatsu

Job Titles to Be Filled

Line bore welders

Number of Jobs to Fill/Create

11-12 (next 2-3 years)

Estimated Hourly Wage

\$28.50

Company Type

Private For-Profit

Company 3 Name

Cashman Equipment / Empire Cat

Company 3 Function or Industry

Mining equipment, rental

Primary Point of Contact

Daniel Sjol

Email

Daniel_Sjob@cashmanequipment.com

Job Titles to Be Filled

Line bore welders

Number of Jobs to Fill/Create

50 in Nevada (10 in Elko)

Estimated Hourly Wage

\$22-\$55 (+ \$5/hour for nightshift; + \$3/hour for field service)

Company Type

Private For-Profit

Additional Company Information

Description

Will this proposal utilize an existing training program?

Yes

Who are the intended trainees of this program? (Select all that apply)

Potential Hires

Describe the proposed program of workforce recruitment, assessment and training, including skills to be taught and length of program

Beginning in spring 2023, the Elko Welding Technology program replaced WELD 160 Welding Design/Layout and Pipefitting with WELD 275: a 5.5-credit Line Boring class designed to give students a basic understanding of the principles of Line Boring and Bore Welding used in the mining and other industries for bore repair applications.

Line Boring is best described as a machining process that brings holes on machinery back to factory specifications. Once the holes have become worn beyond tolerance, they are unsafe and need to be machined back to factory size.

For the mining and other industries, this instruction will:

- Allow on-site repair of equipment that is too large, too heavy, or too costly to move.
- Minimize the timeline for simple repairs.
- Maximize the degree of accuracy and precision.
- Avoid potential damage during shipping.
- Free up valuable lay down space.
- Eliminate plant crane and rigging requirements.
- Remove the need for boring mills.

WELD 275 will be a course requirement for the Certificate of Achievement - Welding Technology (two semesters/55.5 credits) and the Associate of Applied Science - Welding Technology (two semesters/69.5 credits). At 5.5 credits, the course is demanding, both academically and technically, as it prepares students to fill an imminent need in industry.

Indicate which community stakeholders are involved in this program to date

Great Basin College

Please briefly describe the role of community stakeholders in the development of the program and their eventual ongoing roles.

GBC was encouraged to pursue the Line Bore Welding program by its Welding Advisory Board; the industry stakeholder members had great praise for the idea and expressed their gratitude that the additional training will fill a much-needed gap within the mining and other industries. That group has been providing letters of support; they will continue to meet on a regular basis to provide input regarding the success of the program and any needed changes and/or improvements.

Indicate other funding commitments

Federal (Perkins, DOL, Second Chance)

Please confirm your understanding and agreement to utilize WINN funds where other funds are not already used or allocated.

Agree

Is this program consistent with Nevada's WIOA Unified State Plan?

No

Describe initial plans to ensure access and workforce diversity in the program.

Great Basin College, a member of the Nevada System of Higher Education, is an Affirmative Action/Equal Employment Opportunity educational institution. It is guided by the principle that equal opportunity means more than equal employment opportunity, and that access to facilities and services shall be available to all people regardless of their race, age, religion, color, gender, including pregnancy related conditions, sexual orientation, disability, whether actual or perceived by others and including service related disabilities, national origin, military status or military obligation, gender, identity or expression or genetic information. This also includes a person's clothing or traits historically associated with national origin, race, color or religion, including, but not limited to, hair texture, hairstyle or head wear. This principle is applicable to every member of the GBC/NSHE community, both students and employed personnel at every level, and to all facilities and services.

Does this partnership need GOED support to develop a Workforce Development Action Plan?

No

Estimated Total Project Cost
\$282,559.21

Estimated WINN Request
\$159,789.10

Estimated Start Date
7/1/2023

Estimated End Date
6/30/2024

Workforce Innovations for a New Nevada - Program Application

The Workforce Innovations for a New Nevada (WINN) Fund was established to provide programs of workforce recruitment, assessment or training to the benefit of new or expanding companies in Nevada.

This application is to be completed by a representative of an Authorized Provider who wishes to provide a WINN Program. This application was updated in August 2021 to include provisions of Senate Bill 24, 81st Legislative Session. Applications requesting funding in excess of \$100,000 must be reviewed and approved by the Board. GOED Board meetings are held quarterly.

Funding is provided to Authorized Providers in Nevada. Entities not approved in advance of the WINN Application may be asked to submit additional information.

Authorized Provider Information

Authorized Provider Name

Board of Regents, NSHE, obo Great Basin College

Project Name

Welding Technology Line Boring Equipment - Elko

Private Postsecondary Institutions

Workforce Development Program Experience

Great Basin College has extensive experience working with industry to provide workforce development programs. Since the college's inception in 1967, GBC has created more than 50 Associate, Bachelor and Certificate of Achievement programs aimed at filling workplace needs. The college also offers Industry Skills Certificates (less than 30 credits) to prepare students to fill in-demand positions.

Each program has its own technical skills committee comprised of regional industry professionals who help guide decisions regarding program launch, expansion, and sometimes revision. These professionals help GBC understand current industry needs so what students learn while training aligns with what they experience in the workplace.

Over the past decade, GBC has seen its graduation rate incrementally increase from 194 students in 2011 to 451 in 2021. Following graduation, 90%+ of graduates from Career and Technical Education programs are employed within their chosen industry within 6 months. Electrical Systems Technology routinely graduates the most degree and certificate program graduates, followed by Diesel Technology, Instrumentation Technology, Welding Technology, and Industrial Millwright programs.

One of the reasons GBC has been so successful at creating workforce development programs that lead to high-skill, high-wage and in-demand positions is its Maintenance Training Cooperative (MTC) program. The MTC is made up of mining and support industries that partnered with GBC to "grow their own" highly trained employees. Through an application process, this group awards participating students a \$5,000 scholarship to cover tuition and other costs while also providing a paid internship at no less than \$20/hour. Well over 90% of MTC participants go on to work with their internship provider full-time following graduation. For the 2023-2024 academic year, over 80 students have been accepted into the program.

Primary applicants must be able to effectively track and document expenses related to this grant, procure equipment in a timely fashion, maintain procedures and internal controls for accounting, and have infrastructure for maintaining data and completing reports.

Organizational Capacity

Great Basin College uses the Workday accounting system to set up, maintain and close out grants. GBC has many years of experience managing grants from federal, state and local sources, as well as private foundations. GBC has adequate financial staffing and experience to implement and manage grants and is prepared to comply with any required assurances.

GBC can provide documentation regarding its internal controls, financial managements policies, conflict of interest policy, civil rights policy, student privacy policy and/or sample ledgers of expenditures as needed.

Great Basin College has been accredited through the Northwest Commission on Colleges and Universities (NWCCU) since 1974. The accreditation was most recently reaffirmed in 2021.

Has your institution ever been suspended or debarred from receiving federal or state funds?

No

Has your institution ever been found non-compliant or otherwise sanctioned for failure to perform on a grant?

No

Explanation(s)

Statement of Need

Needs Assessment

Implementing a Line Boring class in the Welding Technology program is crucial to meeting industry demand for mining and other concerns. The instruction combined with Line Bore equipment for hands-on training will help bridge a current gap in the workforce and prepare students to be qualified and ready to fill high-skill/high-wage and in-demand positions.

Currently, line boring training is not offered in northern Nevada. There are several union- and other related welding programs in Las Vegas that offer the instruction; however, receiving that training would present a geographical hardship for students in the north. Offering line boring training as part of the Welding Technology program at GBC-Elko will allow students to continue to live and work in rural Nevada while increasing their skills and employability.

Advisory board members and members of local industry have shared letters of support for the program, indicating the program will solve many issues, especially as related to local mining. Companies cannot afford non-billable hours to send technicians for Line Bore training, and opportunities for on-the-job training are rare. However, students who successfully complete the Line Boring class will have enough background knowledge to justify sending them on jobs that could refine and perfect their skills.

The Certificate of Achievement - Welding Technology and the Associate of Applied Science - Welding Technology both rank top 10 on the Nevada Governor's Office of Economic Development High Demand Occupation Analysis. WELD 275 will now be a course requirement for both pathways. At 5.5 credits, the course will be demanding, both academically and technically.

This Line Boring class is one example of how GBC CTE works closely with advisory board members and business and industry leaders to stay current regarding local workplace needs—in terms of workplace staffing, equipment, and quality output.

GBC has received many letters of support from employers who are anxious for students to receive Line Bore training, including:

KG Mining (Bald Mountain) Inc. (Kinross): 15-20 Line Bore welders needed in the next 3 years @ \$36/hour - \$40/hour

Komatsu Mining Corp Group: 11-12 Line Bore welders needed in the next 2-3 years @ \$28.50/hour

Cashman Equipment/Empire Cat: 50 Line Bore welders needed in Nevada (10 in Elko) @ \$22/hour - \$55/hour + increase for nightshift/field service

Industry Engagement

GBC was encouraged to pursue the Line Bore Welding program by its Welding Advisory Board, which meets in May each year, or more frequently depending on industry need. The industry stakeholder members had great praise for launching Line Boring instruction and expressed their gratitude that the additional training will fill a much-needed gap within the mining and other industries. That group has been providing letters of support; they will continue to meet on a regular basis to provide input regarding the success of the program and any needed changes and/or improvements.

Employer Statement

Letter of Support.Kinross.pdf

Letter of Support.Komatsu.pdf

Letter of Support.Empire Cat.pdf

Workforce Disruption - Prior 12 Months

No

Additional Employer Partners

Program Objectives and Outcomes

Program Design

WELD 275 will be a course requirement for the Certificate of Achievement - Welding Technology (two semesters/55.5 credits) and the Associate of Applied Science - Welding Technology (two semesters/69.5 credits). At 5.5 credits, the course is demanding, both academically and technically, as it prepares students to fill an imminent need in industry.

Three GBC-Elko Welding instructors participated in an intensive training during spring 2023 at the Climax Academy in Newberg, Oregon. They were provided with a strong working knowledge of necessary Line Boring tools, including boring bars, bore welding machines, lathe machines, milling machines, flange facers, calder valve testing equipment, valve repair equipment, and optical alignment training. All three received certificates of completion for the Climax training; the lead instructor, Matt Nichols, also has 15 years experience specifically using Line Boring equipment. The GBC Welding Technology instructors also are certified by the American Welding Society (AWS).

Skills and Competencies

The Elko Welding Technology program has replaced WELD 160 Welding Design/Layout and Pipefitting with WELD 275: a 5.5-credit Line Boring class designed to give students a basic understanding of the principles of Line Boring and Bore Welding used in the mining and other industries for bore repair applications.

Line Boring is best described as a machining process that brings holes on machinery back to factory

specifications. Once the holes have become worn beyond tolerance, they are unsafe and need to be machined back to factory size.

For the mining and other industries, this instruction will:

- Allow on-site repair of equipment that is too large, too heavy, or too costly to move.
- Minimize the timeline for simple repairs.
- Maximize the degree of accuracy and precision.
- Avoid potential damage during shipping.
- Free up valuable lay down space.
- Eliminate plant crane and rigging requirements.
- Remove the need for boring mills.

Students who successfully complete the Line Boring course will have the knowledge and skills to:

- Read a dial caliper using US decimal equivalents.
- Prepare Line Boring equipment for operation.
- Understand when Line Boring is needed.
- Use mathematical computations, as needed, to decide how to best perform necessary Line Boring operations.
- Demonstrate proper use of Line Boring machinery.
- Perform safely in the work environment, meeting and obeying all workplace safety requirements.

Recruitment

The Welding Technology program is a direct appeal to secondary students, especially since many secondary students take dual-concurrent enrollment Welding courses while still in high school. Secondary students who complete WELD 220 could actually take WELD 275-Line Boring while in high school.

The Welding Technology program conducts open houses and open advisement events where students, prospective students, and stakeholders can meet with faculty to learn more about the program and how to begin their academic journey toward Welding. Some field trips with secondary and post-secondary students will also show Welding Technology in practice.

GBC is working on an overall CTE recruitment video as well as shorter program-specific clips to use in social media and to post on the GBC website. GBC's CTE programs also are working to produce updated marketing materials about each program, including Welding Technology, that will also be translated into Spanish.

GBC will explore relationships with EmployNV Hub and JOIN in Winnemucca to recruit underemployed workers.

Leveraging Resources

Financial aid assistance is available to Welding Technology students. Great Basin College participates in the Title IV federal student aid programs. Every effort is made to assist students in accessing financial support including the Pell Grant, Supplemental Education Opportunity Grant, Access Grant, GBC Need Grant, Silver State Opportunity Grant, Regents Service Program, Millennium Scholarship, Nevada Promise, grant-in-aid, work study, and dual-enrollment.

In addition, Welding Technology students have the opportunity to apply to participate in the Maintenance Training Cooperative (MTC) program where they can receive a \$5,000 scholarship to cover tuition and other costs while also taking part in a paid internship at no less than \$20/hour. Students who receive the MTC scholarship may also qualify to receive a \$2,500 CTE scholarship through the Pennington Foundation.

Workforce Development Integration

GBC continually seeks to align its programs with the goals and needs of existing workforce development programs and partners. GBC CTE works closely with advisory board members and business and industry leaders to stay current regarding local workplace needs with regard to staffing, equipment, and quality output. As a result, 14 of GBC's CTE programs rank top 10 on the Nevada Governor's Office of Economic Development High Demand Occupation Analysis. Eleven more rank within the GOED's top 20.

GBC's Welding Technology program relies heavily on stakeholder feedback to help ensure technological alignment between what GBC teaches and what is needed in the workplace; stakeholders include advisory board members and business/industry leaders. GBC's plan to ensure alignment is to continue to conduct annual advisory board meetings, program reviews, curricular reviews and strategic plan updates to ensure optimum program results.

GBC strives to ensure that students receive the same quality instruction regardless of program location; it also strives to ensure its programs align with the goals and needs of regional industry.

Job Placement

For more than 90% of students who participate in the Maintenance Training Cooperative (MTC) scholarship program, internship opportunities easily transition into full-time employment following graduation; the same is true for students who participate in other internship opportunities outside of MTC.

Overall, GBC's industry partners commit to interview program completers. In many cases, GBC provides interviewing instruction along with "mock" interviews for students prior to completing their programs. GBC also provides opportunities for students to access labor market data and information through career explorations, careers fairs, career skills training, and job postings.

Outcomes

Students in both the Certificate of Achievement - Welding Technology program (two semesters/55.5 credits) and the Associate of Applied Science - Welding Technology (two semesters/69.5 credits) will be required to participate in Line Boring instruction.

Welding Technology cohorts range from a minimum of 9 students to a maximum of 16 students; average cohort is 13 students.

1. Targeted number of applicants/trainees: 13/first cohort (2023); 13/second cohort (2024); 13/third cohort (2025).
2. Completion rate: 80% (based on CNA completer rates)
3. Anticipated job placements: 90% within 6 months (based on GBE CTE employment data)
4. Anticipated average wage at placement: \$35.88/hour (based on major employer average)

Measurable project outcomes: At the completion of the each academic year of the Welding Technology program in Winnemucca, GBC will:

- Graduate/credential/advance at least 80% of students (10) in the program by May each year.
- Employ 90% of completer students (12) in the Welding Technology fields by the January following May graduation each year.

Reporting

The Welding Technology program and its Line Boring instruction will be evaluated qualitatively through observation, interviews and post-program surveys to students, GBC staff, and internship providers to ensure outcome achievement as well as participant satisfaction. The program also will be evaluated quantitatively, via an assessment of program results measured against program goals.

Data will include student enrollment (including marketing efforts), retention rates from each semester,

program completion rates, employment forecast/rates, and observation, interview and survey results from students, GBC staff and internship providers.

Supporting Documents

GBC Catalog.Welding Technology.pdf

Workforce Diversity Action Plan

WINN requires that projects consider how to ensure equitable access to high-skill and high-wage opportunities for all Nevadans.

This application must include an explanation of the actions that will be taken and strategies that will be implemented to promote workforce diversity and the goals and performance measures which will be used to measure the success of the plan in achieving those goals.

A strong plan will show an understanding of the interventions and supports diverse participants will need to prepare them for success and include methods for monitoring at the training and employment levels of the project.

Veterans

While GBC is not specifically recruiting veterans to the Welding Technology program, GBC is committed to helping veteran students progress. GBC has a Veterans Resource Center that helps veteran students access the resources and opportunities they need to succeed in higher education. New student orientation briefings help veteran students understand the programs and assistance available to them, and GBC offers a private study area for veteran students.

Gender (Non-traditional Employment)

GBC is committed to helping students prepare for nontraditional fields, although nontraditional enrollment has historically been a challenge. Of the 13 programs that lead to nontraditional occupations for a particular gender (including Welding Technology), only two have shown nontraditional enrollment over 25%. Otherwise, nontraditional concentrator rates have remained relatively low (12% of CTE concentrators were enrolled in program courses that lead to nontraditional fields).

To combat these low percentages, GBC: (1) Has expanded marketing efforts, which is showing good results. Of the programs that have increasing nontraditional enrollment (Electrical Systems Technology, Industrial Millwright and Nursing) all have included recent marketing materials that featured nontraditional students; (2) Will launch nontraditional mentoring support groups in Fall 2023. One group is for female students applying to Manufacturing and other male-dominated programs; the other is for male Nursing students. The groups will meet monthly to discuss nontraditional education, students' motivation for seeking out the education, and what supports they need; (3) Continues to explore ways to recruit instructors that mirror nontraditional students; this has been very effective in the Health Sciences; and, (4) Facilitates in-service training and professional development opportunities that help CTE instructors be most effective at helping students overcome cultural, language, gender and other barriers. GBC also is striving to ensure at least some advisory board members reflect the nontraditional populations.

Race/Ethnicity

GBC CTE is dedicated to helping special populations prepare for high-skill, high-wage, and in-demand occupations. According to GBC's latest statistics, Native American/Alaskan Native and Hispanic/Latino are trending negatively with regard to earning a credential of value, while Asian students saw the largest gaps in retention and placement.

GBC recognizes that Native American/Alaskan Native and Hispanic/Latino students may be lagging behind in certificate/degree completion and job placement in part due to cultural or language barriers. Reliable,

adequate and affordable internet may be another barrier; 60% of GBC CTE programs are online, while others are hybrid, also requiring internet access.

A further barrier is that students are challenged by general education requirements and program prerequisites. For instance, the math requirement for Business programs has delayed students' degree progression; the English requirements for AAS in the Welding, Electrical, Millwright and Dielsel technology programs have also been a particular barrier for Hispanic/Latino students.

In order to address these challenges, GBC: (1) Is in the process of translating Manufacturing and Health Sciences promotional materials into Spanish; (2) Preparing to conduct a survey specific to the Native American/Alaskan Native and Hispanic/Latino populations to gain better insight into the barriers the students are facing; (3) Working to resurrect the Native American Student Association (NASA) on campus as an additional Native American resource; (4) Inviting Native American/Alaskan Native and Hispanic/Latino industry partners and business owners to serve as advisory board members; (5) Incorporating mandatory tutoring into general education courses that have historically low pass rates; (6) Raising awareness regarding available tutoring services; (7) Collecting more data on student access to reliable internet and technology, including surveys, disaggregated by race and income, to help establish important context around what supports students need; and, (8) Extending CTE staff recruitment efforts to channels within underrepresented communities.

Recipients of Public Assistance

GBC will soon be part of the Supplemental Nutrition Assistance Program (SNAP) that provides education money to persons who qualify for food stamps. The SNAP program is available to part-time and full-time students for needs such as fees, childcare and gas. Students in the Welding Technology Program are full-time and, if eligible for public assistance, could access these support services during their training.

Re-Entry or Returning Citizens

GBC actively recruits students to participate in educational opportunities while incarcerated and advises them prior to release how to continue their education. Students who wish to complete the Welding Technology program upon their release may complete all required general education courses while incarcerated.

Persons with Disabilities

Great Basin College offers accessibility services for students through its Disability Resources Center: "It is the policy, practice, and commitment to accessibility of Great Basin College to comply with the Americans with Disabilities Act, Section 504 of the Rehabilitation Act, and state and local requirements regarding students with disabilities. Under these laws, no qualified individual with a disability shall be denied access to or participation in services, programs and activities of Great Basin College. All services are at no cost to students and potential students of Great Basin College."

Other Diversity Action Plans

Great Basin College has developed a Committee on Diversity and Inclusion, which serves as an ad hoc Faculty Senate committee. The purpose of the committee is to formally address issues related to diversity as these relate to education, the campus community, and the workplace. The committee is seeking to better define diversity and explore possibilities for strategically and proactively applying its principles across the campus. These diversity and inclusion principles apply to all programs, including Welding Technology.

Workforce Diversity Commitment Statement

Great Basin College, a member of the Nevada System of Higher Education, is an Affirmative Action/Equal Employment Opportunity educational institution. It is guided by the principle that equal opportunity means more than equal employment opportunity, and that access to facilities and services shall be available to all people regardless of their race, age, religion, color, gender, including pregnancy related conditions, sexual

orientation, disability, whether actual or perceived by others and including service related disabilities, national origin, military status or military obligation, gender, identity or expression or genetic information. This also includes a person's clothing or traits historically associated with national origin, race, color or religion, including, but not limited to, hair texture, hairstyle or head wear. This principle is applicable to every member of the GBC/NSHE community, both students and employed personnel at every level, and to all facilities and services.

Statement to Comply with Federal & State Law

Great Basin College complies with all federal, state and local laws and regulations that are applicable to its operation as an institution of higher learning and a member of the Nevada System of Higher Education.

Statewide Portability Plan

Potential or Existing Plan

Great Basin College will provide Line Boring instruction through its Elko campus. Currently, that is the only location where Welding Technology instruction takes place. GBC's long-term plan is to establish traditional Welding Technology programs at its campus centers in Ely, Pahrump and Winnemucca. This plan would not only keep students at their local campuses but would expedite their training for new or current employers. Further, expanding Welding Technology and Line Boring instruction would ensure equal access to high-quality CTE programs by offering all students the same in-person instruction and access to lab equipment as the Elko program.

The addition of regional programs also would ensure technological consistency across multiple locations, especially for employers, like Nevada Gold Mines, that employ people across the region.

Sustainability Plan

The Welding Technology program is approved by the Nevada System of Higher Education Board of Regents, and is an official certificate and degree program for GBC. There is no anticipation the Welding Technology program or its Line Bore instruction will end; it will continue as long as industry and student demand exist. This equipment is a one-time purchase, and will be used for many years after the end of the grant period. The training that students receive through the program will serve them and their employers for many years in the workplace.

Because the Welding Technology program is already established, salaries are included in the state budget. To

further ensure the sustainability of the Welding Technology program and Line Bore instruction:

- GBC Welding Technology will continue to collaborate with regional business and industry to provide educational, training and employment opportunities.
- GBC Welding Technology will work with advisory board members, job agencies, and other local and regional employers to increase internship and externship opportunities for students not currently working in a Welding Technology field.
- GBC Welding Technology will ensure that equipment and software reflect current workplace procedures and technology.
- GBC will continue to seek out professional development opportunities to ensure that Welding Technology staff are current with industry practices and technologies.
- GBC will stay abreast of emerging career opportunities within the Welding Technology field for graduating students.

Authorized Provider Training Facilities

Facility 1

Facility Name

Great Basin College-Elko

Website

<https://www.gbcnv.edu>

Address

1500 College Parkway, Elko, Nevada 89801

Capacity

The GBC-Elko Welding Technology program is housed in the "Welding Shop," a building that was specifically designed for Welding instruction. The building has classroom facilities and a large lab area that includes an upper observation deck. No adjustments will need to be made to the facilities. The "Welding Shop" has the capacity to serve multiple Welding Technology 16-student cohorts at the same time.

Request for Funding

Total Project Cost

\$282,559.21

WINN Funding Request

\$159,789.10

Does a portion of the budget include Incumbent Workers?

No

Proposed Match Amount for Incumbent Worker Budget Share**Has this program received other public funding? Indicate all sources of prior funding:**

Perkins CTE Grant

Cost Estimates

GBC Welding Technology Line Boring Budget.xlsx

Budget Narrative

GOED WINN Budget Narrative.docx

Match Commitments**WINN is primarily a reimbursement-based grant. Can your institution cover the costs included in your budget without advanced funding?**

Yes

Reimbursement invoices must be submitted quarterly, but may be submitted as often as monthly. What are your invoicing plans?

Monthly

APPLICATION FOR WINN FUNDS - BUDGET BREAKDOWN

APPLICANT NAME: Board of Regents, NSHE, obo Great Basin College

PROJECT NAME: GBC-Elko Welding Technology Line Boring/ Equipment

PROJECT PERIOD: 07.01.2023 - 06.30.2024

PRIORITY PROGRAM COSTS

Enter the total cost for each line in the far right column	Total WINN Request
Candidate Assessment Fees	\$0.00
Curriculum Development and Instructional Services	\$0.00
Equipment or Technology for Training	\$159,789.10
Priority Costs Subtotal:	\$159,789.10

ALLOWABLE PROGRAM COSTS

Enter the total cost for each line in the far right column	Total WINN Request
Training Fees	\$0.00
Analysis of On-Site Training	\$0.00
Administrative or Support Personnel <i>(May not exceed 10% of total request)</i>	\$0.00
Instructional Facility Costs	\$0.00
Program Recruiting and Promotion	\$0.00
Other Necessary Costs	\$0.00
Non-Priority Costs Subtotal:	\$0.00

TOTAL WINN REQUEST: \$159,789.10

Please contact Stacey Bostwick at 702-486-0609 with any questions regarding the budget breakdown template.

GOED WINN Budget Narrative
GBC-Elko Welding Technology Line Boring
FY24-25

Priority Program Costs

Equipment or Technology for Training - \$159,789.10

OBJECT CODE 610 - \$2,113.24

- **Seco Carbide Turning Inserts (1/64):** \$11.92 x 60 quantity = \$715.20 – Used to accurately machine metals, including steels, carbon, cast iron, high-temperature alloys, and other non-ferrous metals. These 1/64 inserts come in various styles, grades and sizes.
- **Seco Carbide Turning Inserts (1/32):** \$12.48 x 60 quantity = \$748.80 – Used to accurately machine metals, including steels, carbon, cast iron, high-temperature alloys, and other non-ferrous metals. These 1/32 inserts come in various styles, grades and sizes.
- **Merit Abrasives Mounted Flap Wheel:** \$10.20 x 50 quantity = \$510.00 – A versatile abrasive tool that shapes metal. Flap wheels attach to drills or die grinders and allow welders to grind and finish hard-to-access areas, such as the inside of pipes or tubes.
- **Value Collection Roll Kits:** \$34.81 x 4 quantity = \$139.24 – Abrasive sanding cloths that help bring metal work to its final tolerance.

OBJECT CODE 612 - \$40,240.62

- **Fluke Infrared Thermometer:** \$155.33 x 6 quantity = \$931.98 – Allows bore welder to measure temperature from a distance, without the thermometer having to be in contact with what it is measuring.
- **Kennametal RH SCLP Positive Rake Indexable Turning Toolholder:** \$80.83 x 6 quantity = \$484.98 – Designed to cut a variety of workplace materials; its face slopes away from the cutting edge at the inner side of a machined surface.
- **Kennametal LH SCLP Positive Rake Indexable Turning Toolholder:** \$80.83 x 6 quantity = \$484.98 – Designed to cut a variety of workplace materials; its face slopes away from the cutting edge at the inner side of a machined surface.
- **Kennametal Neutral Rake Indexable Turning Toolholder:** \$80.83 x 10 quantity = \$808.30 – Designed to cut a variety of workplace materials; its face is perpendicular to the cutting edge at the inner side of a machined surface.
- **Harris Products Welder's Pliers:** \$81.06 x 8 quantity = \$652.80 – A single tool designed for six functions, including nozzle and tip installation, wire cutting, nozzle cleaning, slag hammer and spatter removal.
- **Noga Indicator Positioner and Holder (175-Pound Pull):** \$112.53 x 8 quantity = \$900.24 – Used to indicate, measure, and monitor how a machine component moves along a shaft or threaded linear spindle. Position indicators serve multiple functions like reading values such as length, force, and the number of revolutions in different measuring systems.
- **Noga Indicator Positioner and Holder (Fine Adjustment):** \$83.46 x 16 quantity = \$1,335.36 – Used to indicate, measure, and monitor how a machine component moves along a shaft or threaded

linear spindle. Position indicators serve multiple functions like reading values such as length, force, and the number of revolutions in different measuring systems.

- **Eklind 22-Piece L-Key Hex Key Set:** \$29.42 x 6 quantity = \$176.52 – Small handheld tools that drive bolts and screws with a hexagonal socket.
- **Noga Steel Chip Hook:** \$29.05 x 6 quantity = \$174.30 – Removes chips and cleans the chip trays on line bore machines.
- **Starrett 12-Inch Leg Inside Caliper:** \$106.94 x 17 quantity = \$1,817.98 – Measures hole diameters and distances between surfaces.
- **Starrett Mechanical Tubular Micrometer:** \$503.84 x 16 quantity = \$8,061.44 – Measure the inside dimensions of cylinders, rings and parallel surfaces. Includes a measuring head and tubular extension rod that can be adjusted to reach the desired depth of the object being measured.
- **Starrett Mechanical Outside Micrometer:** \$1,339.54 x 6 quantity = \$8,037.24 – Measure the thickness of an object or the outside diameter of a part.
- **Crescent Adjustable Wrench Set:** \$70.55 x 5 quantity = \$352.75 – Used to help install and uninstall boring tools for precise hole finishing.
- **GearWrench Combination Hand Tool Set:** \$403.21 x 5 quantity = \$2,016.05 – Used to help install and uninstall boring tools for precise hole finishing.
- **Interapid Dial Test Indicators:** \$286.01 x 16 quantity = \$4,576.16 – Used for precise comparisons or measurements of workpiece surfaces, machine, equipment, part tolerances, alignment of machine components, or the general deviation of any object from an expected standard. Includes attachments.
- **Ingersoll Rand Air Die Grinder:** \$531.40 x 8 quantity = \$4,251.20 – Used to rework dies, polish metal, and remove gaskets and smooth welds. The cordless grinders run on compressed air and are lighter to reduce user fatigue over extended periods of time.
- **Metabo Corded Angle Grinder:** \$132.43 x 10 quantity = \$1,324.30 – A handheld power tool that can be used for a variety of metal fabrication jobs including cutting, grinding, deburring, finishing and polishing.
- **SPI Graduation Dial Drop Indicator:** \$39.52 x 16 quantity = \$632.32 – Used to indicate the misalignment between the rotational symmetry and the axis of rotation of the spindle of a workpiece, with the ultimate goal of reducing it to a suitably small range.
- **Climax Assy Leadscrew 12-Inch Feed:** \$268.66 x 1 quantity = \$268.66 – Part of the bore machine assembly that transforms rotary or turning motion into linear motion; 12-inch feed.
- **Climax Assy Leadscrew 24-Inch Feed:** \$402.86 x 1 quantity = \$402.86 – Part of the bore machine assembly that transforms rotary or turning motion into linear motion; 24-inch feed.
- **Climax Set Holder Insert:** \$637.55 x 4 quantity = \$2,550.20 – Designed to bore cut unusually hard materials.

OBJECT CODE 652 - \$44,184.78

- **Jobox Jobsite Tool Box:** \$2,333.97 x 4 quantity = \$9,335.88 – Will provide a secure storage solution for Welding Technology line boring tools. Steel construction with padlock.
- **Little Giant Mobile Work Bench:** \$2,701.98 x 4 quantity = \$10,807.92 – Provides a durable workspace that can move with a technician around a workshop as needed.
- **Climax Mount Universal 2-1/4 Bar BB5000:** \$2,350.60 x 10 quantity = \$23,506.00 – For use with the Climax BB5000 boring machine. Through-bar design allows the rotational drive and feed unit to be mounted anywhere along the bar, even separately.
- **Climax Head Boring Set:** \$2,505.43 x 2 quantity = \$5,010.86 – Boring heads are specifically designed

to enlarge an existing hole. They hold cutters in position so they can rotate and gradually remove material until the hole is at the desired diameter.

- **Climax Bore Measuring Tool:** \$2,110.68 x 3 quantity = \$6,332.04 – Measures the inside hole diameter with high accuracy with regard to range, depth, accuracy requirements and number of contacts (two or three).

OBJECT CODE 730 - \$73,250.46

- **Climax BW3000 Auto Bore Welder:** \$29,081 x 2 quantity = \$58,162.00 – A bore repair system that reduces the diameter of a bore by adding 3mm-6mm of metal to the inside of a worn bore, which can then be machined back to the correct size with the line boring process. Can also be used for flange and valve repair.
- **Climax BB5000 Boring Machine:** \$7,509.92 x 1 quantity = \$7,509.92 – Produces smooth and accurate holes in a workpiece by enlarging existing holes with a bore, which may consist of a single steel cutting tip, cemented carbide or diamond, or a small grinding wheel.
- **Climax Axial Feed Unit:** \$7,578.54 x 1 quantity = \$7,578.54 – Establishes the feed rate, feed direction and feed stop/start of the boring machine.

Allowable Program Costs

Not applicable

TOTAL WINN BUDGET: \$159,789.10

May 1, 2023

Stacey Bostwick
Director of Workforce Development
Nevada Governor's Office of Economic Development
555 E. Washington Ave, Suite 5400
Las Vegas, Nevada 89101

Subject: Workforce Innovations for a New Nevada (WINN) Application

Dear Ms. Bostwick:

Founded in 1993, Kinross Gold is a senior gold mining company with a diverse portfolio of mines and projects in the United States, Canada, Brazil, Chile, and Mauritania. Headquartered in Toronto, Canada, Kinross is focused on delivering value through operational excellence, balance sheet strength, disciplined growth, and responsible mining. Kinross operates two mines in Nevada at Round Mountain, Nevada, and Bald Mountain, Nevada.

On behalf of Bald Mountain Mine, please accept this letter of support for the addition of a Line Bore training program at Great Basin College in Elko, Nevada. The program will not only serve the needs of employers like Kinross seeking high-skill workers across Nevada, but especially in Elko and surrounding communities where the need for highly trained Welders is so great.

The mining industry suffers from a notable shortage of skilled tradespeople in the welding trade that possess a specific knowledge and application of Line Bore techniques. This demand only grows with each passing year. These positions offer a high paying wage and comprehensive benefits package that provides individuals with a meaningful career that supports a comfortable and rewarding lifestyle. We anticipate that approximately 15-20 such openings will be available in the next 3 year(s) at a starting wage of \$75,000 - \$85,000. We are confident the GBC Line Bore program will increase graduates' opportunities for positions within our company.

We recognize the need for, and support the development of this Industry-based training program. We look forward to continuing to work in partnership with Great Basin College and other stakeholders in this important effort.

Sincerely,



Joseph Kemp
Vice President & General Manager
KG Mining - Bald Mountain Mine
Office: (775) 237-5875
Mobile: (775) 318-0635
Joseph.Kemp@Kinross.com



KOMATSU LETTER OF SUPPORT

April 27, 2023

Stacey Bostwick
Director of Workforce Development
Nevada Governor's Office of Economic Development
555 E. Washington Ave, Suite 5400
Las Vegas, Nevada 89101

Subject: Workforce Innovations for a New Nevada (WINN) Application

Dear Ms. Bostwick:

For the last century, the companies that power society and develop the world's infrastructure have relied on Komatsu to empower them. Through manufacturing, technology, and service innovation with a reputation for Dantotsu quality, reliability, insights, and support, we work as partners to create lasting value for the business.

On behalf of Komatsu Mining Corp. Group in Elko, Nevada, please accept this letter of support for adding a Line Boring training program at Great Basin College. The program will serve the needs of welding employers seeking high-skill workers across Nevada, especially in Elko and surrounding communities where the need for highly trained welders is so great.

Line boring in our industry is crucial. We have projects that can only be done by line boring. We currently have four line bore technicians (two in the shop and two in the field) that work approximately 9,000 hours a year line boring. I know that field service sometimes must turn down line bore work because they don't have the manpower to send. In the shop, we have sometimes had to put components on our mills that could be line bored if we had adequate manpower.

We anticipate that approximately 11-12 welding openings will be available in the next 2-3 years at a starting wage of \$28.50. We are confident the GBC Line Bore program will increase graduates' opportunities for positions within our company.

We recognize the need for and support the development of this Industry-based training program. We look forward to continuing to work in partnership with Great Basin College and other stakeholders in this important effort.

Sincerely,

Joshua Ritz, Welding Shop Supervisor
Komatsu Mining Corp. Group
Joshua.ritz@global.komatsu



May 10, 2023

Stacey Bostwick
Director of Workforce Development
Nevada Governor's Office of Economic Development
555 E. Washington Ave, Suite 5400
Las Vegas, Nevada 89101

Subject: Workforce Innovations for a New Nevada (WINN)
Application

Dear Ms. Bostwick:

Empire Southwest is a family-owned business founded in 1950 as Empire Machinery. Throughout the company's three generations of private ownership, Empire Cat has increased community involvement, established corporate values, formed new technology alliances, and expanded its territory to include Arizona, Nevada, and portions of Eastern California. Just recently, Empire agreed to acquire Nevada-based Cashman Equipment, which will provide stronger service and solutions to clients in the construction, mining, energy, agricultural, and industrial sectors in the Silver State.

Please accept this letter of support for the addition of a Line Bore training program at Great Basin College in Elko, Nevada. The program will serve the needs of employers like Empire Cat seeking high-skill workers across Nevada where the need for highly trained Welders is growing dramatically to keep up with industry demand.

Future graduates must understand the fundamentals of portable machining; how to set up and dial in bar and bearings; how to read micrometer and prints; and how to understand the different cutters, tools and travel speed for materials being machined. Our future techs need to know how to weld bores by hand and with a bore welding machine. In addition, we are hoping techs will know how to build up machined surfaces using metal spraying so they can bring machines back to spec. We also are going to start offering portable milling services to our customers.

A stylized line-art logo for GBC Line Bore Welding 20, featuring a series of vertical bars of varying heights and widths, connected by a horizontal line at the top, resembling a technical drawing or a stylized 'E' shape.

GBC Line Bore Welding 20



We anticipate that approximately 50 welding/machining openings will be available in Nevada (10 of those in Elko) in the next year at a starting wage of \$22/hour to \$55/hour (plus \$5/hour for nightshift and \$3/hour for field service). We are confident the GBC Line Bore program will increase graduates' opportunities for positions within our company.

We recognize the need for, and support the development of this Industry-based training program. We look forward to continuing to work in partnership with Great Basin College and other stakeholders in this important effort.

Sincerely,

Daniel Sjol, Lead
Southwest Empire Cat Weld Shop
Daniel_Sjol@cashmanequipment.com

Career and Technical Education

Certificate of Achievement— Welding Technology

Professional Skills and Career Paths

Mining welder, aerospace welder/fabricator, manufacturing welder, welder/fabricator, ship welder, pipe welder

Student Learning Outcomes

Graduates of the Certificate of Achievement in Welding Technology program will have the knowledge and skills to:

- Make satisfactory welds in all positions using the following welding processes:
 - Shielded Metal Arc Welding (SMAW)
 - Gas Metal Arc Welding (GMAW)
 - Flux Cored Arc Welding (FCAW)
 - Gas Tungsten Arc Welding (GTAW)
- Make satisfactory cuts with the following processes:
 - Oxygen Fuel Cutting (OFC)
 - Plasma Arc Cutting (PAC)
 - Air Carbon Arc Cutting (ACC)
- Interpret welding blueprints and welding symbols.
- Perform pipe layouts.
- Use basic welding metallurgy.
- Perform safely in the work environment, meeting and obeying all workplace safety requirements.

Formal admission to this program is required. Refer to page 106 for an outline of admission standards.

General Education Requirements	Credits
English/Communications. Determined by placement testing	3
ENG 100, 101, 103, or 107	
Computation — Any course with a MATH prefix	3
Human Relations	
BUS 110 (recommended).....	1-3

Program Requirements		Credits
WELD 105	Drawing and Weld Symbol Interpretation	3
WELD 110	Basic Arc Welding Principles and Practices**	5.5
WELD 150	Metallurgy Fundamentals for Welding	3
WELD 275	Line Boring.....	5.5
WELD 210	Advanced Welding Principles and Practices	5.5
WELD 220	Gas Metal (GMAW) and Flux Cored Arc Welding (FCAW)	11
WELD 240	Gas Tungsten Arc Welding (GTAW)	7
WELD 260	Pipe Welding.....	8

SUGGESTED COURSE SEQUENCE Certificate of Achievement— Welding Technology

FALL—1st Semester	Credits
ENGLISH*	3
COMPUTATION*	3
HUMAN RELATIONS*	1-3
WELD 105	3
WELD 110	5.5
WELD 210	5.5
WELD 240	7
TOTAL	28-30

SPRING—2nd Semester	Credits
WELD 150	3
WELD 275	5.5
WELD 220	11
WELD 260	8
TOTAL	27.5

Minimum Credits: 55.5

***Choose with an advisor**

**Students who have credit for WELD 136 from previous course enrollment or CTE college credit (see page 24), contact a GBC advisor. Course requirements include 5.5 units of WELD 110 or 2.5 units of WELD 110 and 3 units of WELD 136.

Career and Technical Education

Associate of Applied Science— Welding Technology

Student Learning Outcomes

Graduates of the Associate of Applied Science in Welding Technology program will have the knowledge and skills to:

- Make satisfactory welds in all positions using the following welding processes:
 - Shielded Metal Arc Welding (SMAW)
 - Gas Metal Arc Welding (GMAW)
 - Flux Cored Arc Welding (FCAW)
 - Gas Tungsten Arc Welding (GTAW)
- Make satisfactory cuts with the following processes:
 - Oxygen Fuel Cutting (OFC)
 - Plasma Arc Cutting (PAC)
 - Air Carbon Arc Cutting (ACC)
- Interpret welding blueprints and welding symbols.
- Perform pipe layouts.
- Use basic welding metallurgy.
- Perform safely in the work environment, meeting and obeying all workplace safety requirements.

Formal admission to this program is required. Refer to page 106 for an outline of admission standards.

Welding is a necessary skill for today’s technicians and field mechanics as well as for those who want to develop a career in metal fabrication. The college’s welding department has become the center for welding technologies in Northeastern Nevada. With highly qualified instructors, GBC provides the opportunity to learn the standard methods of shielded metal arc welding (SMAW), flux cored arc welding (FCAW), gas metal arc welding (GMAW), and gas tungsten arc welding (GTAW), as well as oxyfuel, air carbon arc, and plasma arc cutting. For more information, call 775.327.2287.

Great Basin College has certified welding inspectors on staff so students can earn an AWS certification.

General Education Requirements	Credits
English/Communications.....	6
ENG 100 or ENG 101 and ENG 102 or ENG 107 and ENG 108	
Mathematics.....	3
MATH 116, 116E, 120, 120E, 126, 126E, or higher, or ... STAT 152	
Science—PHYS 107 (recommended).....	3
Social Science—PSC 101.....	3
Human Relations	
BUS 110 (recommended).....	3

Humanities or Fine Arts.....	3	
ART 101 or THTR 204 (recommended)		
Technology—WELD 110 (required)		
Program Requirements		Credits
WELD 105 Drawing and Weld Symbol Interpretation.....		3
WELD 110 Basic Arc Welding Principles and Practices**		5.5
WELD 150 Metallurgy Fundamentals for Welding...		3
WELD 275 Line Boring.....		5.5
WELD 210 Advanced Welding Principles and Practices		5.5
WELD 220 Gas Metal (GMAW) and Flux Cored Arc Welding (FCAW)		11
WELD 240 Gas Tungsten Arc Welding (GTAW).....		7
WELD 260 Pipe Welding.....		8

SUGGESTED COURSE SEQUENCE AAS—Welding Technology

FALL—1st Semester	Credits
ENGLISH*	3
BUS 110	3
MATH 116, 116E, 120, 120E, 126, 126E or higher	3
HUMANITIES/FINE ARTS*	3
PSC 101	3
WELD 105	3
WELD 110	5.5
WELD 210	5.5
WELD 240	7
TOTAL	36
SPRING—2nd Semester	Credits
ENGLISH*	3
SCIENCE*	3
WELD 150	3
WELD 275	5.5
WELD 220	11
WELD 260	8
TOTAL	33.5

Minimum Credits: 69.5

***Choose with an advisor**

**Students who have credit for WELD 136 from previous course enrollment or CTE college credit (see page 24), contact a GBC advisor. Course requirement for WELD 110: 5.5 units of WELD 110 or 2.5 units of WELD 110 and 3 units of WELD 136.

After the AAS in Welding Technology, the next step could be the Bachelor of Applied Science in Management and Supervision. See page 104.